SONY

DIGITAL VIDEOCASSETTE PLAYER

DVW-A510P
DVW-510P
DVW-CA510P

AUDIO PROGRAM PLAY BOARD
BKDW-507

PARALLEL (50P) INTERFACE KIT
BKDW-509

CONTROL PANEL EXTENSION KIT
BKDW-510

CONTROL PANEL CASE
BKDW-511

Digital BETACAM™

MAINTENANCE MANUAL Part1
1st Edition (Revised 7)

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠ WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠ WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠ AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

DVW-A510P	Serial No. 10001 and Higher
DVW-510P	Serial No. 10001 and Higher
DVW-CA510P	Serial No. 10001 and Higher
BKDW-507	Serial No. 10001 and Higher
BKDW-509	Serial No. 10001 and Higher
BKDW-510	
BKDW-511	

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Manual Structure

Purpose of this manual

This manual is the maintenance manual of digital videocassette player DVW-A510P/510P and DVW-CA510P.
This manual describes the maintenance information of this unit, and the information on primary services such as the replacement of main blocks and circuit boards.

Contents

The following is a summary of all the sections for understanding the contents of this manual.

Section 1 SERVICE OVERVIEW

Explains the locations of main part, the functions of printed circuit board, the removal and installation of cabinet, and the measures against trouble.

Section 2 RECORDING FORMAT, HEAD CONFIGURATION, AND SIGNAL PROCESSING

Explains the recording format, head configuration, and signal processing.

Section 3 BLOCK DIAGRAMS AND CIRCUIT DESCRIPTIONS

Describes the overall block diagrams, the block diagrams for every circuit block, the frame wiring, and the circuit descriptions.

Section 4 ERROR MESSAGES AND TROUBLESHOOTING

Explains the error messages and troubleshooting.

Section 5 MAINTENANCE MODE

Explains the maintenance mode of this unit.

Section 6 REPLACEMENT OF POWER BLOCK AND CIRCUIT BOARDS

Explains how to replace the power block and circuit boards, and how to adjust them after replacement.

Section 7 PERIODIC MAINTENANCE AND INSPECTION

Explains the cleaning procedure and periodic check.

Section 8 REPLACEMENT OF PERIODIC MAINTENANCE PARTS

Explains how to replace the parts that should be replaced periodically and how to adjust them after replacement.

Section 9 SPARE PARTS

Describes the exploded views for the main unit and optional accessories, mounted circuit boards list, packing materials list, and standard accessories list.

(continue)

Contents (continued)

DVW-CA510P

Contains the exclusive information of DVW-CA510P.
Please replace or add the corresponding pages from Section 1 to 9 with them .

Note

Some figures in this manual are drawn as the recorder. Please understand in advance.

Relative manual

Besides this "Maintenance Manual Part 1", the following manuals are available for this unit.

- **Operation Manual (Supplied with this unit.)**
  This manual is necessary for application and operation of this unit.

- **Installation Manual (Supplied with this unit.)**
  This manual describes the items that are required to install this unit.

- **Maintenance Manual Part 2 (Not supplied with this unit.)**
  This manual describes the information items (adjustments, board layouts, schematic diagrams, detailed parts list, etc.) that premise the service based on parts.
  If this manual is required, please contact to Sony's service organization.

- **Protocol Manual (Not supplied with this unit.)**
  PROTOCOL OF REMOTE-1 (9-Pin) CONNECTOR
  This manual explains the protocol for controlling this unit via the RS-422A (9-pin serial remote).
  If this manual is required, please contact to Sony's service organization.

SECTION 1
SERVICE OVERVIEW

1-1. NOTES ON POWER SUPPLY BLOCK

1-1-1. Warning on Primary Circuit and Electric Shock

The power supply block consists of the AC-139 board and primary peripheral components. The whole AC-139 board is on the primary side circuit, so pay careful attention to the electric shock. Since the inside of a switching regulator is also on the primary side circuit, treat it with care.

1-1-2. Notes on Resetting the Circuit Breaker

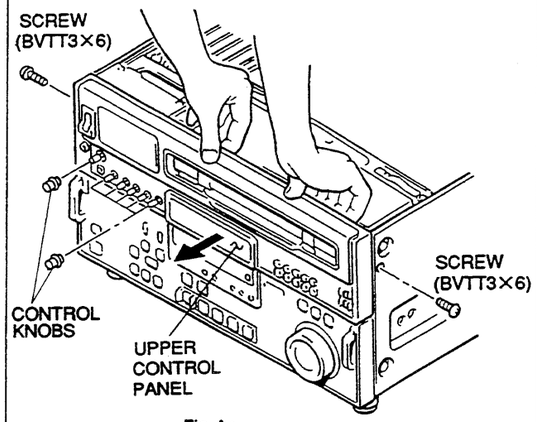
When the breaker on the power supply panel is activated and the button is ejected, remove the cause of the trouble, then push the button.

1-2. REMOVAL/INSTALLATION OF CABINET

1-2-1. Cabinet Removal/Installation

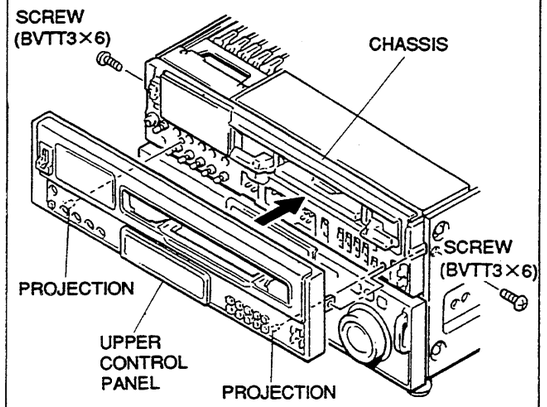
CAUTION
Always switch off the POWER before removing and installing cabinet.

Upper Control Panel
1. Remove the upper lid.
2. Remove the six control knobs on an upper control panel.
3. Remove the each one screw on the left and right sides.
4. Fingers should be inserted in the space between the upper control panel and chassis, and remove the upper control panel as shown in the figure A.



<Fig. A>

5. When installing, insert the projections of the upper control panel into the holes of the chassis, then fix the panel with the screws as shown in the figure B.

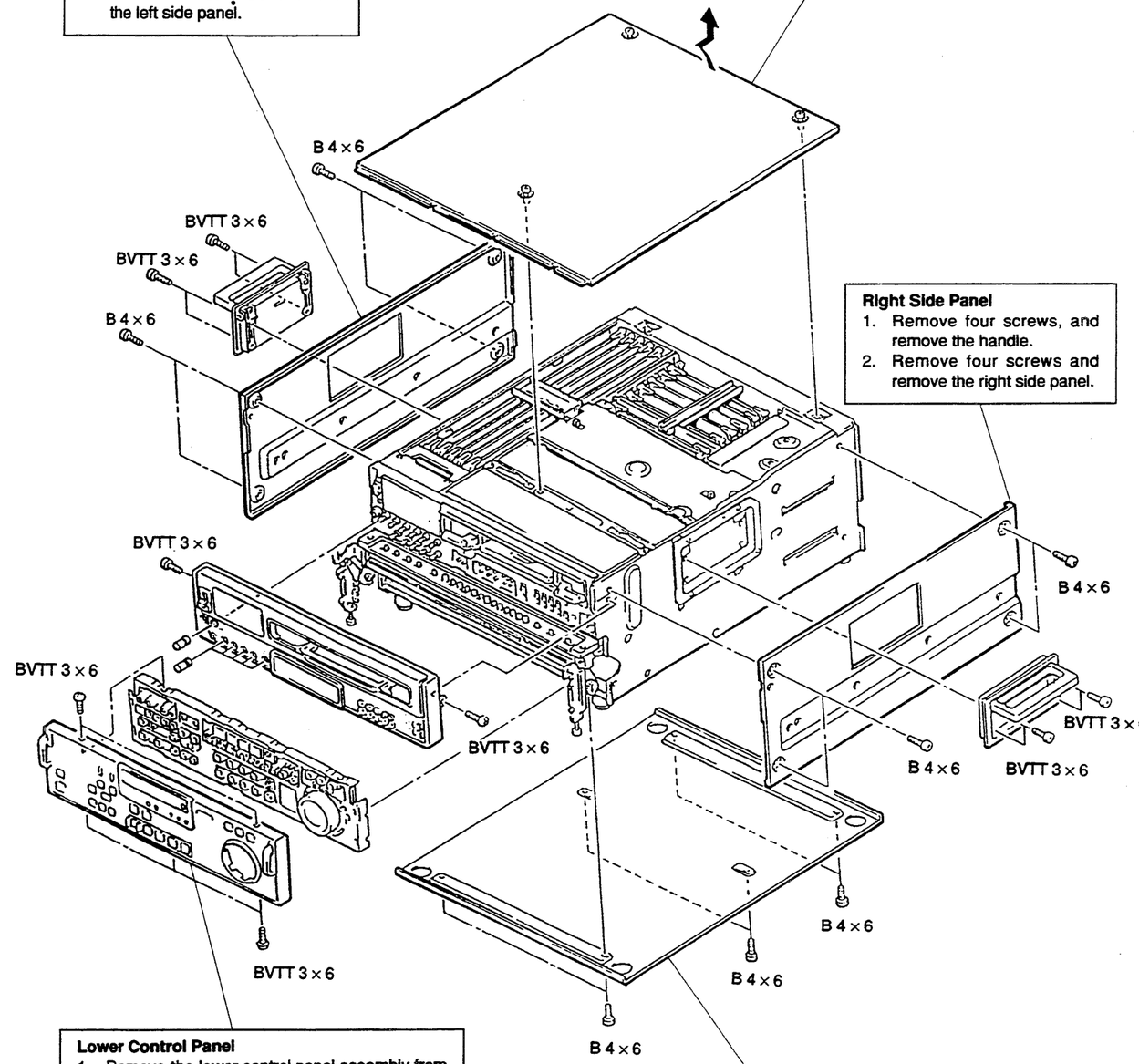


<Fig. B>

Left Side Panel
1. Remove four screws, and remove the handle.
2. Remove four screws and remove the left side panel.

Upper Lid
Loosen three fixing screws, and remove the upper lid by moving in the direction indicated by the arrow.

Right Side Panel
1. Remove four screws, and remove the handle.
2. Remove four screws and remove the right side panel.



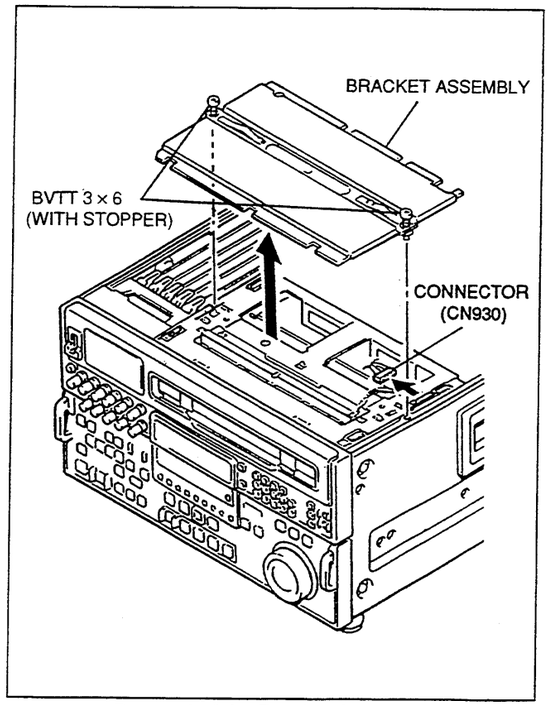
Lower Control Panel
1. Remove the lower control panel assembly from the unit. (Refer to section 1-9. Removal/ Installation of lower control panel assembly)
2. Remove five screws on the top and bottom of the lower control panel assembly, then remove the panel.

Bottom Plate
Put the unit on its right side down, remove six screws and remove the bottom plate.

1-2-2. Cassette Compartment Removal/Installation

Removal

1. Press the EJECT button with the power on.
2. Turn off the POWER.
3. Remove the upper lid.
   (Refer to section 1-2-1. Cabinet Removal/Installation)
4. Remove the plate MD assembly. (Refer to Section 1-3. Removal/Installation of Plate MD)
5. Loosen two screws, and remove the cassette compartment bracket assembly.
6. Disconnect the connector (CN930) on the CL-29 board.

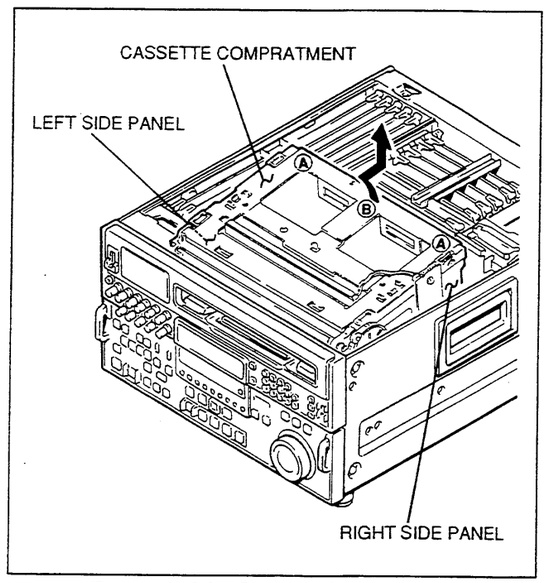


Removal of the Bracket Assembly

7. Remove the four legs of the Cassette Compartment for fixing the position by lifting the Cassette Compartment slightly and straight with Ⓐ portions (two portions) held.
8. Remove the Cassette Compartment by sliding up it raising up the rear part with the Ⓑ portion held as shown in the figure.

NOTE

In this time, do not move the Cassette Compartment to right and left and do not widen the right and left side panels. If the right and left side panels are widened, a gear position might be changed or some parts might be removed.

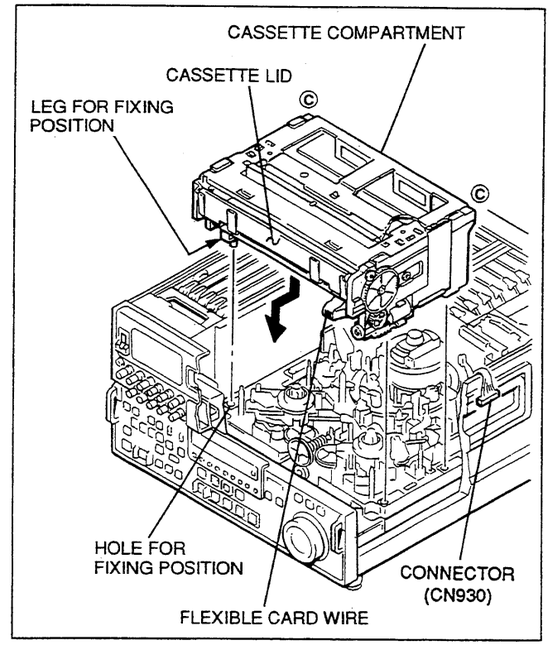


Removal of the Cassette Compartment

9. When the Cassette Compartment is put away from the unit after removing, put it in the direction as shown in the figure (If it is put with the cassette lid at the bottom, the flexible card wire might be damaged).

Installation

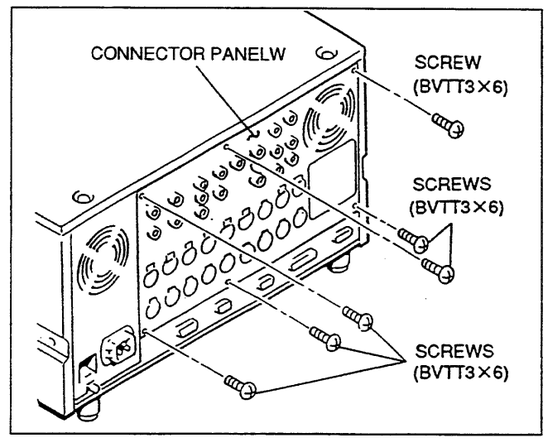
10. Set the harness of the connector (CN930) disconnected in step 6 so it is not put between chassis.
11. Install the cassette compartment inserting slantingly in the direction as shown in the figure.
12. Insert the four legs of the Cassette Compartment for fixing the position into the four holes of the mechanical chassis for fixing the position by pressing the Ⓒ portions (two portions) as shown in the figure.
13. After confirming that the cassette compartment is fixed to the chassis, install the cassette compartment bracket assembly.
14. Connect the connector (CN930) on the CL-29 board.



Installation of the Cassette Compartment

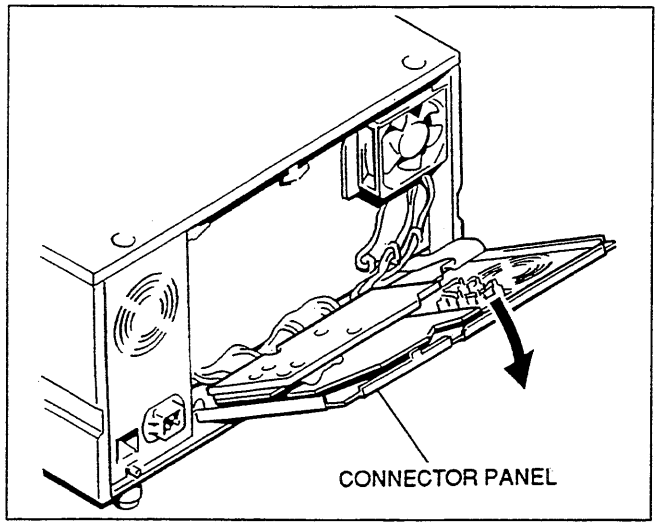
1-2-3. Connector Panel Removal/Installation

1. Turn off the POWER.
2. Remove six screws indicated → at the top and bottom on the connector panel.



Removal of Screws

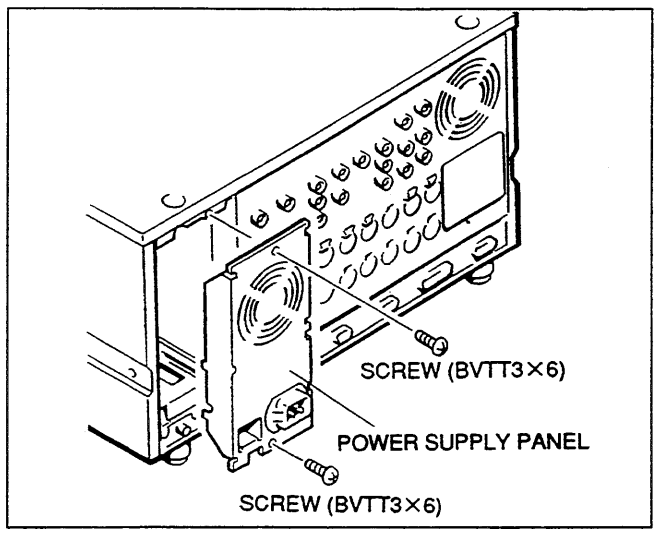
3. Remove the connector panel so as not to stretch the harness as shown in the figure.
4. Install the connector panel in the reverse order of steps 1 through 3.



Removal of the Connector Panel

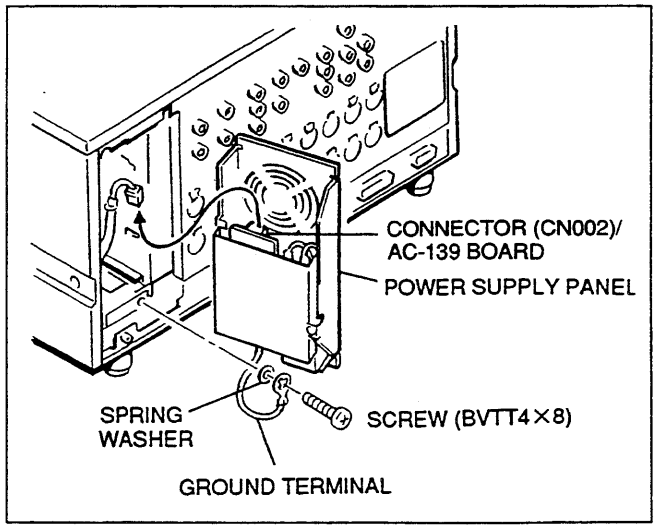
1-2-4. Power Supply Panel Removal/Installation

1. Turn off the POWER.
2. Remove two screws, and open the power supply panel.



Removal of the Power Supply Panel

3. Remove a screw and a spring washer which secure the ground terminal, then disconnect connector (CN002) on the AC-139 board, then remove the power supply panel.
4. Install the power supply panel in the reverse order of steps 1 through 3.

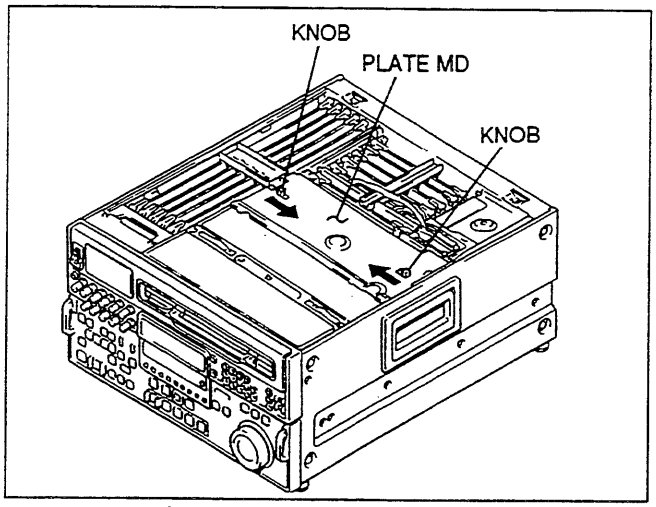


Disconnecting the Connector

1-3. REMOVAL/INSTALLATION OF PLATE MD

Removal

1. Remove the upper lid. (Refer to 1-2. Removal/Installation of Cabinet.)
2. Slide the knobs of the plate MD each in the direction indicated by the arrows (inside).



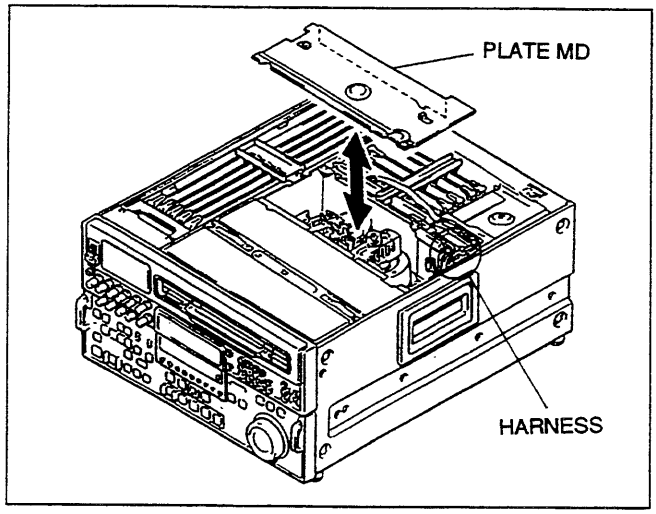
Sliding of the Knob Positions

3. Remove the plate MD.

Installation

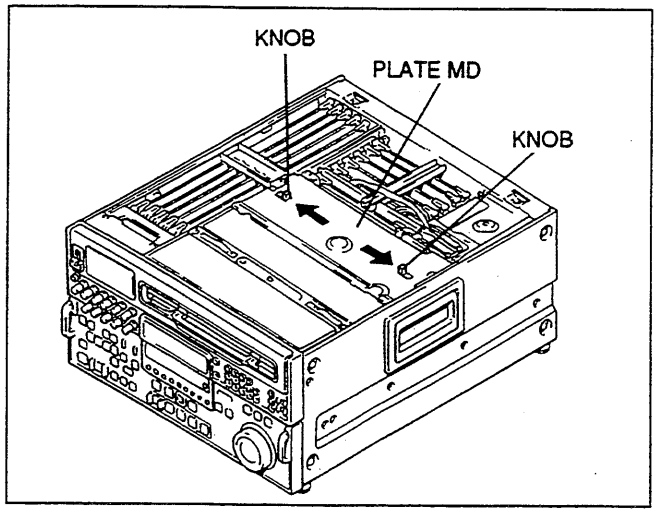
4. Insert the plate MD into the clearance shown in the figure.

NOTE
Be careful not to put the harness under the plate MD in this case.



Removal/Installation of Plate MD

5. Slide the knobs of the plate MD each in the direction indicated by the arrows (outside), then fix.
6. Install the upper lid.



Fixing of the Plate MD

1-4. FUNCTIONS OF PRINTED CIRCUIT BOARD

1-4. FUNCTIONS OF PRINTED CIRCUIT BOARD

The numbers in left colums of the board name are in common with the numbers of Section 1-5-1. Printed Circuit Board Locations.

No.	Board Name	Circuit Function	System Configuration
1	DIF-16	4:2:2 Component Serial Digital Interface with Embedded Audio	Digital Process
2	VPR-1	Video Signal Processor, D/A, Ref CK Generator, Composite Encoder	
3	DPR-36	Digital Data Processor (Decode, Error Correction)	
4	APR-1	Audio Signal Processor (D/A, AES/EBU I/F)	RF/Analog Process
5	EQ-45BA (DVW-A510P)	PB RF Equalizer Analog Betacam PB Buff	
	EQ-45B (DVW-510P)	PB RF Equalizer	
6	CUE-1BA (DVW-A510P)	CUE, TC/PB & LAU PB Circuit	
	CUE-1B (DVW-510P)	CUE, TC/PB Circuit	
7	AP-28 (DVW-A510P)	AFM Demodulator & LAU Noise Reduction for Analog Betacam (PB)	Analog Betacam Playback
8	DM-89 (DVW-A510P)	RF Demodulator for Analog Betacam (PB)	
9	TBC-24 (DVW-A510P)	TBC (A/D Conversion & Write Clock Gen. Blocks)	
10	TBC-23 (DVW-A510P)	TBC (Sequence & Reference Block)	
12	AC-139	AC Connector Board with Breaker	Power
13	SW REG	Switching Regulator	
14	HN-181	Connection Board (Drum, etc)	Connection
15	HN-185	Connection Board with Dew Sensor	
16	HN-184	Connection Board (Threading Motor and END Sensor, etc)	
17	SS-52	System, Servo, DT Control	System/Servo Control
18	DR-307/200	Motors (Drum, Reel, Capstan, etc) Driver, Solenoids Driver	
19	DT-34	DT Driver	
20	FP-58	Panel Function (SWs, LEDs) Control, CAV Control Level Conversion	Front Panel Function
21	VR-152	Phone level RV, Phone connector	
22	VR-153	Audio PB Level VRs	
23	SWC-17	Upper Panel Function (Switches, LEDs)	
24	SWC-18	Sub Control Panel Function	
25	SWC-19	System Set-up Panel Function Control	
26	KY-231	Lower Panel Function Control	
27	DP-176	Time Counter Display	
28	PTC-69	Search Dial Sensor	
29	CP-218	Rear Panel Connector Board (Analog Video Signal Buffer)	Rear Panel Function
30	CP-220	Rear Panel Connector Board (Analog/Digital Audio,TC)	
31	RM-130	Parallel (50P) Interface (optional accessory BKDW-509)	Option
32	MB-441	Mother Board	Other
33	PTC-54	Threading FG	
34	CCM-15	Threading Motor/Reel Shift Motor	
35	TR-79	T Tension Sensor,Thread/Unthread End Sensor	
36	PTC-59	Cassette's Holes Sensor	
37	RM-141	T Reel Motor	
38	RM-82	S Reel Motor	
39	SE-228	Reel FG	
40	PTC-71	Reel Position Sensor	
41	TR-78	S Tension Sensor	
42	PD-35	Pinch Solenoid Connection	
43	CL-29	Cassette Up/Down Motor, Cassette Down Sensor	Cassette Compartment Driver/Sensor
44	LP-81	Lamp of Cassette Compartment	
45	PC-70	Cassette In Sensor, Cassette Size Sensor	

1-5

1-5. LOCATIONS OF MAIN PART

1-5-1. Printed Circuit Board Locations

The numbers in the figures are in common with the numbers in SECTION 1-4. Functions of Printed Circuit Board.

INDEX

AC-139 ..... ⑫
AP-28 ..... ⑦
APR-1 ..... ④

CCM-15 ..... ㉞
CL-29 ..... ㊸
CP-218 ..... ㉙
CP-220 ..... ㉚
CUE-1B/BP ..... ⑥

DIF-16 ..... ①
DM-89 ..... ⑧
DP-176 ..... ㉗
DPR-36 ..... ③
DR-307/200 ..... ⑱
DT-34 ..... ⑲

EQ-45B/BA ..... ⑤

FP-58 ..... ⑳

HN-181 ..... ⑭
HN-184 ..... ⑯
HN-185 ..... ⑮

KY-231 ..... ㉖

LP-81 ..... ㊹

MB-441 ..... ㉜

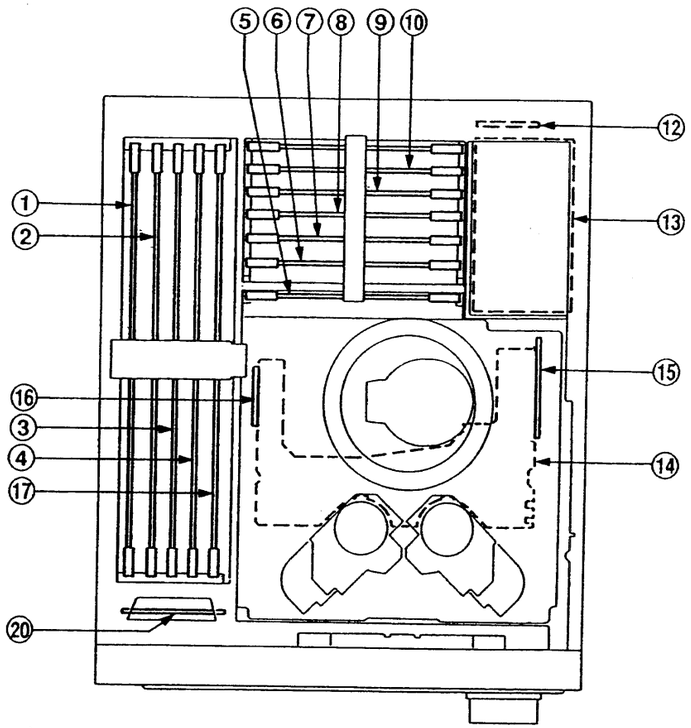
PC-70 ..... ㊺
PD-35 ..... ㊷
PTC-54 ..... ㉝
PTC-59 ..... ㊱
PTC-69 ..... ㉘
PTC-71 ..... ㊵

RM-130 ..... ㉛
RM-141 ..... ㊲
RM-82 ..... ㊳

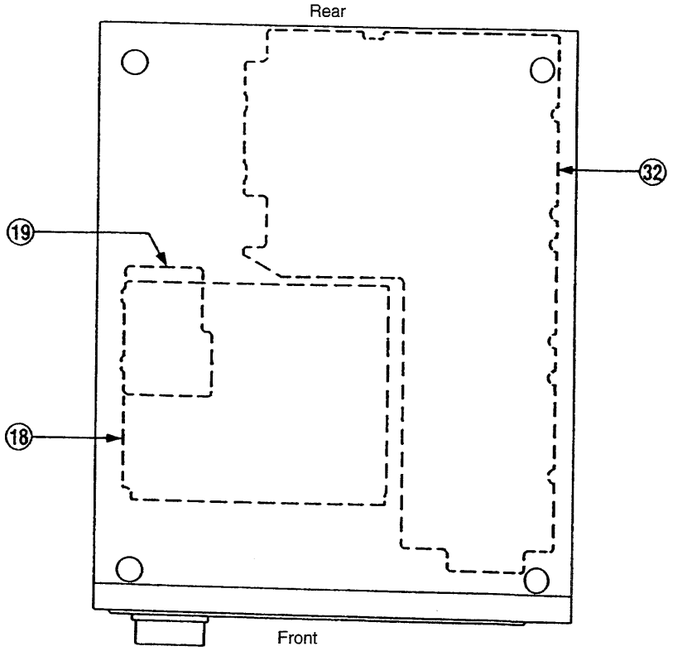
SE-228 ..... ㊴
SS-52 ..... ⑰
SW REG ..... ⑬
SWC-17 ..... ㉓
SWC-18 ..... ㉔
SWC-19 ..... ㉕

TBC-23 ..... ⑩
TBC-24 ..... ⑨
TR-78 ..... ㊶
TR-79 ..... ㉟

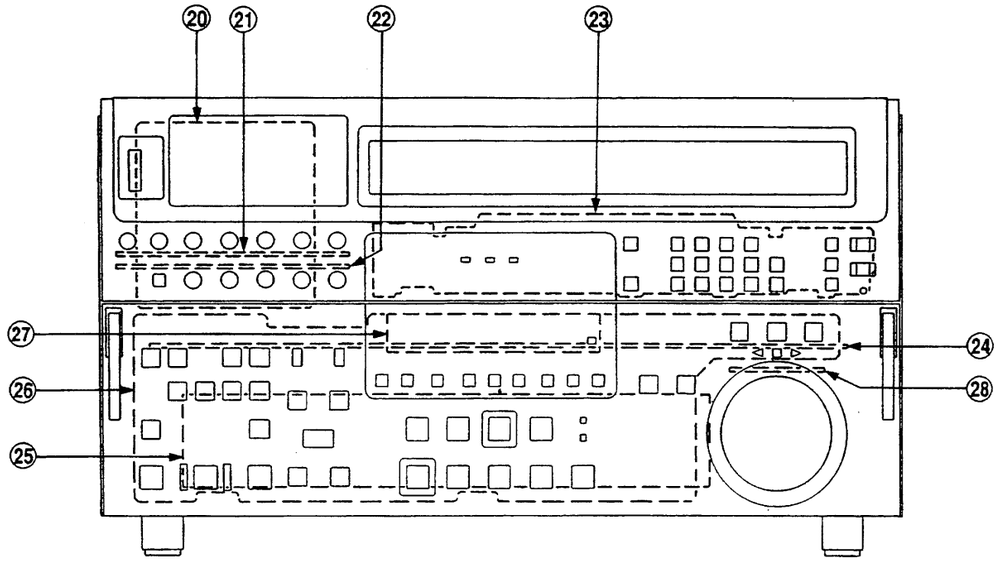
VPR-1 ..... ②
VR-152 ..... ㉑
VR-153 ..... ㉒



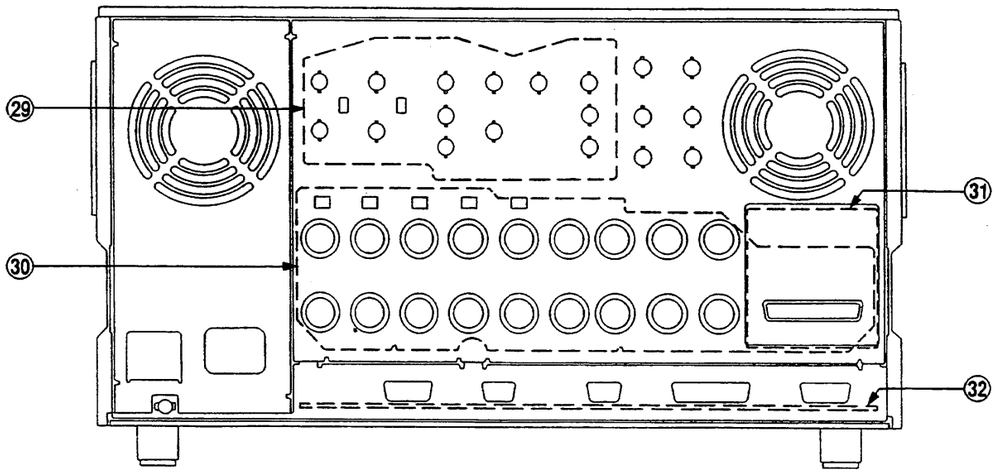
<Top view>



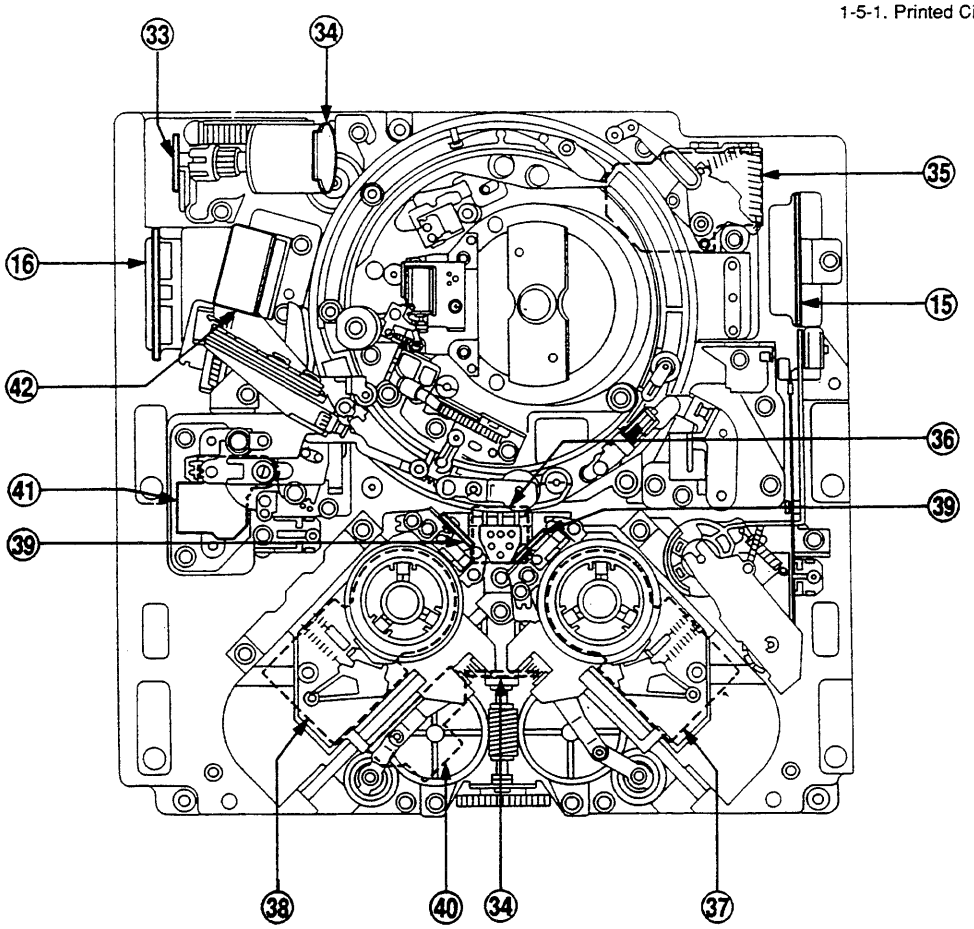
<Bottom view>



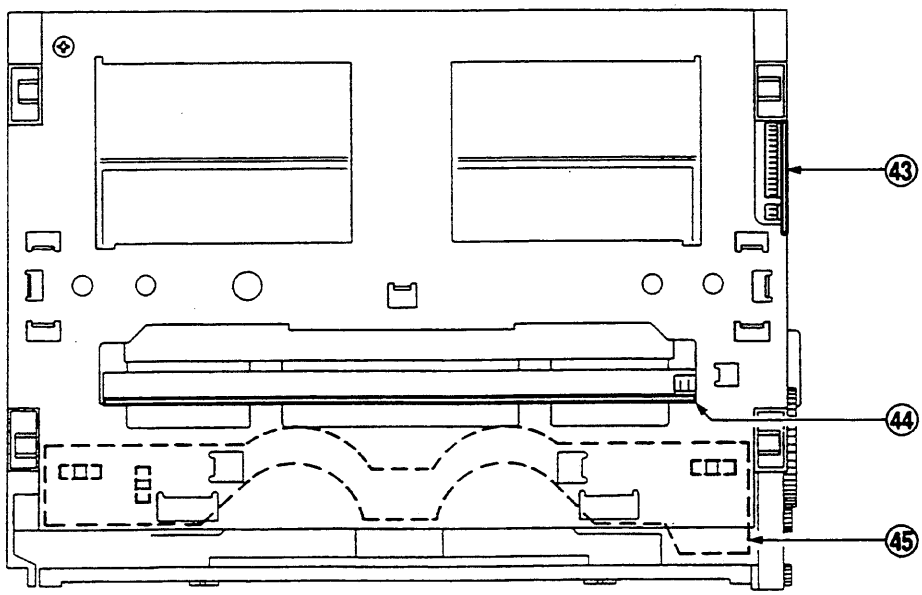
<Front view>



<Rear view>

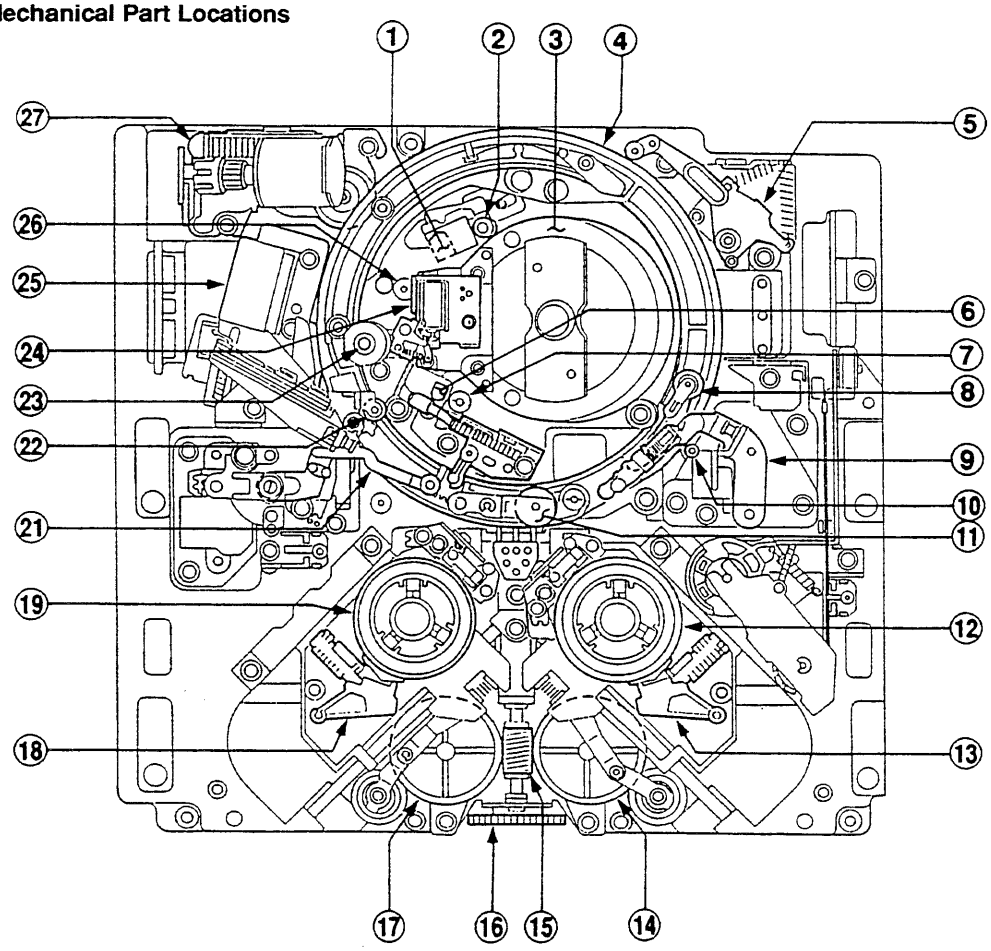


<Top view>



<Top view of casssette compartment>

1-5-2. Main Mechanical Part Locations

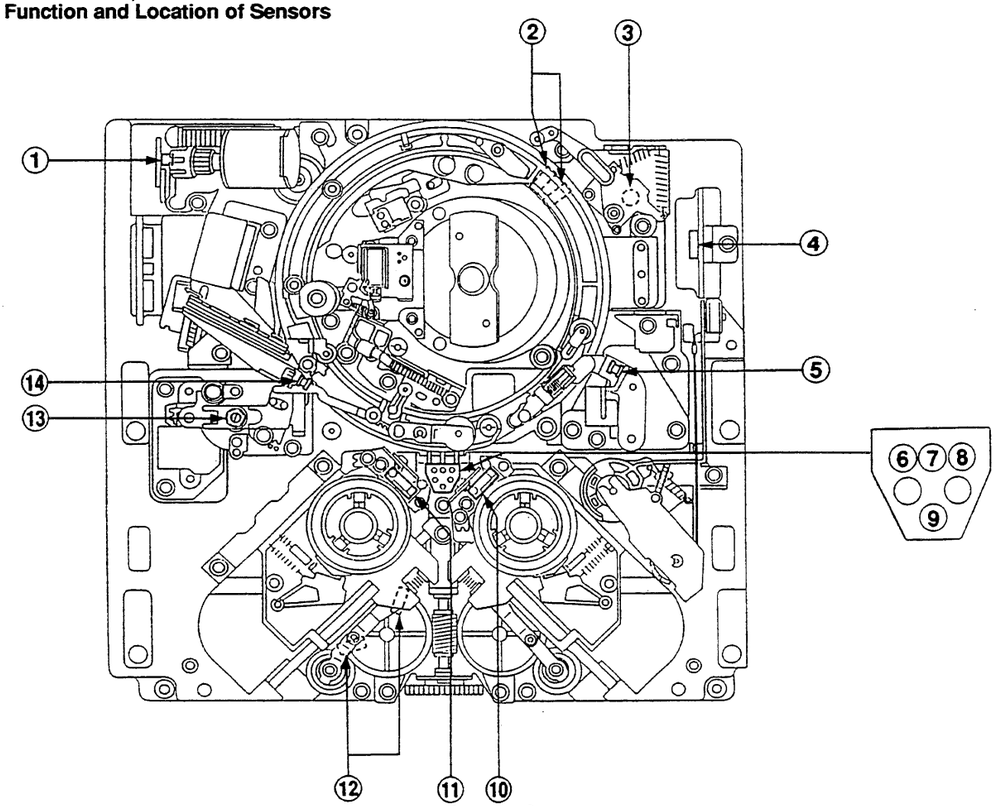


<Top view>

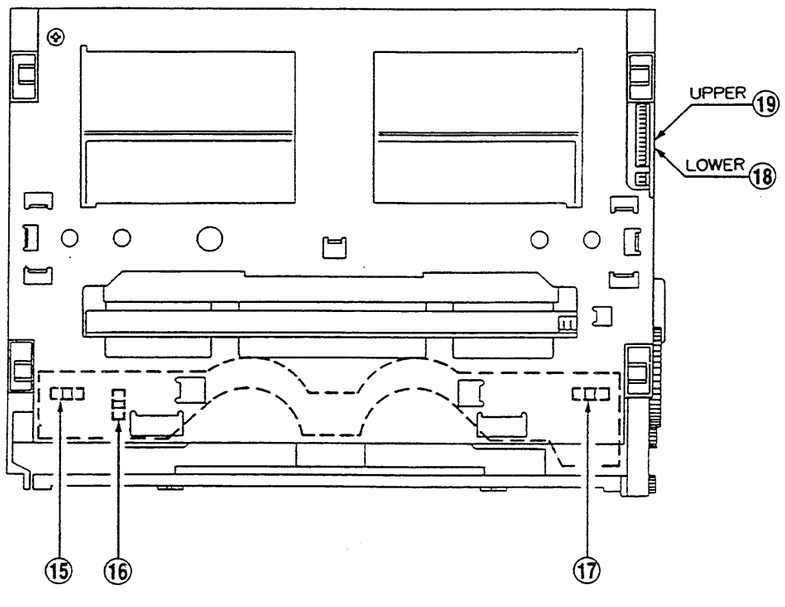
INDEX

① Audio/TC head
② TG-3 tape guide
③ Head drum
④ Threading ring
⑤ T tension regulator arm
⑥ CTL head
⑦ TG-2 tape guide
⑧ Audio/TC head cleaner
⑨ T drawer arm
⑩ TG-10 tape guide
⑪ Pinch roller
⑫ T reel table
⑬ T brake assembly
⑭ T worm wheel
⑮ Worm gear
⑯ Drive gear
⑰ S worm wheel
⑱ S brake assembly
⑲ S reel table
㉑ S tension regulator arm
㉒ TG-0 tape guide
㉓ Capstan shaft
㉔ Cleaning roller block
㉕ Pinch press block
㉖ TG-4 tape guide
㉗ Threading gear block

1-5-3. Function and Location of Sensors



<Top view>



<Top view of cassette compartment>

① **Threading motor rotation sensor**
The threading motor rotation sensor detects the rotation speed of the threading motor.
The FG output signal of this detection sensor is input to the servo circuit to control the threading speed so that the tape is not damaged during threading and unthreading.

② **Threading-end/unthreading-end sensor**
This sensor detects whether the threading ring reaches the threading-end or unthreading-end position.

③ **T tension regulator arm sensor**
During recording and playback, this sensor detects the tension arm position and controls the reel torque to keep a constant T tape tension.

④ **Condensation sensor**
This sensor detects whether the dew condensation occurs in the unit.

⑤ **Tape top sensor**
This sensor detects the top of the tape, and in addition detects the tape end of the tape that runs in the reverse direction.

⑥ **Reel hub diameter sensor**
The reel hub diameter of a cassette tape varies depending on the length of the tape wound on the cassette tape. The reel hub diameter sensor detects the reel hub diameter using a tub on the back side of the cassette tape. The output signal of this sensor is input to the servo circuit to control the rotation speed and torque of the reel motor.

⑦ **Metal tape sensor**
Using a tub on the back side of the cassette tape, this sensor detects whether an oxide tape or metal tape is being inserted into the unit. (Only during analog tape playback)

⑧ **Tape thickness sensor**
Using a tub on the back side of the cassette tape, this sensor detects the thickness of the tape wound on a cassette tape that is being inserted into the unit.

⑨ **Analog/digital tape sensor**
Using a tub on the back side of the cassette tape, this sensor detects whether an analog tape or digital tape is being inserted into the unit.

⑩ **T reel table rotation sensor**
This sensor detects the rotation of the take-up reel table.
The FG output signal of this sensor is input to the servo circuit to control the rotation speed of the reel motor.

⑪ **S reel table rotation sensor**
This sensor detects the rotation of the supply reel table.
The FG output signal of this sensor is input to the servo circuit to control the rotation speed of the reel motor.

⑫ **Reel L/S position sensor**
This sensor detects whether the reel table moves to the correct position according to the size of the inserted cassette tape.

⑬ **S tension regulator arm sensor**
During recording and playback, this sensor detects the tension arm position and controls the reel torque to keep a constant S tape tension.

⑭ **Tape end sensor**
This sensor detects the end of the tape that runs in the forward direction.

⑮ **Cassette-in sensor (L)**
This sensor detects whether a cassette is being inserted.

⑯ **Cassette L/S size sensor**
This sensor detects whether the inserted cassette tape is an L size or S size.

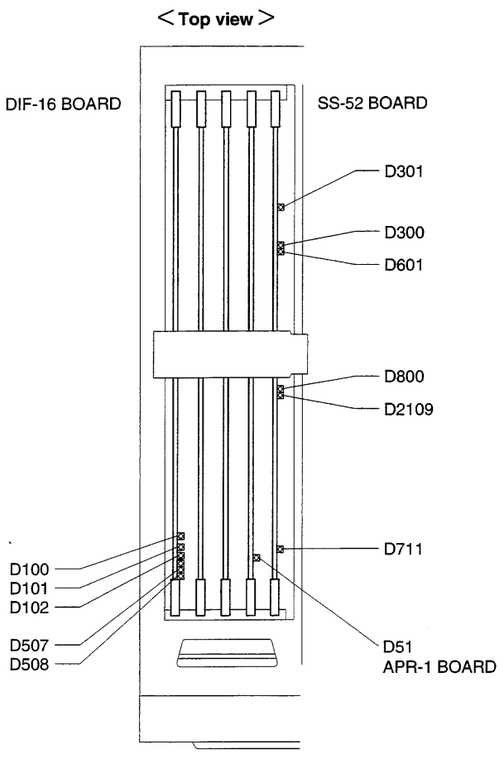
⑰ **Cassette-in sensor (R)**
This sensor detects whether a cassette is being inserted.

⑱ **Cassette-down (2) sensor**
⑲ **Cassette-down (1) sensor**
The cassette-down (1) sensor detects the movement of the cassette compartment through combined ON/OFF operation of the cassette-down (2) sensor, the cassette-down (1) sensor, and a cassette-in sensor.

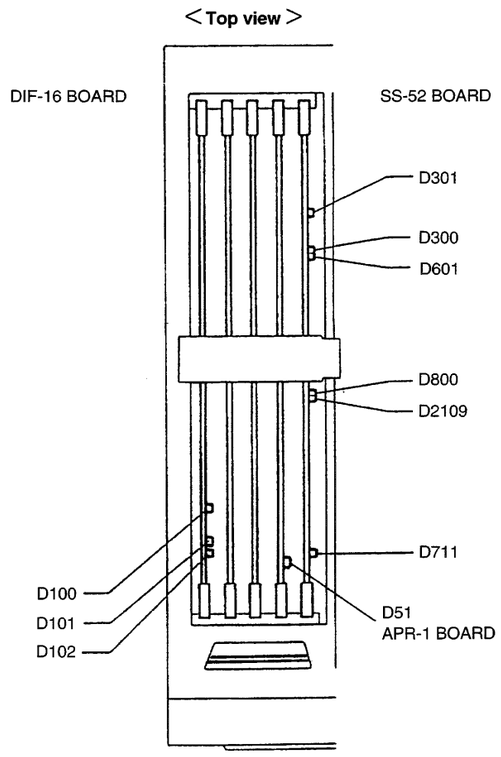
1-6. LED INDICATOR INFORMATION ON BOARDS

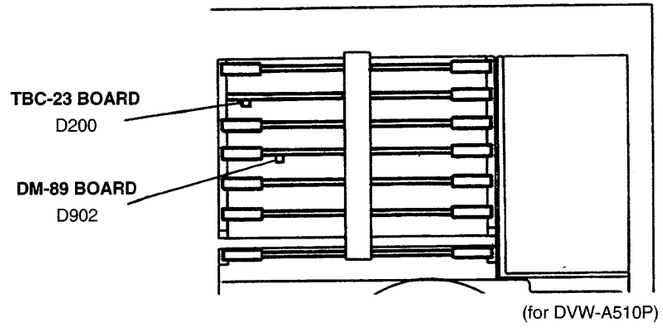
Lot No. 907 and higher

DVW-A510P (EK): S/N 14001 and higher
DVW-510P (EK): S/N 11255 and higher
DVW-CA510P (EK): S/N 10076 and higher



DVW-A510P (EK): S/N 10001 through 14000
DVW-510P (EK): S/N 10001 through 11254
DVW-CA510P (EK): S/N 10001 through 10075





(for DVW-A510P)

<Top view>

DIF-16 Board

LED No.	Name	Color	Description	Normal State
D100	DIF TEST YP	Red	Lights when the Y PARITY test mode is executed in the maintenance mode.	Goes off
D101	PARA IN P ERROR	Red	Lights when an error occurs in the video signal that is sent from VPR board to DIF board.	Goes off
D102	TX625/$\overline{525}$	Green	Indicates the state of 4: 2: 2 component serial digital interface output. This state is set 625/50 by C.P.U BUS CONTROL.	Goes on
*D507	ENC1 ADJUST	Green	Lights when the VCO frequency is almost 27 MHz adjusting the D1 ENC1 VCO in the maintenance mode A23 : DIF VR.	Unsettled
*D508	ENC2 ADJUST	Green	Lights when the VCO frequency is almost 27 MHz adjusting the D1 ENC2 VCO in the maintenance mode A23 : DIF VR.	Unsettled

SS-52 Board

LED No.	Name	Color	Description	Normal State
D300	———	———	Unused	———
D301	SYS 1	Amber	Blinks during SYS 1 V25 CPU normal operation.	Blinks
D601	SYS 2	Amber	Blinks during SYS 2 Z80 CPU normal operation.	Blinks
D711	SV	Amber	Checks the ROM and RAM for communication when the power switch is set to ON. Lights for scores ms at intervals 1 to 2 seconds. (For the blinking pattern when abnormality occurred, refer to the figure shown right.)	Blinks
D800	DRUM	Amber	Blinks during drum microcomputer normal operation. Usually lights for 30 msecond at intervals of about one second. The blinking interval is inverted when the drum is locked.	Blinks
D2109	DT	Amber	Blinks during DT microcomputer FMC-16 CPU normal operation.	Blinks

APR-1 Board

LED No.	Name	Color	Description	Normal State
D51	APR 1	Amber **Red	Blinks during APR 1 microcomputer normal operation (when a 1/2VD signal is received from the SS-52 board).	Blinks

DM-89 Board (for DVW-A510P)

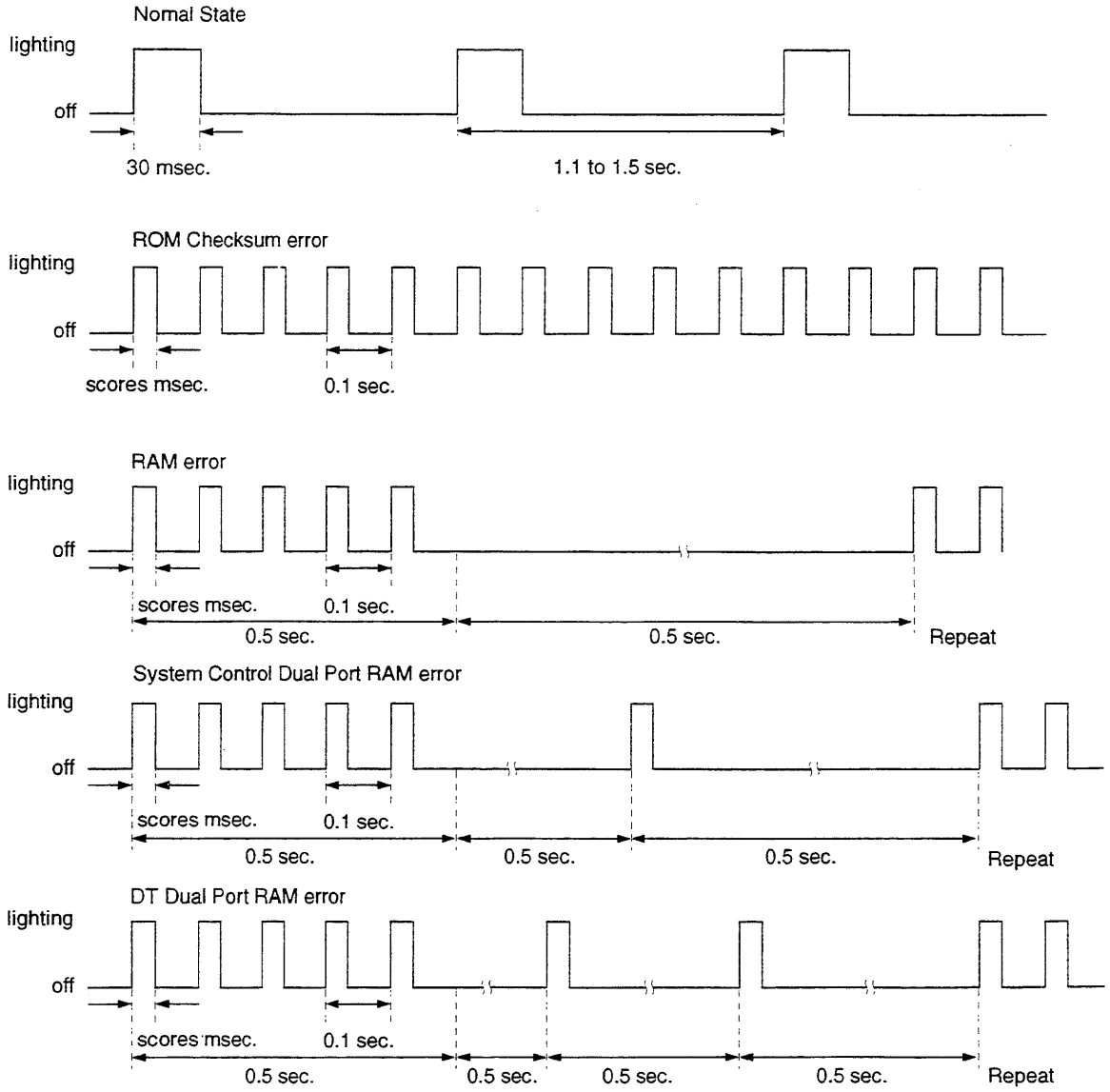
LED No.	Name	Color	Description	Normal State
D902	ADJUST	Amber	Usually lights for about 10 msecond at intervals of about one second. The blinking interval is inverted when the unit is in the adjustment mode (when switch S901-1 is set to ON).	Blinks

TBC-23 Board (for DVW-A510P)

LED No.	Name	Color	Description	Normal State
D200	TBC	Amber	Lights once a second during TBC microcomputer normal operation.	Blinks

*: Lot No. 907 and higher
**: Lot No. 910 and higher

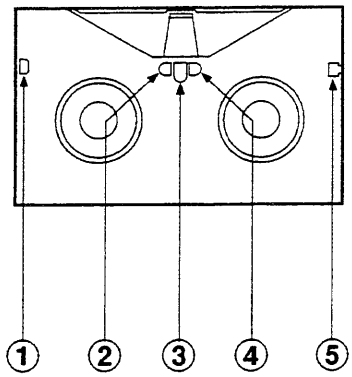
<Blinking Pattern of D711 on SS-51 Board>

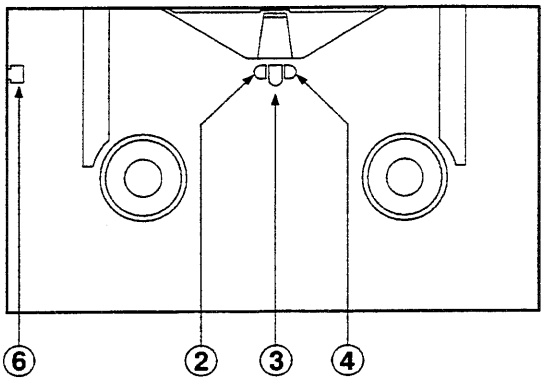


1-7. MECHANISM OF CASSETTE

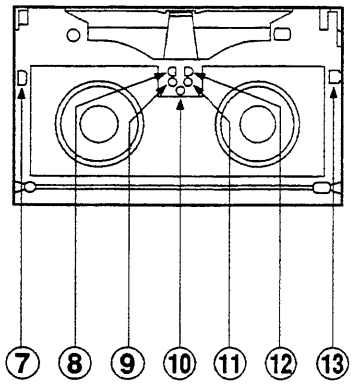
As shown in the figure below, plugs and tabs are provided at the back side of the cassette tape.

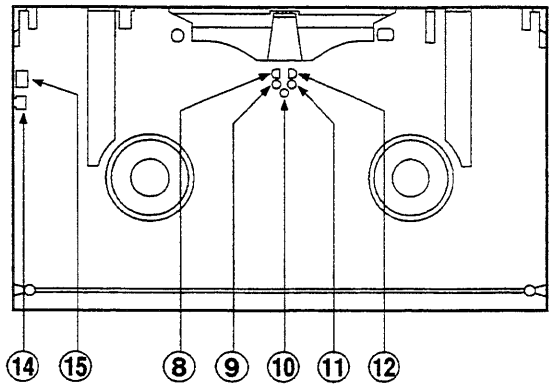
Analog cassette tape





Digital cassette tape





① S cassette REC inhibit tab (for oxide tape)
② Video tape thickness detection tab
③ Metal tape detection tab
④ Reel hub diameter detection tab
⑤ S cassette REC inhibit plug (for metal particle tape)
⑥ L cassette REC inhibit plug

⑦ S cassette analog REC inhibit plug (originally open)
⑧ Video tape thickness detection tab
⑨ SPARE ID
⑩ Digital tape detection hole
⑪ SPARE ID
⑫ Reel hub diameter detection tab
⑬ S cassette digital REC inhibit plug
⑭ L cassette digital REC inhibit plug
⑮ L cassette analog REC inhibit plug (originally open)

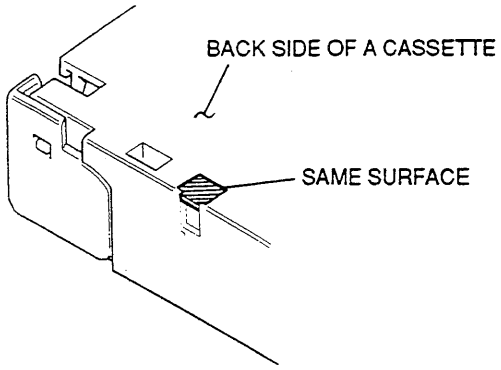


Fig 1.

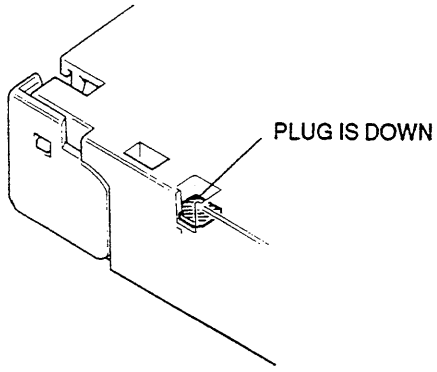


Fig 2.

The presence or absence of these plugs and tabs determines the cassette status as shown in the table below.

Analog cassette tape

No.	Plug and tab	Cassette status with or without plugs and tabs	
		With plugs and tabs	Without plugs and tabs
①	S cassette REC inhibit tab (for oxide tape)	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
②	Video tape thickness detection tab	A 20 µm thick tape is wound on the cassette.	A 15 µm thick tape is wound on the cassette.
③	Metal tape detection tab	An oxide tape is wound on the cassette.	A metal tape is wound on the cassette.
④	Reel hub diameter detection tab	For small hub	For large hub
⑤	S cassette REC inhibit plug (for metal particle tape)	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
⑥	L cassette REC inhibit plug		

Digital cassette tape

No.	Plug and tab	Cassette status with or without plugs and tabs	
		With plugs and tabs	Without plugs and tabs
⑦	S cassette analog REC inhibit plug (originally open)	———	Analog signals cannot be recorded.
⑧	Video tape thickness detection tab	———	A 14 µm thick tape is wound on the cassette.
⑨	SPARE ID	———	———
⑩	Digital tape detection hole	An analog tape is wound on the cassette.	A digital tape is wound on the cassette.
⑪	SPARE ID	———	———
⑫	Reel hub diameter detection tab	For small hub	For large hub
⑬	S cassette digital REC inhibit plug	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
⑭	L cassette digital REC inhibit plug	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
⑮	L cassette analog REC inhibit plug (originally open)	———	Analog signals cannot be recorded.

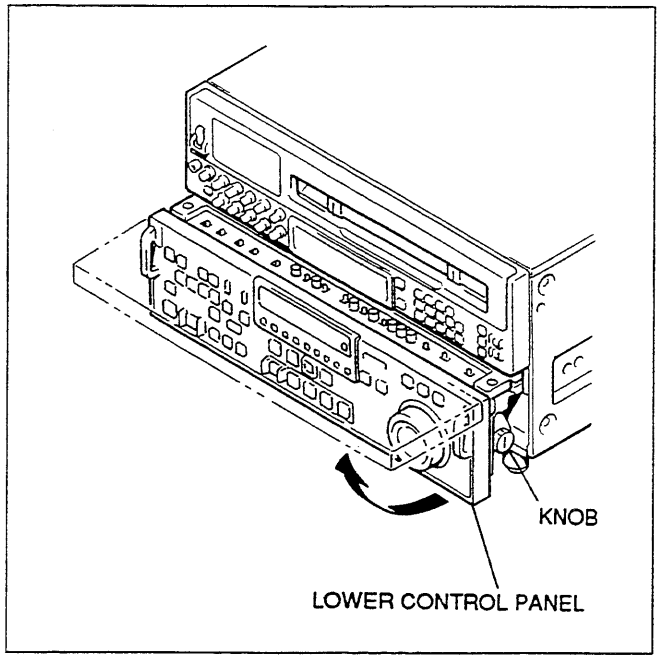
1-8. HOW TO PULL OUT/PUSH IN THE LOWER CONTROL PANEL

1. Take both side handles of a lower control panel and pull them slightly forward. Pull them more strongly, then the lower control panel is fixed.
2. Lift the lower control panel. The panel can be moves maximum 90 degrees.

NOTE
The lower control panel can be tilted up to 90 degrees by approximately 15 degree step. When using the lower control panel on the tilt, turn the knobs clockwise to hold the panel firmly.

3. When put back the panel assembly in the unit, replace it horizontally to the front side of the unit and then push it in the unit.

NOTE
Put back the panel assembly in the unit surely after using the unit.

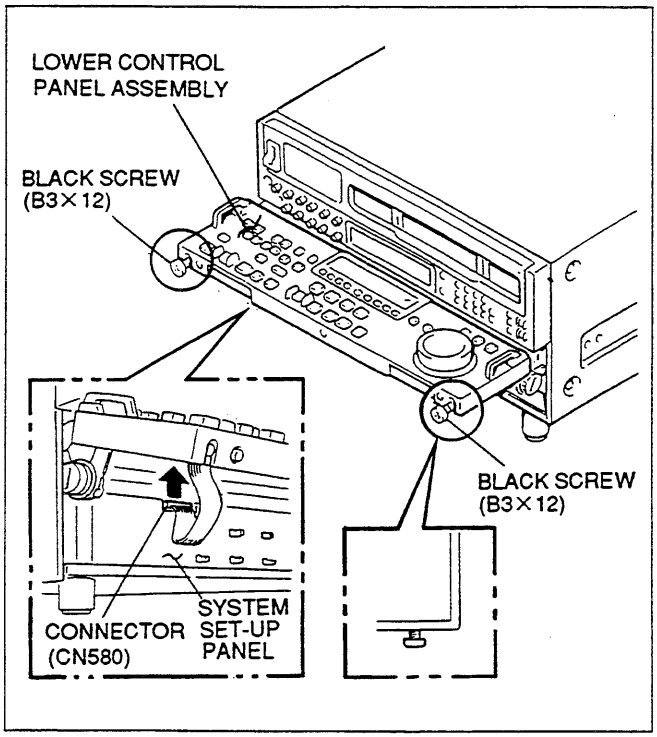


Pulling out/Pushing in the Lower Control Panel

1-9. REMOVAL/INSTALLATION OF LOWER CONTROL PANEL ASSEMBLY

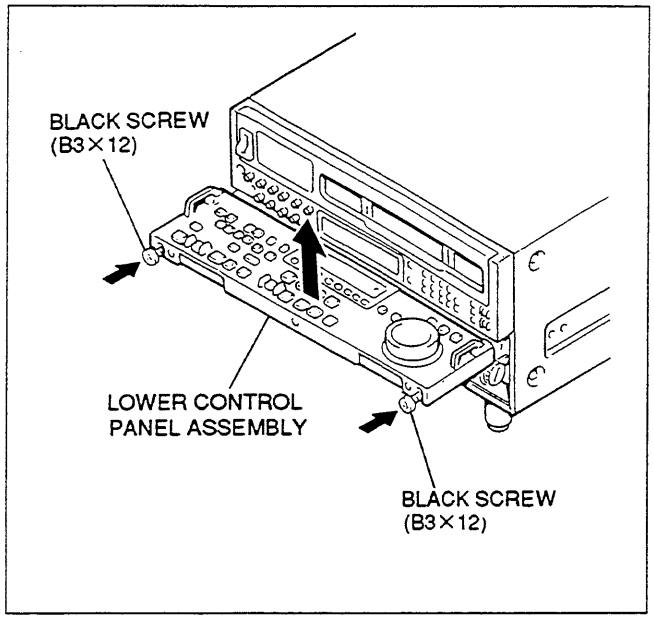
Removal

1. Fix a lower control panel at 90 degrees.
(Refer to Sec. 1-8. How to Pull out/Push in the Lower Control Panel)
2. Disconnect the connector (CN580) on the system set-up panel.
3. Loosen the two black screws on the lower control panel assembly. (Loosen the screws until screw's top are exposed from the lack of the lower control panel assembly.)



Disconnecting the Connector

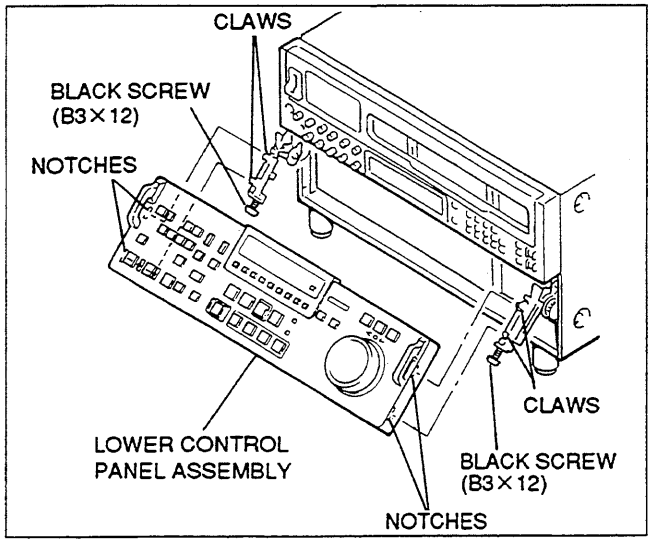
4. While pushing the loosen black screws in the direction of the arrow, remove the lower control panel assembly from the arms.



Removal of the Panel Assembly

Installation

5. Connect the harness of the panel assembly to the connector (CN580) on the system set-up panel.
6. Fix the arms at 45 degrees.
7. Set the notches of the panel assembly to the claws of the arms and insert the panel assembly until making a click sound.
   Then fix the assembly with the two screws.
8. When putting back the panel assembly in the unit, replace it horizontally to the front side of the unit and then push it in the unit.



Installation of the Panel Assembly

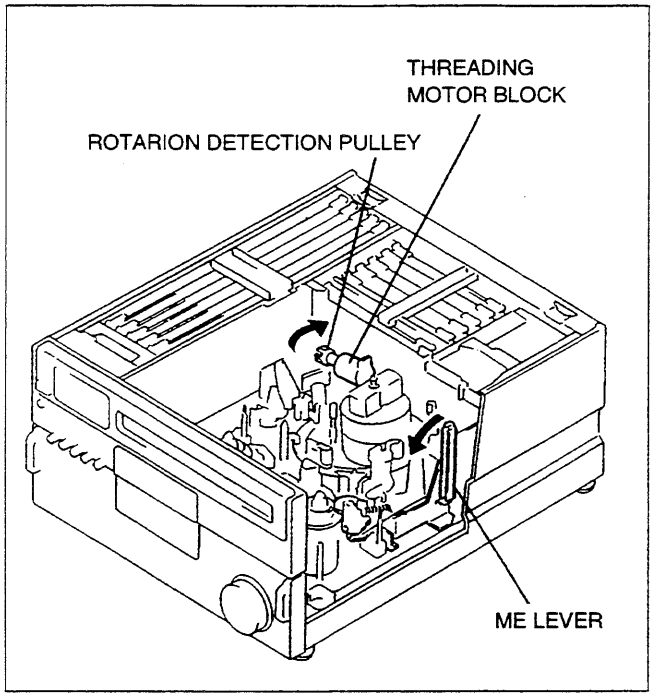
1-10. HOW TO TAKE OUT THE CASSETTE WHEN THE TAPE IS SLACKING

When the tape is slacked in the VTR, take out the cassette tape in the procedure below while taking care not to damage the tape.

1. Turn off the POWER.
2. Remove the upper lid.
   (Refer to Section 1-2. Removal/Installation of Cabinet.)
3. Remove the plate MD.
   (Refer to Section 1-3. Removal/Installation of Plate MD.)
4. Rotate the rotation detection pulley of the threading motor block in the direction of the arrow with fingers by about a half turn and slacken the tape.
5. Shift the ME lever toward the front panel and wind the tape inside the cassette.

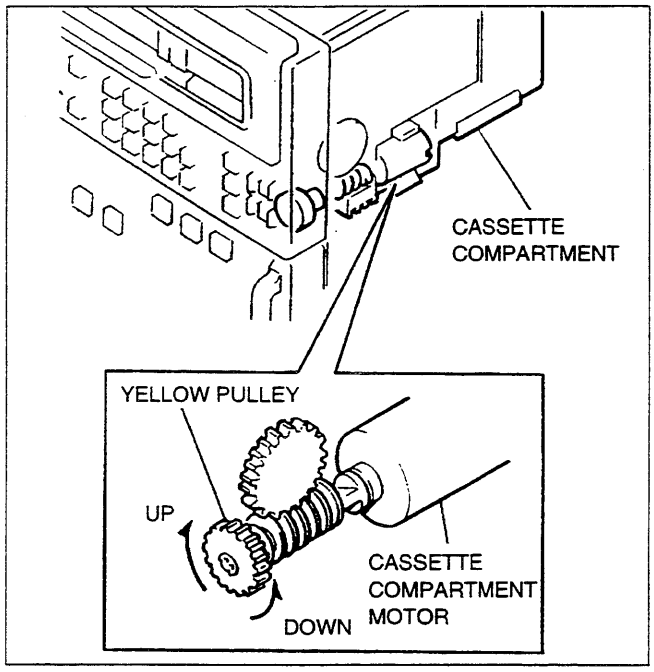
   NOTE
   Do not shift the ME lever during normal operation (during reel table operation).

   Repeat steps 4 and 5 until the unit is put into the unthreading-end state and until the tape is wound completely.
6. Fix the lower control panel assembly at the position of 90 degrees.
   (Refer to Section 1-8. How to Pull out/Push in Lower Control Panel.)



Winding of a Tape

7. Turn the yellow pulley of the cassette compartment motor shown in the figure clockwise until the cassette tape is ejected completely.



Ejection of a Cassette Tape

1-11. CLEANING WHEN THE HEADS ARE CLOGGED

If the video heads are clogged, clean the heads as the following procedure.
If the video heads are clogged after cleaning by cleaning tape, clean them by cleaning piece.

1-11-1. Cleaning by Cleaning Tape

NOTE
Make sure to use the cleaning tape BCT-5CLN. If the cleaning is performed by other cleaning tape, not the BCT-5CLN, unusual friction or damage of the video head may occur.

1. Insert the cleaning tape BCT-5CLN in the unit.
2. Press the EJECT button simultaneously with PLAY button.
   Head cleaning starts.
3. After 5 seconds, the cleaning tape will be ejected automatically.

   NOTE
   Be sure to eject the cleaning tape after cleaning to avoid damages to the heads.

4. Confirm that the head clog is clear.

1-11-2. Cleaning by Cleaning Cloth

Caution

- Turn the power off before cleaning.
- Each block in the mechanical deck consists of a precision part and is adjusted precisely. Be careful not to damage each part and to apply an excessive force during cleaning.
- Do not touch the greased portions during cleaning. If grease attaches to a cleaning cloth, replace the cleaning cloth by new one. If a cleaning cloth smeared with grease is used, grease may attach to the places where it should not.
- Do not insert a cassette tape before a cleaning fluid completely evaporates after cleaning.

Tools

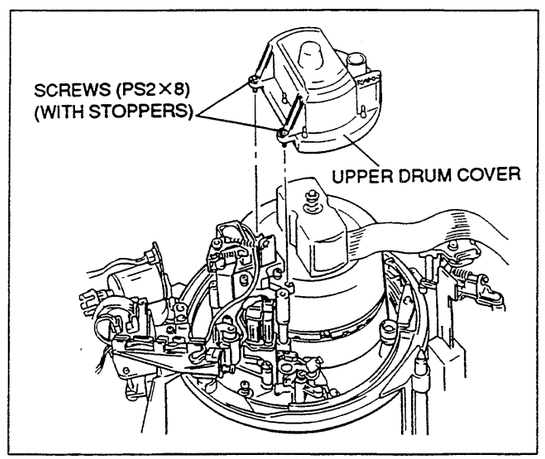
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

CAUTION
Do not use a cotton swab to clean the rotary heads.

Procedures

1. Turn the power off.
2. Remove the upper lid.
   (Refer to Section 1-2-1.)
3. Remove the plate MD.
   (Refer to Section 1-3.)
4. Remove the cassette compartment.
   (Refer to Section 1-2-2.)
5. Loosen the two screws and remove the upper drum cover.

   NOTE
   These screws cannot be removed because of stoppers.



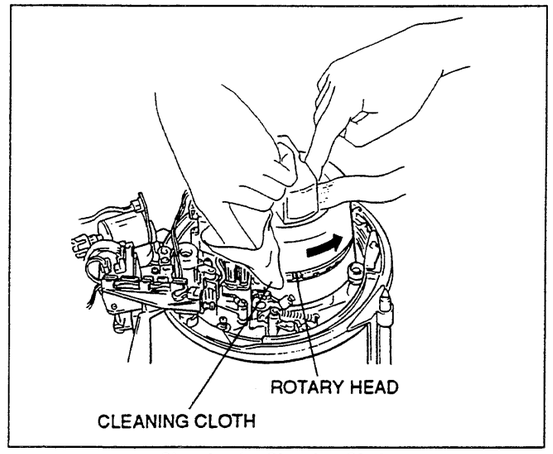
Removal/Installation of Upper Drum Cover

6. Press the cleaning cloth moistened with cleaning fluid slightly against the rotary heads.
7. Rotate the inner drum slowly counterclockwise two or three turns and clean the rotary heads.

   CAUTION
   Be sure to rotate the inner drum counterclockwise and clean the rotary heads along the circumference. Do not rotate the inner drum in the direction opposite to the specified direction (clockwise) or clean it in the vertical direction. This may damage the rotary heads.

8. After cleaning, wipe it with a dry cleaning cloth two or three times.
9. Tighten the two screws while pressing the upper drum cover towards the drum support direction.

   Tightening torque: 14.7×10^{-2} N•m (1.5 Kgf•cm)



Cleaning by Cleaning Cloth

1-12. FIXTURE AND MEASURING EQUIPMENT FOR ADJUSTMENT

1-12-1. Fixture

Fig. No.	Part No.	Description	Inscription No.	For use
1	J-6001-820-A	Drum Eccentricity Gauge (3)	———	Inner drum eccentricity adjustment
2	J-6001-830-A	Drum Eccentricity Gauge (2)	———	
3	J-6001-840-A or J-6325-530-A	Drum Eccentricity Gauge (1) or Drum Eccentricity Gauge (6)	———	
4	J-6087-000-A	Drum Eccentricity Gauge (5)	———	
5	J-6324-030-A	Drum Eccentricity Gauge (7)	MW-403	
6	J-6035-070-A	Extraction Tool (for PLCC socket)	———	Extraction of IC (PLCC type)
7	J-6080-029-A	Small Dental Mirror (Round type ϕ 12)	———	Cassette pillar height adjustment
8	J-6086-570-A	Reference Flat Plate	SL-657	Audio/TC head zenith adjustment
9	J-6152-450-A	Wire Clearance Check Gauge Set	———	Clearance check
10	J-6251-090-A	Torque screwdriver's hexagonal bit (d=2.5 mm, l=120 mm)	———	Tightening screws to fix a drum assembly and inner drum assembly
	J-6323-440-A	Torque screwdriver's hexagonal bit (d=0.89 mm, l=50 mm)	———	Tightening screws to fix a tension regulator roller
	J-6323-500-A	Torque screwdriver's hexagonal bit (d=2 mm, l=75 mm)	———	Tightening screws to fix a reel FG sensor
11	J-6323-420-A	Torque screwdriver's bit (+ 2 mm, l=75 mm)		Tightening screws to fix a brush/slip ring assembly
	J-6323-430-A	Torque screwdriver's bit (+ 3 mm, l=90 mm)		Tightening screws to fix a reel motor assembly or a ring roller
12	J-6252-510-A	Torque screwdriver (6 kg•cm)	JB-5251	Tightening screws
	J-6252-520-A	Torque screwdriver (12 kg•cm)	JB-5252	Tightening screws
13	J-6269-800-A	Extension Board (L), EX-365	———	Large-sized printed circuit board for check and adjustment
14	J-6269-810-A	Extension Board (S), EX-377	———	Small-sized printed circuit board for check and adjustment
15	J-6320-870-A	Reel Motor Shaft Slantness Check Fixture	MW-087	Reel motor shaft slantness adjustment
16	J-6320-880-A	Cassette Reference Plate (L)	MW-088	Reel table height adjustment, Reel motor shaft slantness adjustment
17	J-6322-610-A	Tape Guide Adjustment Driver	MW-261	Tape path alignment
18	J-6329-350-A	Reel Table Height Gauge	MW-935	Reel table height adjustment
19	J-6332-240-A	VISC Phase Adjusting Jig	———	VISC Alignment
20	J-6420-320-A	Extension Cable Set	———	Extension of the switching regulator
21	1-952-684-11	Extension Cable (14 P)	———	Repair of the TBC-23/24 boards
22	3-184-527-01	Cleaning Cloth (15 cm × 15 cm)	———	Cleaning

Fig. No.	Part No.	Description	Inscription No.	For use
23	7-432-114-11	Locking Compound 200 g	———	Inhibits loosening of screws.
24	7-661-018-18	Diamond Oil NT-68 50 ml		
25	7-651-000-10	Sony Grease (SGL-601) 50 g	———	
26	7-700-736-01	L-shaped Hexagonal Wrench (d: 1.27 mm)	———	
	7-700-736-05	L-shaped Hexagonal Wrench (d=1.5 mm)	———	
	7-700-736-06	L-shaped Hexagonal Wrench (d=0.9 mm)	———	
27	7-700-766-04	Hexagonal Wrench Driver (d=2.5 mm)	———	
28	8-960-073-51	Alignment Tape, ZR5-1P	———	Digital Video and Audio alignments
	8-960-073-61	Alignment Tape, ZR2-1P	———	Tracking adjustments (for digital)
29	8-960-096-91	Alignment Tape, CR5-1B PS (metal particle tape)	———	Analog Video alignments (DVW-A500P/A510P only)
	8-960-096-86	Alignment Tape, CR8-1B PS (metal particle tape)	———	Analog Audio alignments (DVW-A500P/A510P only)
	8-960-098-44	Alignment Tape, CR5-2A PS (oxide tape)	———	Analog Video alignments (DVW-A500P/A510P only)
	8-960-098-45	Alignment Tape, CR8-1A PS (oxide tape)	———	Analog Audio alignments (DVW-A500P/A510P only)
30	9-911-053-00	Thickness Gauge	———	Clearance check
31	9-919-573-01	Cleaning Liquid	———	Cleaning
32	J-6530-760-A	TG-0 Adjustment Fixture	DF-076	TG-0 Adjustment

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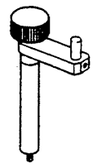
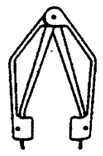
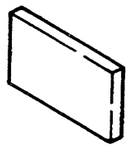
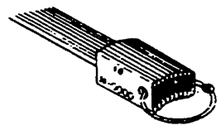
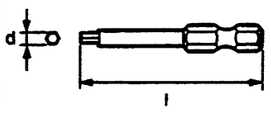
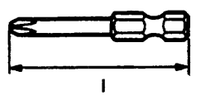
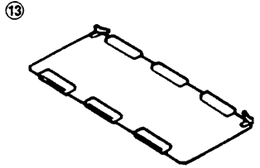
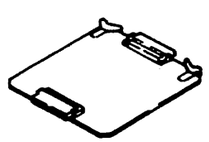
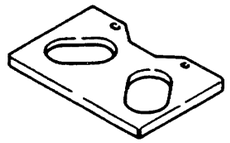
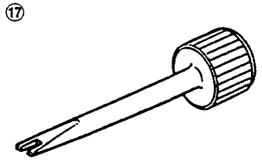
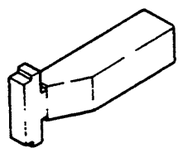
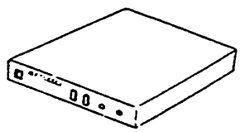
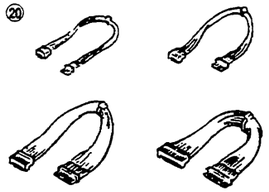
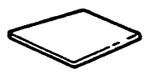
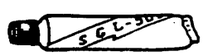
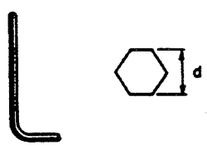
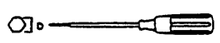
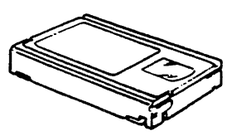
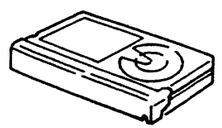
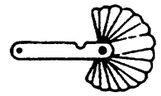
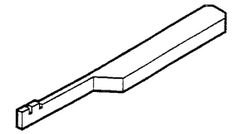
⑤ 	⑥ 	⑦	⑧ 
⑨ 	⑩ 	⑪ 	⑫
⑬ 	⑭ 	⑮	⑯ 
⑰ 	⑱ 	⑲ 	⑳ 
㉑	㉒ 	㉓	㉔
㉕ 	㉖ 	㉗ 	㉘ 

㉙ 	㉚ 	㉛	㉜ 

1-12-1. Fixture

1-12-2. MEASURING EQUIPMENT

It is recommended to use the measuring equipments listed below or the equivalents.
Each equipment is available as a standard product.

Equipment	Model Name	Remarks
Analog Composite Signal Generator	SONY TEKTRONIX 1411	for VPR-1 board alignment
	SONY TEKTRONIX TSG-271A	
Analog Component Signal Generator	SONY TEKTRONIX TSG-300 or TSG-371	for generating SMPTE/EBU format analog signals
Digital Component Signal Generator	SONY TEKTRONIX TSG-422(OP.1S)	for generating 4:2:2 format digital signals
Spectrum Analyzer	ADVANTEST R3261A	with external trigger function bandwidth: more than 100 MHz
Oscilloscope	SONY TEKTRONIX 2465B	
Component/Composite Wave Form Monitor	SONY TEKTRONIX WFM 300A	for measuring video levels
Wave Form/Vector Monitor	SONY TEKTRONIX 1751 or 1781R	for measuring analog composite SCH
Audio Level Meter	HEWLETT PACKARD HP3400A	
Audio Analyzer	SONY TEKTRONIX AA501A(OP.02)	for measuring distortion and levels
Audio Generator	SONY TEKTRONIX SG505(OP.02)	
Frequency Counter	ADVANTEST TR5821AK	
Digital Voltmeter	ADVANTEST TR6845	
Monitor with Serial Digital Input	SONY BVM-1410 (with optional accessoy BKM-2085-14)	
Network Analyzer	ANRITSU MS-420B	
DA Converter Board (D-1)	SONY BKPF-102CA	for VPR-1 board alignment
Digital Video Interface Unit	SONY PFV-D50/D100/D200	for VPR-1 board alignment

1-13. ERROR LOGGER FUNCTION

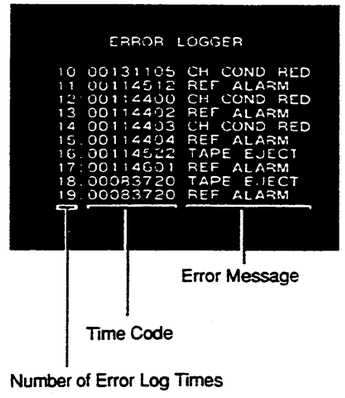
- CH COND RED (Channel Condition Red)
  When the red CHANNEL CONDITION Lamp on the upper control panel lights;
- REF ALARM (Reference Alarm)
  When a reference signal is missing (no signal is input to the INPUT REF VIDEO terminal)
- TAPE EJECT
  When the cassette tape is ejected;
  (If no error is occured from when the cassette tape was ejected last time until it is ejected this time, the preceding time code is overwritten by this time code.)
- ERROR-xx
  When a trouble is detected;
  (The corresponding error code is recorded.)

When any one of the conditions mentioned above occurs, the corresponding message and time code are stored. After the power switch is turned on, the error logger function always monitors the unit to detect the errors. The contents of these data items can be read and checked in the form of a list.

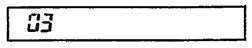
Error Logger Screen

To enter the error logger screen, press the MENU button while pressing and holding the ENTRY button on the lower control panel.
The error logger data is superimposed on the monitor screen (output to the VIDEO OUTPUT COMPOSITE 3 connector or
SERIAL V/A OUTPUT 4 connector). Moreover, the time counter on the lower control panel displays the error logger data by only
the number of storage error times.
A maximum of 99 error data items can be stored. To display the error data items that are not displayed on the screen, turn the
search dial to scroll up them. When 99 data items are exceeded, the old data is erased and the data sequence is advanced.
To exit the error logger screen, press the MENU button on the lower control panel.

Monitor Screen



Time counter display

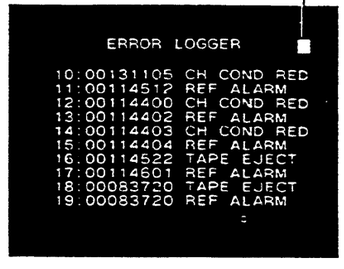


NUMBER OF ERROR LOG TOTAL TIMES

Tape Operation during Error Logger Screen Display

With the error logger screen displayed, press the SET button on the lower control panel to display a block sign on the monitor
screen. This enables the tape operation.
To return to the error logger screen, press the MENU button on the lower control panel.

Block-Sign
Monitor Screen



Error Logger Data Erasure

To erase the error logger data, press the RESET button on the lower control panel in the error logger screen display.

SECTION 2
RECORDING FORMAT, HEAD CONFIGURATION, AND SIGNAL PROCESSING

2-1. OUTLINE

This Sony DVW series VTR is a 1/2-inch component digital VTR which uses a new "Digital Betacam" format.
This "Digital Betacam" format has been developed as the digital version of the analog Betacam format that has been now accepted as a standard in the broadcasting, production, and Electronic News Gathering (ENG) fields of the world.
That is, the Digital Betacam VTR can perform high-performance digital recording and playback while keeping the playback compatibility of the conventional analog Betacam tape, and has almost the same operation performance as in the conventional analog Betacam VTR.

To perform such a workhorse VTR, a new bit rate reduction format (i.e., coefficient recording) has been developed. The data rate is compressed into approximately 1/2, and compressed data is recorded on tape. Moreover, the introduction of a high-performance, high-precision heads and drum, and a new automatic tracking system has enabled a drastic reduction of the width of the recording track.
As the result, the Digital Betacam VTR is able to use the same size 1/2-inch Digital Betacam cassette (S and L) as in the conventional Betacam cassette. The L cassette makes continuous recording of more than 120 minutes possible, and even the S cassette can record for 40 minutes continuously.

In the VTR with a Betacam playback function, the analog tape (metal and oxide) recorded based on the Betacam/Betacam SP format can also be played back. Therefore, currently-owned Betacam recorded tapes can also be used directly. Furthermore, an analog Betacam SP VTR (especially Camcorder) can also be jointly used in the Digital Betacam system.

(Note: The player for the cart system uses the S cassette only.)

2-2. RECORDING FORMAT

2-2-1. Tape Pattern

Fig. 2-2-1 shows the tape pattern in the 625/50 system. To explain the operation of the VTR with a Betacam playback function, this figure shows the tape pattern of the Digital Betacam format at right, and the tape pattern of the Betacam SP format at left together.

In the Digital Betacam format, one-field video data is recorded on six helical tracks (program tracks). In other words, since one-field data is recorded while the drum rotates by 1.5, the number of drum rotations is 75 per second. In the Betacam SP format, since one-field data is recorded while the drum rotates by 1/2, the number of drum rotations is 25 per second. As shown in the figure, the tape speed of the Digital Betacam format is lower about 5% than that of the Betacam SP format.
The VTR with a Betacam playback function detects whether the cassette tape to be played back is based on the Digital Betacam format or the analog Betacam format, by the ID hole of the cassette, and switches the control mode automatically. As the result, the tape is played back at the same drum rotation and tape speed as when it is recorded, and parameters are set so that the optimum tracking is obtained.

The drum diameter of the Digital Betacam VTR is larger about 9% than that of the Betacam SP VTR. Since the relative speed of the head to tape increases proportionally to the drum diameter even if the drum rotation is made same, the signal recorded on the helical track of the Betacam SP tape is played back as time-compressed signal about 9%. In other words, the frequency of the played back RF signal increases. However, the RF signal is processed by a signal processing circuit in the later stage so that it can obtain the same performance as before.

The tape pattern of the Digital Betacam format has three longitudinal tracks (i.e., control track, time code track, and cue audio track). These tracks coincide with the tape pattern of the Betacam SP format. Therefore, the longitudinal tracks of the Betacam SP tape can be played back by the stationary heads of the Digital Betacam VTR. In the Betacam SP format, however, the fourth longitudinal track that records an audio CH1 signal is provided in parallel. The VTR with a Betacam playback function thus has a two-channel audio head.

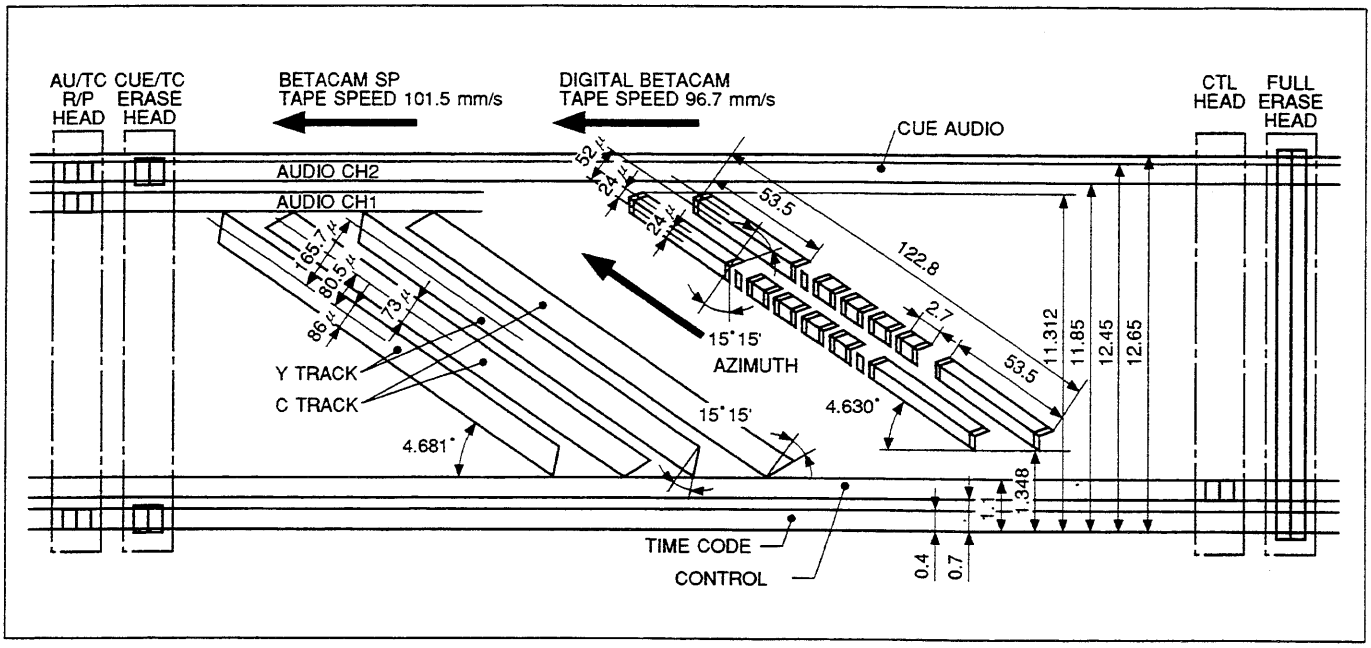


Fig. 2-2-1. Tape Pattern (625/50)

2-2-2. Data Arrangement on Program Tracks

Fig. 2-2-2 shows the arrangement of data recorded on helical tracks (program tracks). The size of each section in the figure is not the actual dimension ratio. For more information on the size, refer to Fig. 2-2-1.

The Digital Betacam format uses an azimuth recording system to perform high-density recording. Namely, two heads with an azimuth angle of approximately 15 degrees in the opposite direction to each other are paired to record two program tracks (track 0 and 1) while the drum rotates by 1/2.

One-field video data and audio data are recorded on six program tracks. Fig. 2-2-2 shows the arrangement of one-frame data. Field 1 data is recorded on the first-half six tracks, and field 2 data is recorded on the latter-half six tracks.

Each program track is constructed to have four audio sectors in the center and to have two video sectors beyond the tracking pilot signals put before and behind the audio sectors. In other words, one-field video data is dispersed into twelve video sectors for recording, and four-channel audio data is dispersed into six audio sectors for recording for every channel. As shown in Fig. 2-2-2, each channel for the audio sectors is arranged so that the danger of error generation disperses.

To identify the beginning and end of a sector, preamble and postamble data are added before and behind all the sectors. Also, edit gaps are installed between the sectors so that each channel can be edited independently.

Tracking pilot signals are used in an automatic tracking system that secures high-speed and high-precision tracking during editing.

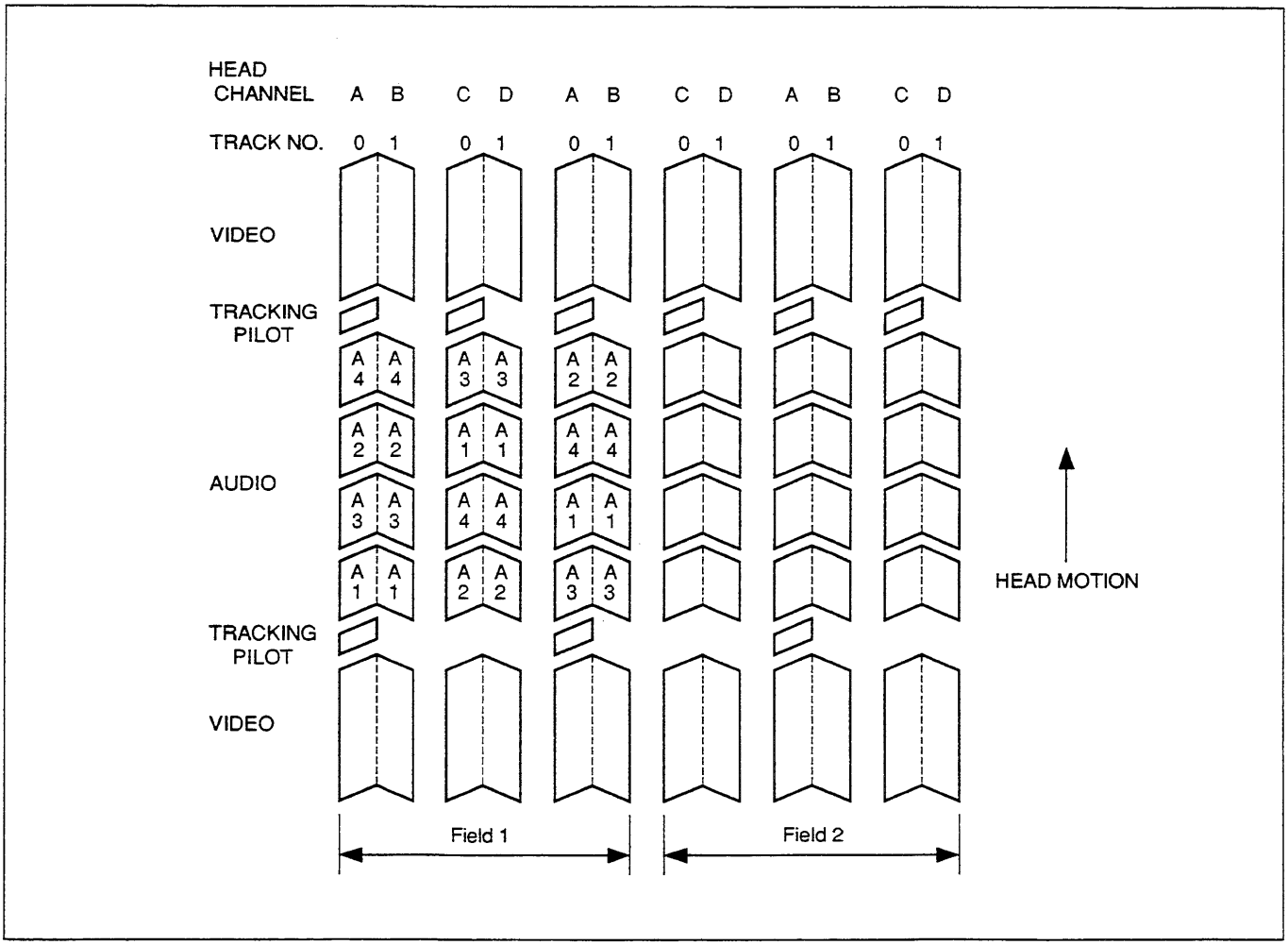


Fig. 2-2-2. Data Arrangement on Program Tracks

2-2-3. Longitudinal Tracks

As shown in Fig. 2-2-1, a control track, time code track, and cue audio track are provided in the longitudinal direction of the tape.

Fig. 2-2-3 shows the CTL signal and time code signal in the 625/50 system, and the timing relationship between these signals and video reference signals.

The CTL signal is recorded by a 50-Hz rectangular pulse in the 625/50 system and controls the start timing of each field data at the rising edge of the pulse. The CTL signal is also modulated the duty cycle of the rectangular wave to 65 : 35 in the first field of a color frame and modulated it to 35 : 65 in the fifth field so as to identify the field number and control the color framing.

The time code signal uses a conventional longitudinal time code based on the EBU standard. One frame consists of 80 bits. Frame number, second, minute, hour, and sync word data items are coded by a biphase mark coding method and recorded for every frame. A user bit is written in the time data as a binary group.

The cue audio signal is recorded by an ordinary AC bias method.

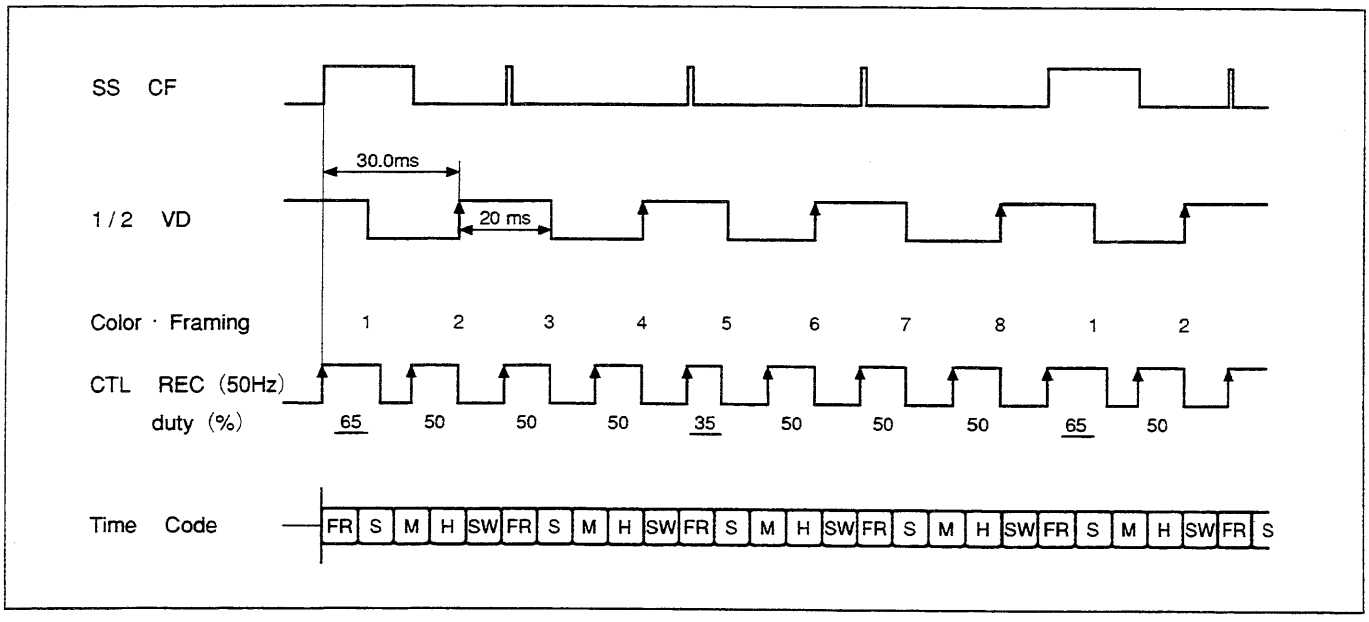


Fig. 2-2-3. Digital Betacam Timing Chart (625/50)

2-3. HEAD CONFIGURATION

Fig. 2-3-1 shows the arrangement of the stationary and rotary heads in the recorder with a Betacam playback function, and its top view. However, the rotary heads can be actually viewed only their tips from the side of the drum.
In the illustration that shows the rotary heads, ADVANCE heads and Y/C heads installed in pairs on the square plates like the bimorph plates are dynamic tracking heads. These heads are used to play back a digital tape and an analog tape respectively. Therefore, the model without a Betacam playback function has no Y/C heads.

Both ADVANCE heads and CONFIDENCE heads are used to play back a digital tape. In usual PB mode, the ADVANCE heads are used to play back. In the REC and INSERT modes, the ADVANCE heads play back the signal before erasure as preread, and the CONFIDENCE heads play back a recorded signal to confirm that the signal has been recorded. For that purpose, the ADVANCE heads and the CONFIDENCE heads are installed in the specified height on the rotary drum so that they can trace the before track and after track respectively toward the REC head.

In Fig. 2-3-1, shaded heads are installed for the recorder only. As for the player, only the stationary heads to play back the longitudinal tracks and only the rotary heads to play back the helical tracks are installed.

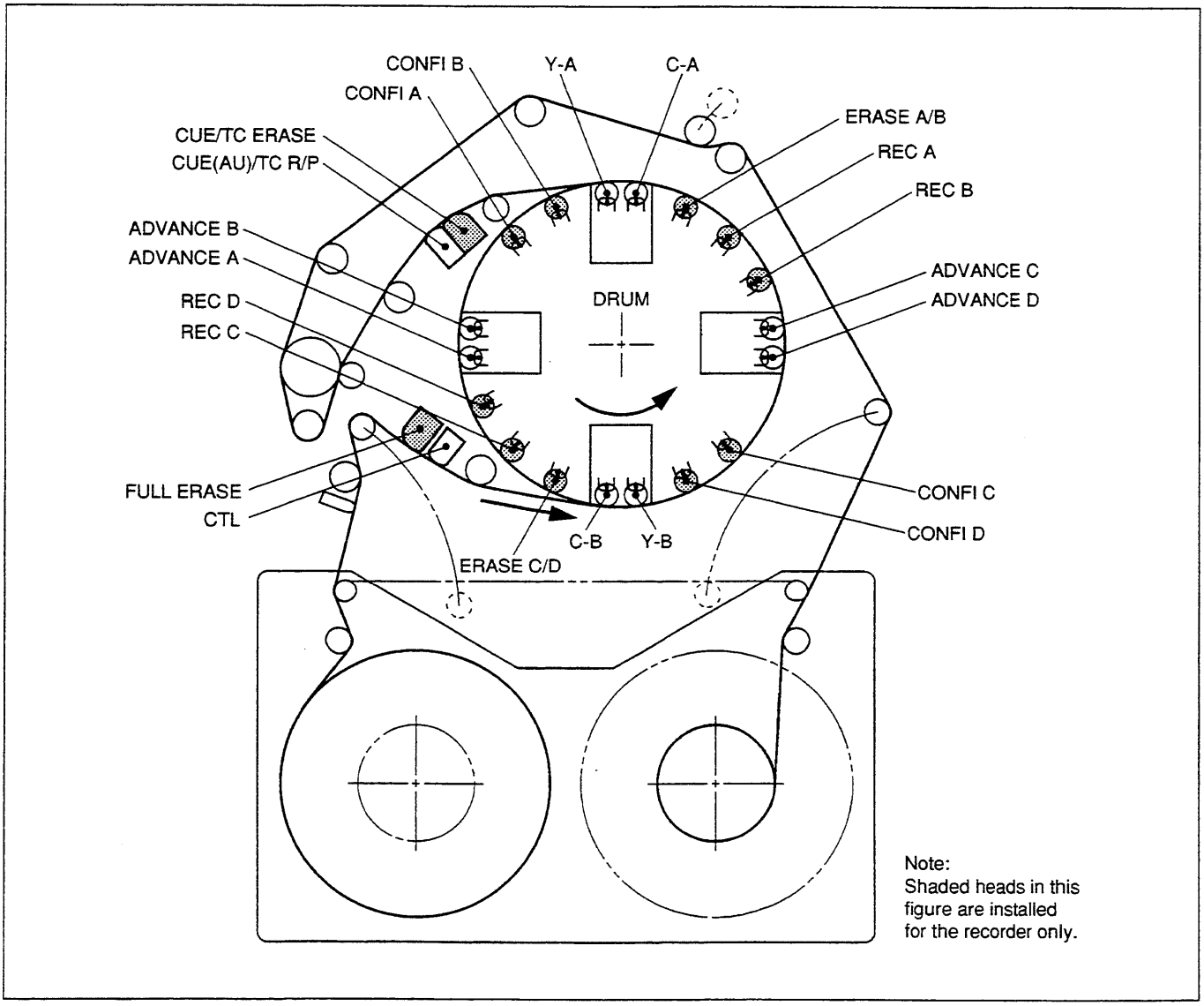


Fig. 2-3-1. Arrangement of Stationary and Rotary Heads

2-4. SIGNAL PROCESSING

2-4-1. Outline of the Digital Interface Format

The interface of the Sony Digital Betacam VTR is based on the component serial digital interface format EBU Tech 3267/ CCIR-656 Part III. The digital audio interface is based on the AES/EBU format.

1. Serial video interface

Each data of a digital component video signal and four-channel digital audio signal is serialized and can be transmitted over a long distance of more than 200 m using one coaxial cable. The transmission rate is 270M bits per second.
This serial interface uses an S-NRZI (Scrambled Non-return to Zero Inversion) channel code system for digital data coding. The NRZI transmission has a merit that the contents of data do not change even if a signal is inverted in polarity. Therefore, this system has the advantage that a sprious radiation can be reduced by using the positive/negative polarity simultaneously for serial signal transmission or that the IC can be constituted by a stable, low-power consumption differential amplifier. Scramble processing also enables a clock to be reproduced on the receiving side even if data "0" continues.
Video data is processed in conformity with the CCIR-601 standard. The luminance signal (Y) is sampled in 13.5 MHz, and the color-difference signals (CR and CB) are sampled in 6.75 MHz. The luminance signal and color-difference signals are then multiplexed in the order of "CB, Y, CR, Y, CB, Y, CR, Y, ..." and transmitted at the rate of 27M words per second.
Fig. 2-4-1 shows the relationship between the video signal level and the quantizing level. Fig. 2-4-2 shows the sampling format in a horizontal line, and Fig. 2-4-3 shows the sampling format in a field.
As shown in Fig. 2-4-2, the four-word timing reference signals (TRS) are added before and behind the digital active line. The top TRS signal defines the start of the active line and is called an SAV (Start of Active Video). The last TRS signal defines the end of the active line and is called an EAV (End of Active Video).
Fig. 2-4-4 shows the format of a timing reference signal corresponding to 10 bits. Since the first three words of four words constitute a unique pattern of 3FF, 000, and 000 (HEX), they can be detected as a sync word. For serial transmission, when this sync word is detected, the bit to be sent next is judged to be an LSB, and becomes a reference for converting the serial bits into every 10 bits of parallel words. The forth word (XYZ) defines the field status, and vertical and horizontal blanking timing.

2. Digital audio interface

The digital audio interface is classified into the serial digital interface combined with a video signal and the AES/EBU digital interface employing an XLR connector.
In both interfaces, the digital audio data is based on the AES/ EBU format, and corresponds with 48 kHz sampling and 20-bit linear quantizing. For the serial digital interface, the digital audio data is inserted into an auxiliary data area during horizontal and vertical blanking periods. For the AES/EBU digital interface, two channels of audio data are multiplexed and stored in a data frame for every audio-sampling period. One frame consists of two subframes. The left channel data in the stereo mode enters into subframe A, and the right channel data enters into subframe B.
Fig. 2-4-5 shows the format of frame and subframes. The subframes contains various data items (shown in the figure) as well as audio data and consist of 32 bits.

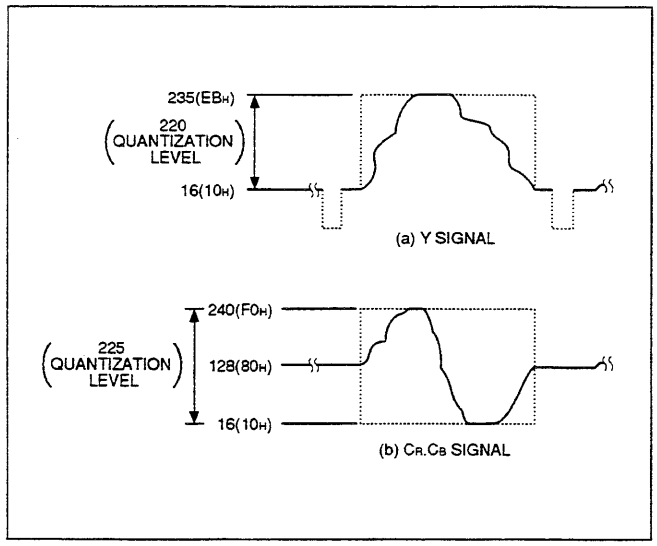


Fig. 2-4-1. Relationship between Video Signal Levels and Quantizing Levels

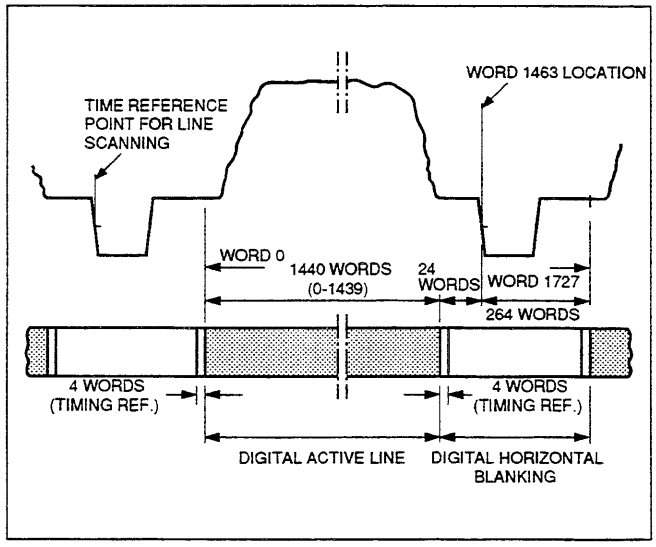


Fig. 2-4-2. Relationship between H Sync and Sampling (625/50)

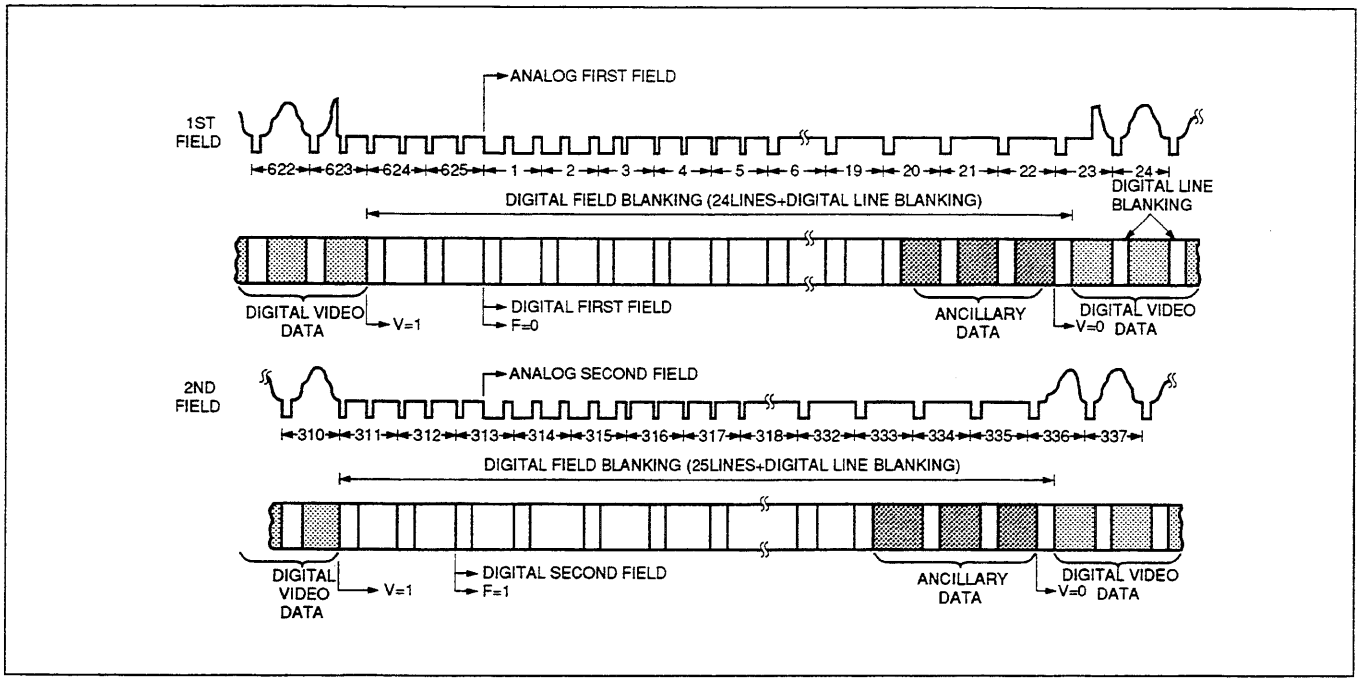


Fig. 2-4-3. Relationship between Analog Video Signal and Digital Field Blanking (625/50)

		PREAMBLE			TIMING REF.	
WORD ADDRESS	EAV	1440	1441	1442	1443	
	SAV	1724	1725	1726	1727	
HEX VALUE		3FF	000	000	(XYZ)	Definition of (XYZ)
B9 (MSB)		1	0	0	1	Always 1 except for TRS
B8		1	0	0	F	0: 1st field 1: 2nd field
B7		1	0	0	V	1: V blanking
B6		1	0	0	H	1: H blanking
B5		1	0	0	P3	Redundant bits used to correct errors occur in F, V and H.
B4		1	0	0	P2	
B3		1	0	0	P1	
B2		1	0	0	P0	
B1		1	0	0	0	Always 0 except for TRS
B0 (LSB)		1	0	0	0	

Fig. 2-4-4. Timing Reference Signal (625/50)

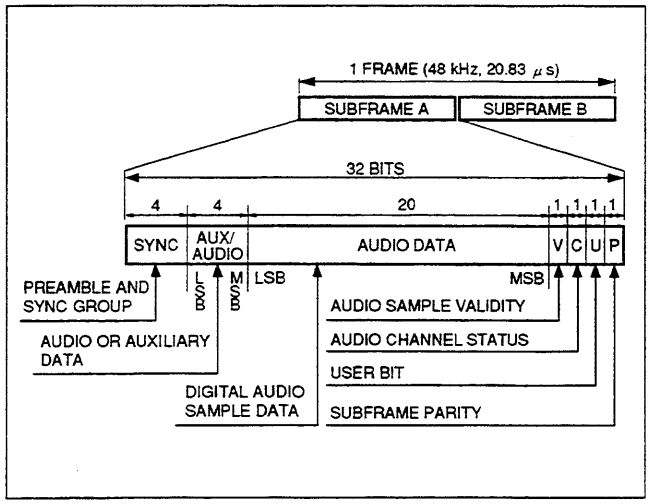


Fig. 2-4-5. Frame and Subframe Formats

2-4-2. Outline of the Digital Signal Processing

The digital signal processing of the Sony Digital Betacam VTR conforms to the D-1 format except that the bit rate reduction processing is added.
Fig. 2-4-6 shows the block diagram of the recording system, and Fig. 2-4-7 shows the block diagram of the playback system.

1. Outline of the recording system

(a) Input interface
For the analog or digital video/audio input signals, the video signal is converted into parallel video data, and the audio signal into serial audio data.

(b) Bit rate reduction encoder
The video data is blocked after it is field-shuffled, then compressed into a data rate of approximate 1/2 according to the newly developed bit rate reduction format.

(c) Audio data processor
The audio data processor performs the audio data selection, gain control, REC verification, and other data processing.

(d) ECC encoder
The ECC encoder performs the error correction coding for error correction in a playback system. The video data that has been sent after bit rate reduction is added the outer error collection code (ECC) and track-interleaved. The audio data sent from the processor is also added the outer ECC and field-shuffled.
Then, the video data and audio data are multiplexed, added the ID data, and inner ECC encoded. Sync data is also added to the resultant data.

(e) REC driver
The REC driver converts parallel REC data into serial data and sends a channel-encoded REC current to the head.

2. Outline of the playback system

In the playback system, signals are processed in the procedure opposite to the recording system.
The audio data error that couldn't be corrected using inner and outer error correction codes is concealed before the audio data is output from an ECC decoder. The video data error that couldn't be corrected is concealed after the video data is returned to the former video data.

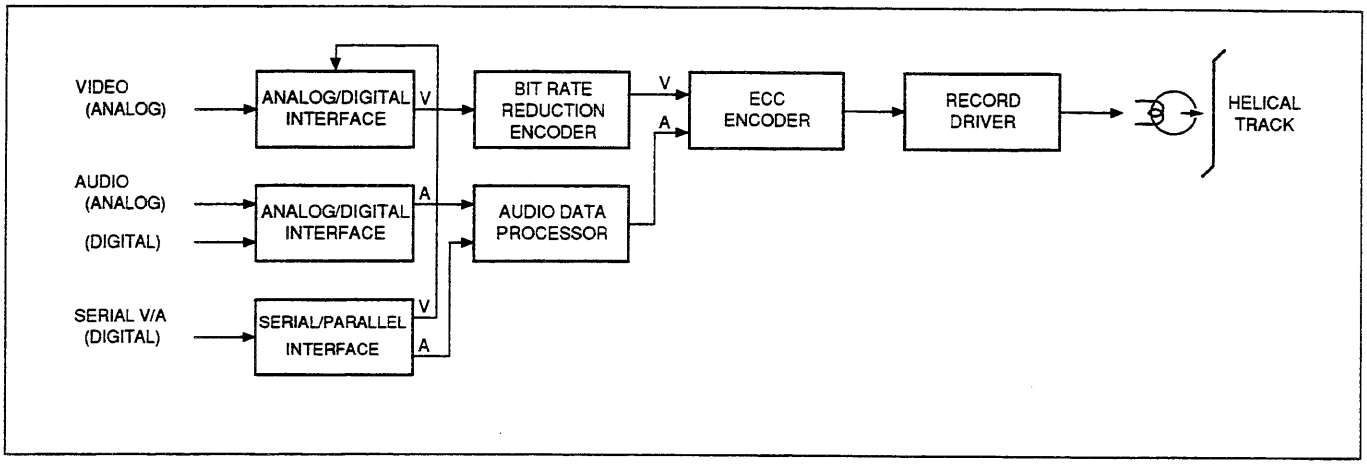


Fig. 2-4-6. Digital Signal Recording System

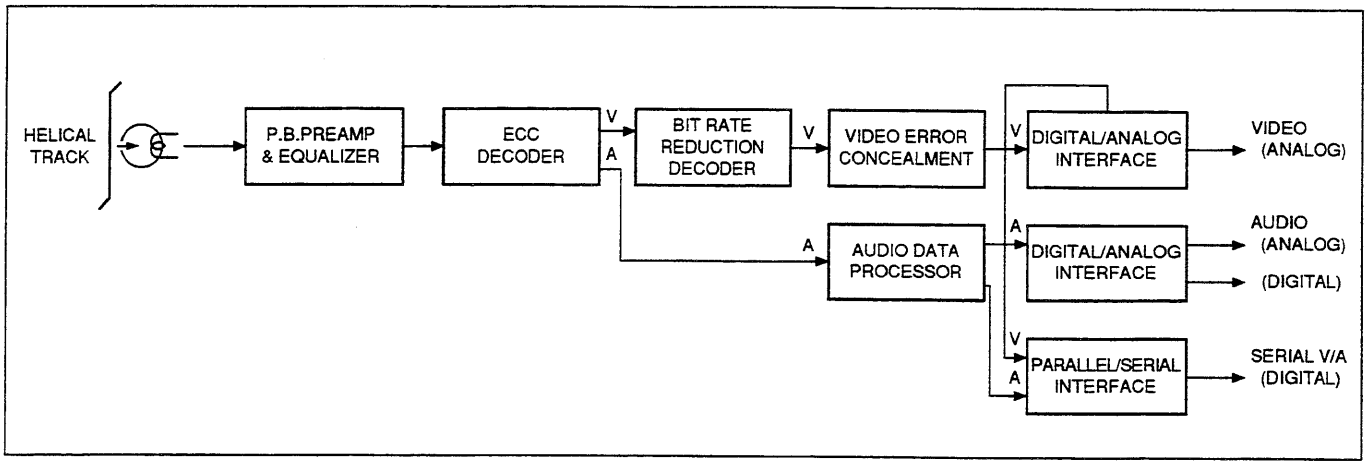


Fig. 2-4-7. Digital Signal Playback System

2-4-3. Error Correction Coding

In the Sony Digital Betacam format, error correction takes place by means of a two-dimensional product code of the inner and outer codes using the Reed-Solomon code.
The structure of the inner code block that constitutes an ECC block is common in video and audio systems. However, the structure of the outer code block differs in video and audio systems. A data block of 180 bytes obtained when sync data is added to one inner code block data is called a sync block, which is the basic unit of a video sector and audio sector. Fig. 2-4-8 shows the structure of the ECC blocks and sync block in the 625/50 system.

One video sector consists of 126 sync blocks. In other words, one video ECC block constitutes one video sector.
Therefore, the two ECC blocks shown in the figure below are recorded on one track, and one field corresponds to 12 ECC blocks.
One audio sector consists of six sync blocks. For the audio data in one channel, one field consists of six sectors (i.e., 36 sync blocks). Therefore, the two ECC blocks shown in the figure correspond to one field in one audio channel.

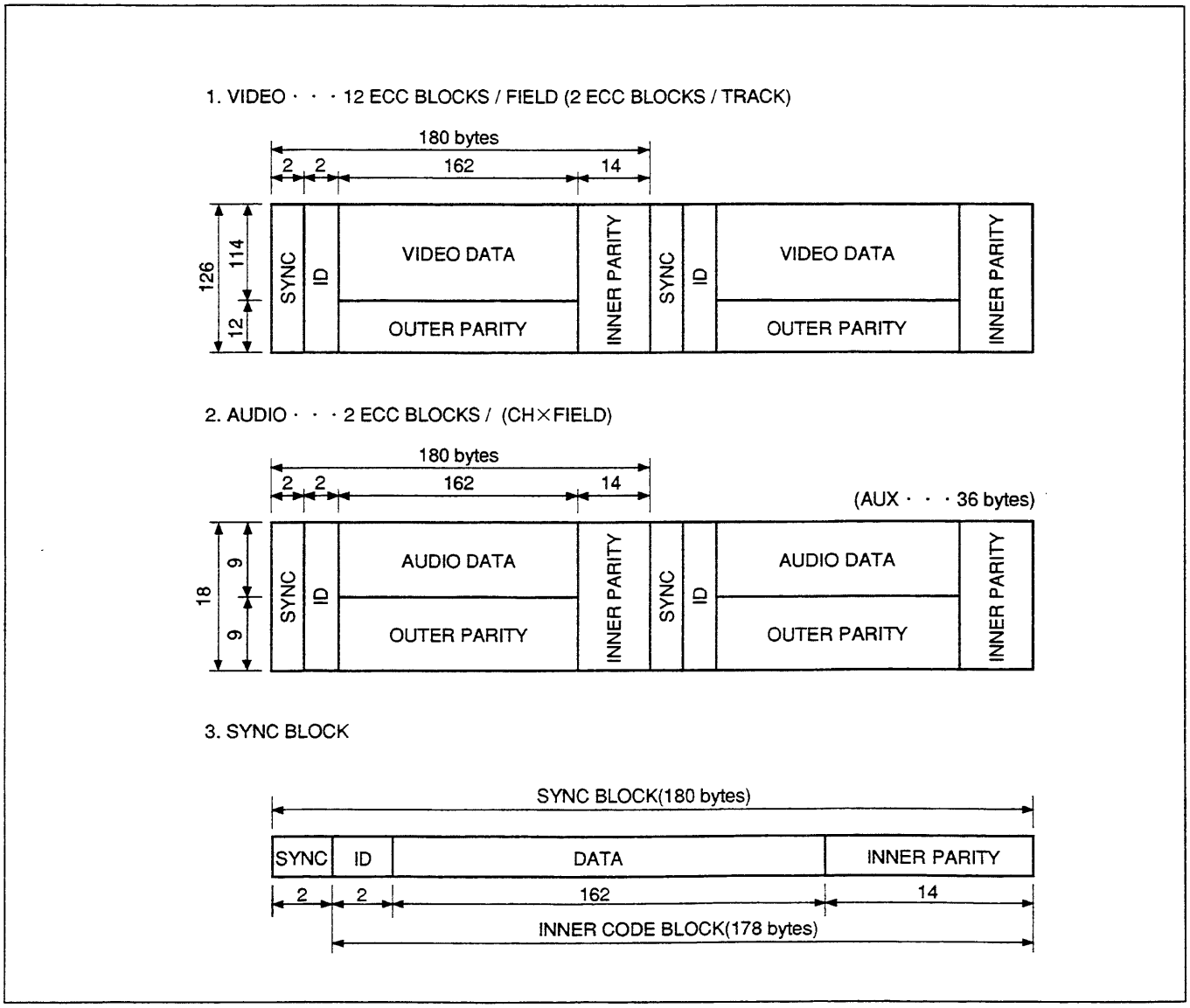


Fig. 2-4-8. Structure of ECC Blocks and Sync Block (625/50)

SECTION 3
BLOCK DIAGRAMS AND CIRCUIT DESCRIPTIONS

CONTENTS OF BLOCK DIAGRAMS

3-1. OVERALL

OVERALL (1/2) : Signal Processing System
OVERALL (2/2) : Control System

3-2. CIRCUIT BLOCK

EQ-45B : RF Processor
DPR-36H : Digital Processor
VPR-1B : Video Processor
APR-1B : Audio Processor
DIF-16B : Serial Digital Interface
CUE-1B : CUE/LTC Processor
DM-89 : Betacam PB Demodulator
TBC-24 : Betacam PB TBC (A/D conversion)
TBC-23 : Betacam PB TBC (Sequence/Reference)
AP-28 : Betacam PB AFM Demodulator
SS-52B (1/3) : System Control
SS-52B (2/3) : Servo Control
SS-52B (3/3) : Dynamic Tracking
DR-200 : Servo Driver
FUNCTION CONTROL BLOCK
POWER SUPPLY

3-3. FRAME

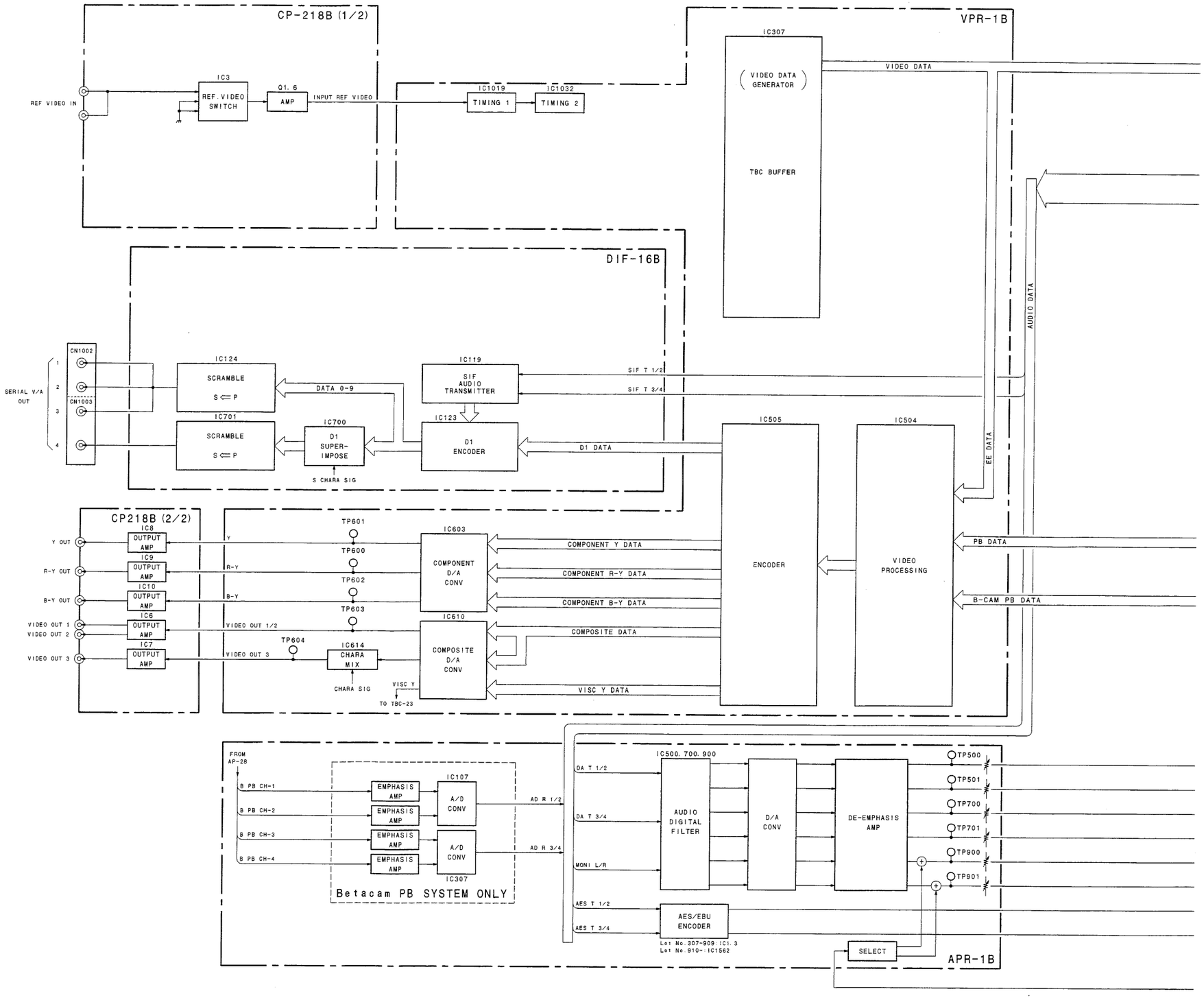
FRAME WIRING (1/3) : Drum/Heads
FRAME WIRING (2/3) : Mecha Deck
FRAME WIRING (3/3) : Front/Rear Panels

CONTENTS OF CIRCUIT DESCRIPTIONS

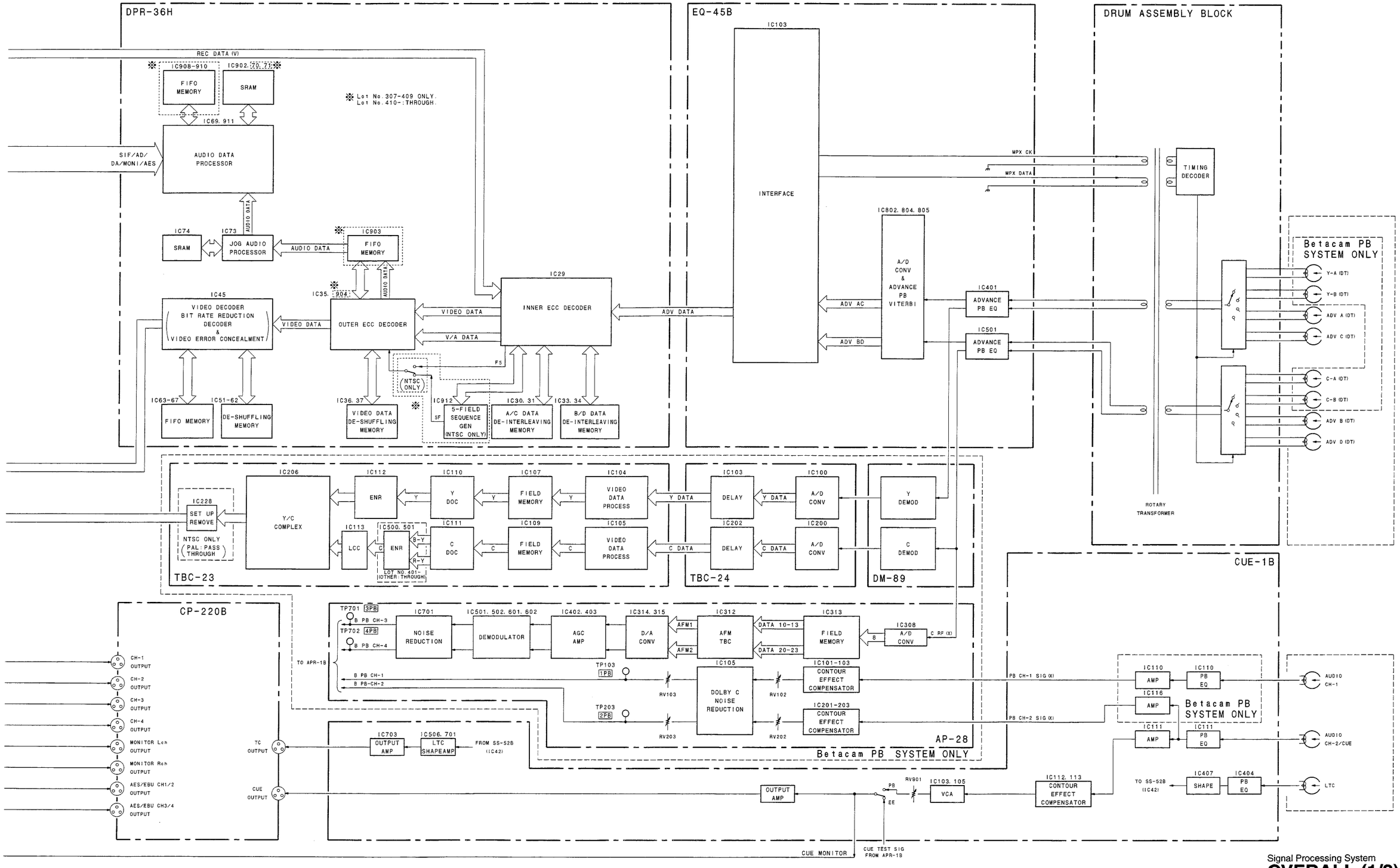
- CIRCUIT DESCRIPTION OF EQ-45B BOARD
- CIRCUIT DESCRIPTION OF DPR-36H BOARD
- CIRCUIT DESCRIPTION OF VPR-1 BOARD
- CIRCUIT DESCRIPTION OF APR-1B BOARD
- CIRCUIT DESCRIPTION OF DIF-16B BOARD
- CIRCUIT DESCRIPTION OF CUE-1B BOARD
- CIRCUIT DESCRIPTION OF DM-89 BOARD
- CIRCUIT DESCRIPTION OF TBC-24 BOARD
- CIRCUIT DESCRIPTION OF TBC-23 BOARD
- CIRCUIT DESCRIPTION OF AP-28 BOARD
- CIRCUIT DESCRIPTION OF SS-52B BOARD (1/3)
- CIRCUIT DESCRIPTION OF SS-52B BOARD (2/3)
- CIRCUIT DESCRIPTION OF SS-52B BOARD (3/3)
- CIRCUIT DESCRIPTION OF DR-200 BOARD

NOTE External connection of each signal is shown by the object board name and the connector-pin number.
If it is shown by "HN" or only connector-pin number, refer to "FRAME WIRING".

3-1. OVERALL

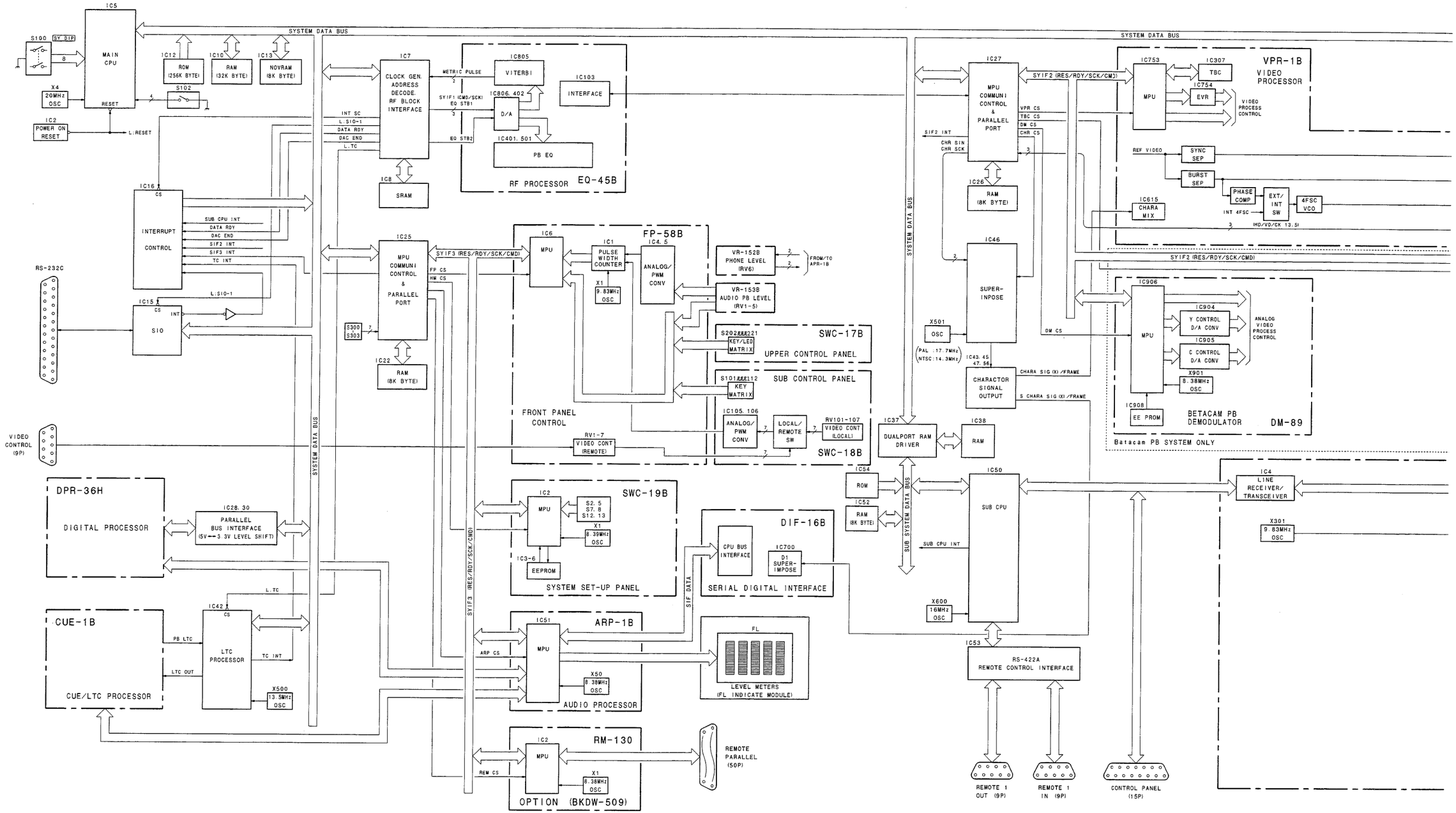

CP-218B (1/2)
VPR-1B
IC307
VIDEO DATA GENERATOR
TBC BUFFER
VIDEO DATA
REF VIDEO IN
IC3
REF. VIDEO SWITCH
Q1. 6
AMP
INPUT REF VIDEO
IC1019
TIMING 1
IC1032
TIMING 2
DIF-16B
CN1002
CN1003
SERIAL V/A OUT
IC124
SCRAMBLE S⇐P
IC701
SCRAMBLE S⇐P
DATA 0-9
IC700
D1 SUPER-IMPOSE
S CHARA SIG
IC119
SIF AUDIO TRANSMITTER
IC123
D1 ENCODER
SIF T 1/2
SIF T 3/4
D1 DATA
IC505
IC504
ENCODER
VIDEO PROCESSING
EE DATA
AUDIO DATA
PB DATA
B-CAM PB DATA
CP218B (2/2)
IC8
IC9
IC10
IC6
IC7
OUTPUT AMP
Y OUT
R-Y OUT
B-Y OUT
VIDEO OUT 1
VIDEO OUT 2
VIDEO OUT 3
Y
R-Y
B-Y
VIDEO OUT 1/2
VIDEO OUT 3
TP601
TP600
TP602
TP603
TP604
IC603
COMPONENT D/A CONV
IC610
COMPOSITE D/A CONV
IC614
CHARA MIX
CHARA SIG
VISC Y
TO TBC-23
COMPONENT Y DATA
COMPONENT R-Y DATA
COMPONENT B-Y DATA
COMPOSITE DATA
VISC Y DATA
FROM AP-28
B PB CH-1
B PB CH-2
B PB CH-3
B PB CH-4
EMPHASIS AMP
IC107
A/D CONV
IC307
Betacam PB SYSTEM ONLY
AD R 1/2
AD R 3/4
IC500. 700. 900
DA T 1/2
DA T 3/4
MONI L/R
AES T 1/2
AES T 3/4
AUDIO DIGITAL FILTER
D/A CONV
DE-EMPHASIS AMP
AES/EBU ENCODER
Lot No. 307-909 : IC1, 3
Lot No. 910- : IC1562
SELECT
TP500
TP501
TP700
TP701
TP900
TP901
APR-1B

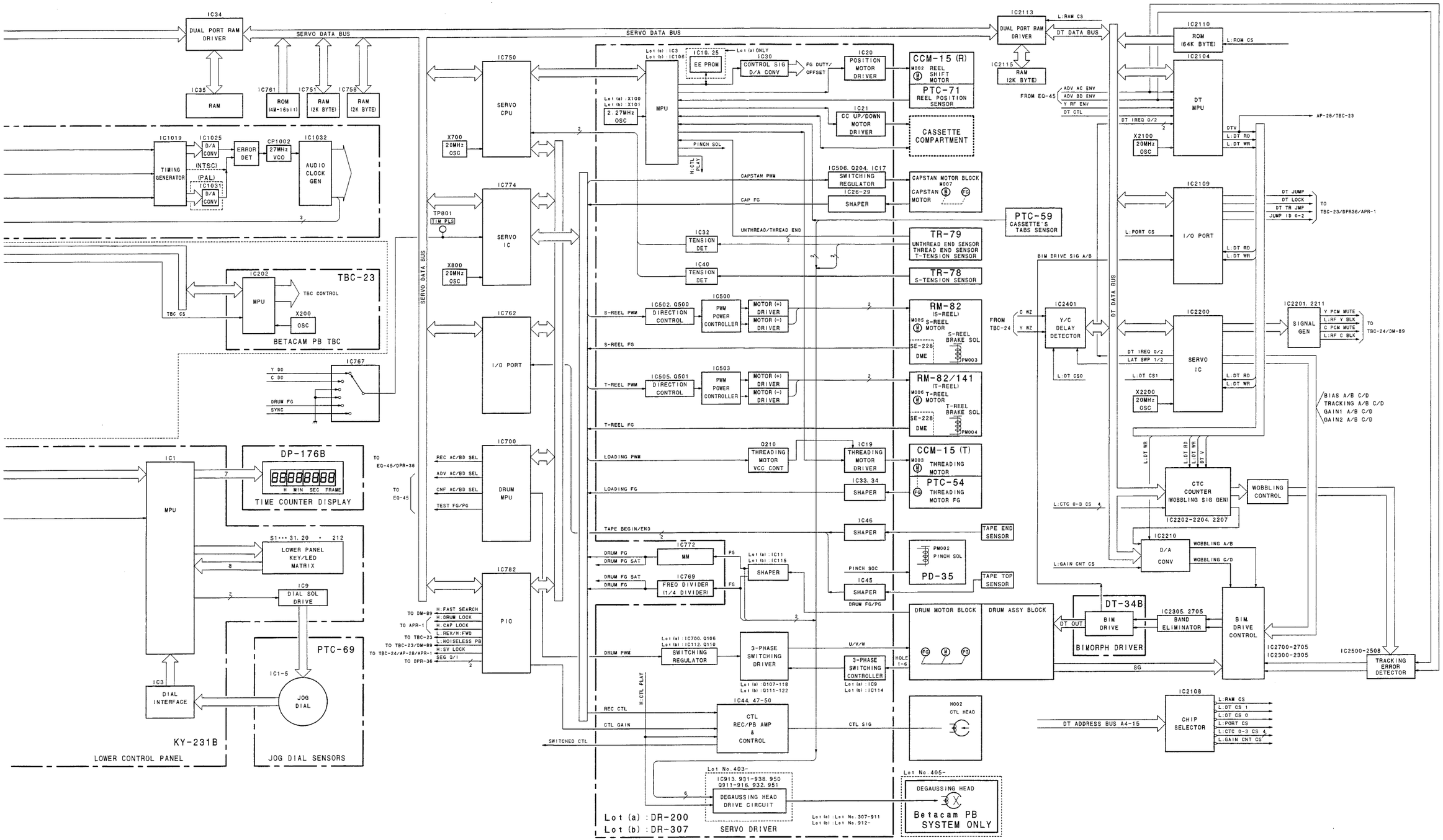
OVERALL (1/2)



3-3

Signal Processing System
OVERALL (1/2)
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P


SYSTEM DATA BUS
IC5
MAIN CPU
S100 SY DIP
X4 20MHz OSC
IC2 POWER ON RESET
L:RESET
IC12 ROM (256K BYTE)
IC10 RAM (32K BYTE)
IC13 NOVRAM (8K BYTE)
S102
IC16 INTERRUPT CONTROL
SUB CPU INT
DATA RDY
DAC END
SIF2 INT
SIF3 INT
TC INT
RS-232C
L:SIO-1
IC15 SIO
VIDEO CONTROL (9P)
DPR-36H
DIGITAL PROCESSOR
IC28. 30
PARALLEL BUS INTERFACE (5V ⟷ 3.3V LEVEL SHIFT)
L.TC
CUE-1B
PB LTC
LTC OUT
IC42
LTC PROCESSOR
TC INT
X500 13.5MHz OSC
CUE/LTC PROCESSOR
IC7
CLOCK GEN. ADDRESS DECODE. RF BLOCK INTERFACE
METRIC PULSE
SY(F1 (CMD/SCK) EQ STB1
EQ STB2
INT SC
L.SIO-1
DATA RDY
DAC END
L.TC
IC8 SRAM
IC805 VITERBI
IC806. 402 D/A
IC103 INTERFACE
IC401. 501 PB EQ
RF PROCESSOR EQ-45B
IC25
MPU COMMUNI CONTROL & PARALLEL PORT
SY(F3 (RES/RDY/SCK/CMD)
FP CS
HM CS
S300
S303
IC22 RAM (8K BYTE)
FP-58B
IC6 MPU
IC1 PULSE WIDTH COUNTER
X1 9.83MHz OSC
IC4. 5 ANALOG/ PWM CONV
VR-152B PHONE LEVEL (RV6)
FROM/TO APR-1B
VR-153B AUDIO PB LEVEL (RV1-5)
S202/221 KEY/LED MATRIX
SWC-17B
UPPER CONTROL PANEL
S101/112 KEY MATRIX
SUB CONTROL PANEL
FRONT PANEL CONTROL
IC105. 106 ANALOG/ PWM CONV
LOCAL/ REMOTE SW
RV101-107 VIDEO CONT (LOCAL)
RV1-7 VIDEO CONT (REMOTE)
SWC-18B
SWC-19B
IC2 MPU
S2. 5 S7. 8 S12. 13
X1 8.38MHz OSC
IC3-6 EEPROM
SYSTEM SET-UP PANEL
ARP-1B
IC51 MPU
ARP CS
X50 8.38MHz OSC
AUDIO PROCESSOR
DIF-16B
CPU BUS INTERFACE
IC700 D1 SUPER-IMPOSE
SERIAL DIGITAL INTERFACE
SIF DATA
FL
LEVEL METERS (FL INDICATE MODULE)
RM-130
IC2 MPU
REM CS
X1 8.38MHz OSC
OPTION (BKDW-509)
REMOTE PARALLEL (50P)
SY1F5 (RES/RDY/SCK/CMD)
IC27 MPU COMMUNI CONTROL & PARALLEL PORT
SY1F2 (RES/RDY/SCK/CMD)
VPR CS
TBC CS
DM CS
CHR CS
SIF2 INT
CHR SIN
CHR SCK
IC26 RAM (8K BYTE)
IC46 SUPER-INPOSE
X501 OSC
(PAL :17.7MHz NTSC:14.3MHz)
IC43. 45 47. 56
CHARACTOR SIGNAL OUTPUT
CHARA SIG (X) /FRAME
S CHARA SIG (X) /FRAME
IC37 DUALPORT RAM DRIVER
IC38 RAM
IC54 ROM
IC52 RAM (8K BYTE)
SUB SYSTEM DATA BUS
IC50 SUB CPU
SUB CPU INT
X600 16MHz OSC
IC53 RS-422A REMOTE CONTROL INTERFACE
REMOTE 1 OUT (9P)
REMOTE 1 IN (9P)
CONTROL PANEL (15P)
VPR-1B VIDEO PROCESSOR
IC753 MPU
IC307 TBC
IC754 EVR
VIDEO PROCESS CONTROL
REF VIDEO
SYNC SEP
BURST SEP
PHASE COMP
EXT/ INT SW
4FSC VCO
INT 4FSC
IHD/VD/CK 13.5I
IC615 CHARA MIX
IC906 MPU
IC904 Y CONTROL D/A CONV
IC905 C CONTROL D/A CONV
ANALOG VIDEO PROCESS CONTROL
X901 8.38MHz OSC
IC908 EE PROM
BETACAM PB DEMODULATOR DM-89
Batacam PB SYSTEM ONLY
IC4 LINE RECEIVER/ TRANSCEIVER
X301 9.83MHz OSC



Control System

OVERALL (2/2)

SS-52B Board Circuit to Other Boards

DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

3-2. CIRCUIT BLOCK

[CIRCUIT DESCRIPTION OF EQ-45B BOARD]

EQ-45B board is a playback RF processor board that converts the PB RF signal sent from the drum into PB data and sends it to DPR-36H board.

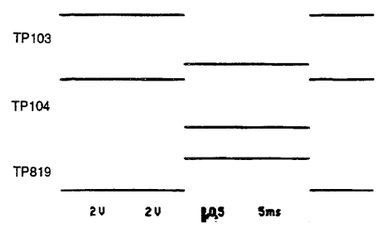
Before the playback process is described, the explanation for IC103 which exists on the upper left side of the circuit block diagram is described.
IC103 is the interface IC in which performs signal conversions between the digital processor (DPR-36H board) and the RF system.
Moreover, IC103 encodes the "MPX" signal multiplexing the head select signals sent from SS-52B board, and sends it to the head drum.
The MPX signal is decoded in the head drum and switches each head amplifier.
In case of the player, IC103 sends the MPX signal to the head drum, and makes it switch the PB head amplifiers.
Then, after the played back PB RF signals have entered EQ-45B board and received RF processing, IC103 adds the parity data to the played back digital data, and sends them to DPR-36H board.
Input signal lines useless for the player, like REC data, are connected to IC103. These are provided for input of test signals, which make "EE2 AC/BD DATA" and the like so as to enable to test the circuits, for the factory production.

Then, the playback process is described below.
The PB RF signals that are played back by PB heads and passed through head amplifiers are sent from the head drum to EQ-45B board.
The signals of heads A and C, and heads B and D, that are switched every time the drum rotates by one half, can be transmitted using the same signal line, respectively.
Therefore, the lines required for the PB RF signal transmission are two pairs of "ADV AC" and "ADV BD".
In case of the player with a Betacam playback function, in the Betacam tape PB mode, head amplifiers in a digital system are turned off.
Therefore, the PB RF signals of Betacam PB heads Y-A and Y-B use the "ADV AC" line in common.
The PB RF signals of heads C-A and C-B use the "ADV BD" line in common.
The PB RF signals input to EQ-45B board are sent each to PB equalizer IC (IC401 or IC501) for VCA, amplitude equalization, and phase equalization.
An envelope is then detected.
In the Betacam tape PB mode, the "PB Y" and "PB C" RF signals that are input through "ADV AC" and "ADV BD" lines to the PB equalizers are output each via only a VCA circuit and sent to DM-89 board (Betacam PB demodulator board).
The RF signal output from each PB equalizer branches into two paths.
One is sent to A/D converter (IC802 or IC804).

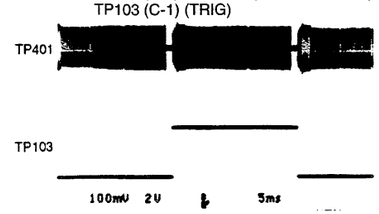
The another is low-frequency compensated and amplitude limited using a quantizing feedback (QFB) circuit, then sent to the PLL IC (IC801 or IC803).
In consideration of the tape speed information, the PLL IC extracts a PB clock from the input RF signal and sends the clock signal to the A/D converter mentioned above and VITERBI IC (IC805).
The A/D converters are required for the VITERBI processing that is executed in the VITERBI IC in the next stage.
The A/D data of the RF signal output from the A/D converter is input to the VITERBI IC, where a regeneration of the bit is executed by a VITERBI system.
The data is then converted into 4-bit parallel data and sent to the interface IC (IC103) together with the clock signal.
In the interface IC, parity data is added to the data sent from VITERBI IC.
Two groups of PB data ("ADV AC D0 through D3" and "ADV BD D0 through D3") are then output together with their parity data and clock signals and sent to DPR-36H board.

CR5-1B PS PB mode
(In only case of the VTR with a Betacam PB function)

① TP103 (C-1) PB mode
TP104 (C-1) PB mode (Lot No. 307 thur. 001)
TP819 (SS-52B) (J-1) (TRIG)

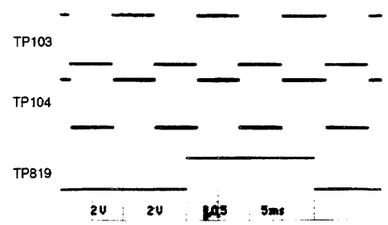


② TP401 (F-1) PB mode (B/W LIMIT OFF) (Lot No. 002 or higher)
TP401 (E-1) PB mode (B/W LIMIT OFF) (Lot No. 307 thur.001)
TP103 (C-1) (TRIG)

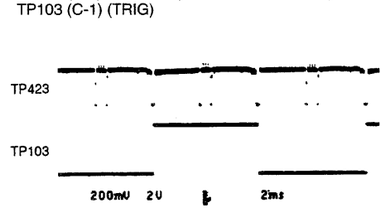


ZR5-1P PB mode

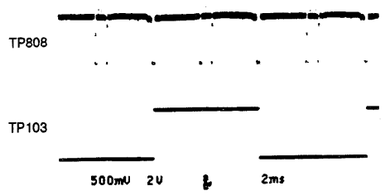
① TP103 (C-1) PB mode
TP104 (C-1) PB mode (Lot No. 307 thur. 001)
TP819 (SS-52B) (J-1) (TRIG)



③ TP423 (F-1) PB mode (Lot No. 002 or higher)
TP423 (E-1) PB mode (Lot No. 307 thur. 001)
TP103 (C-1) (TRIG)

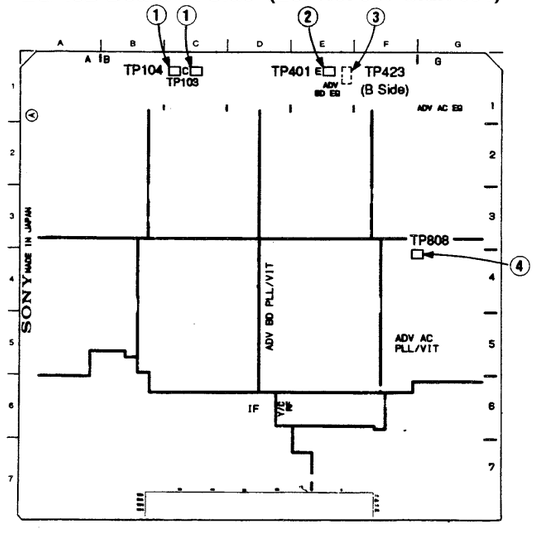


④ TP808 (F-2) PB mode (Lot No. 002 or higher)
TP808 (G-4) PB mode (Lot No. 307 thru.001)
TP103 (C-1) (TRIG)

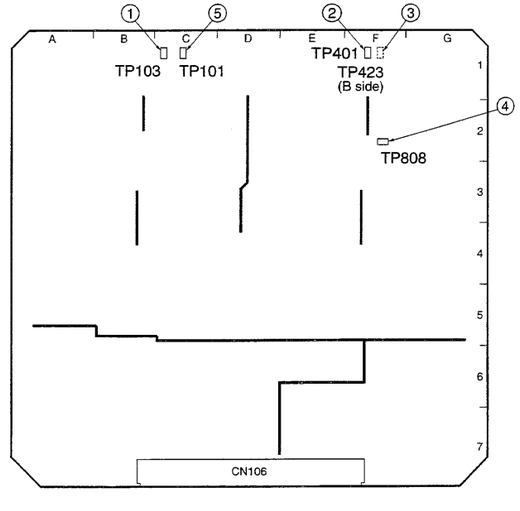


Measurement Condition
MODE : PB mode
TAPE : ZR5-1P
: CR5-1B PS

EQ-45B Board -A Side- (Lot No. 307 thur. 001)

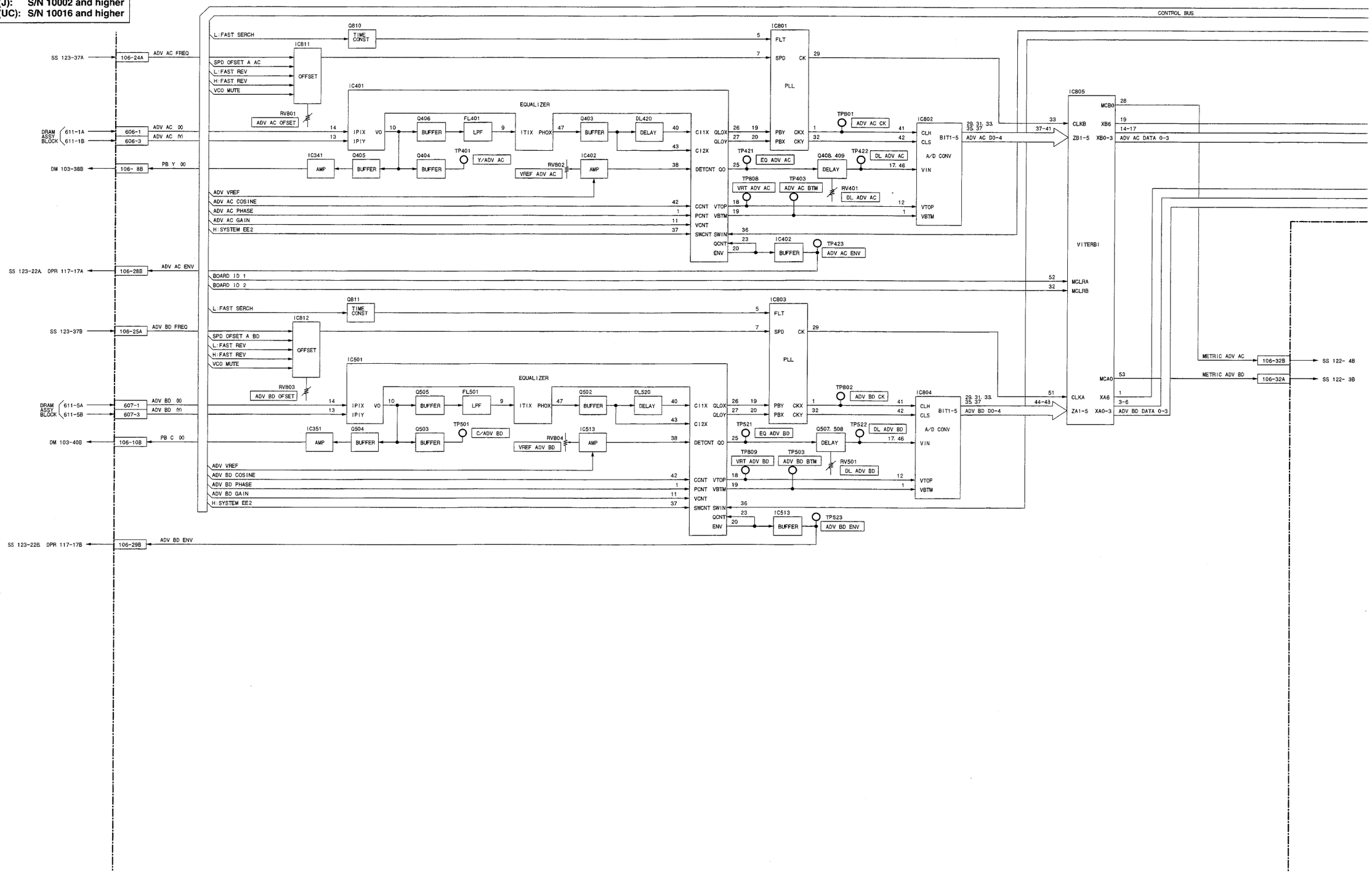


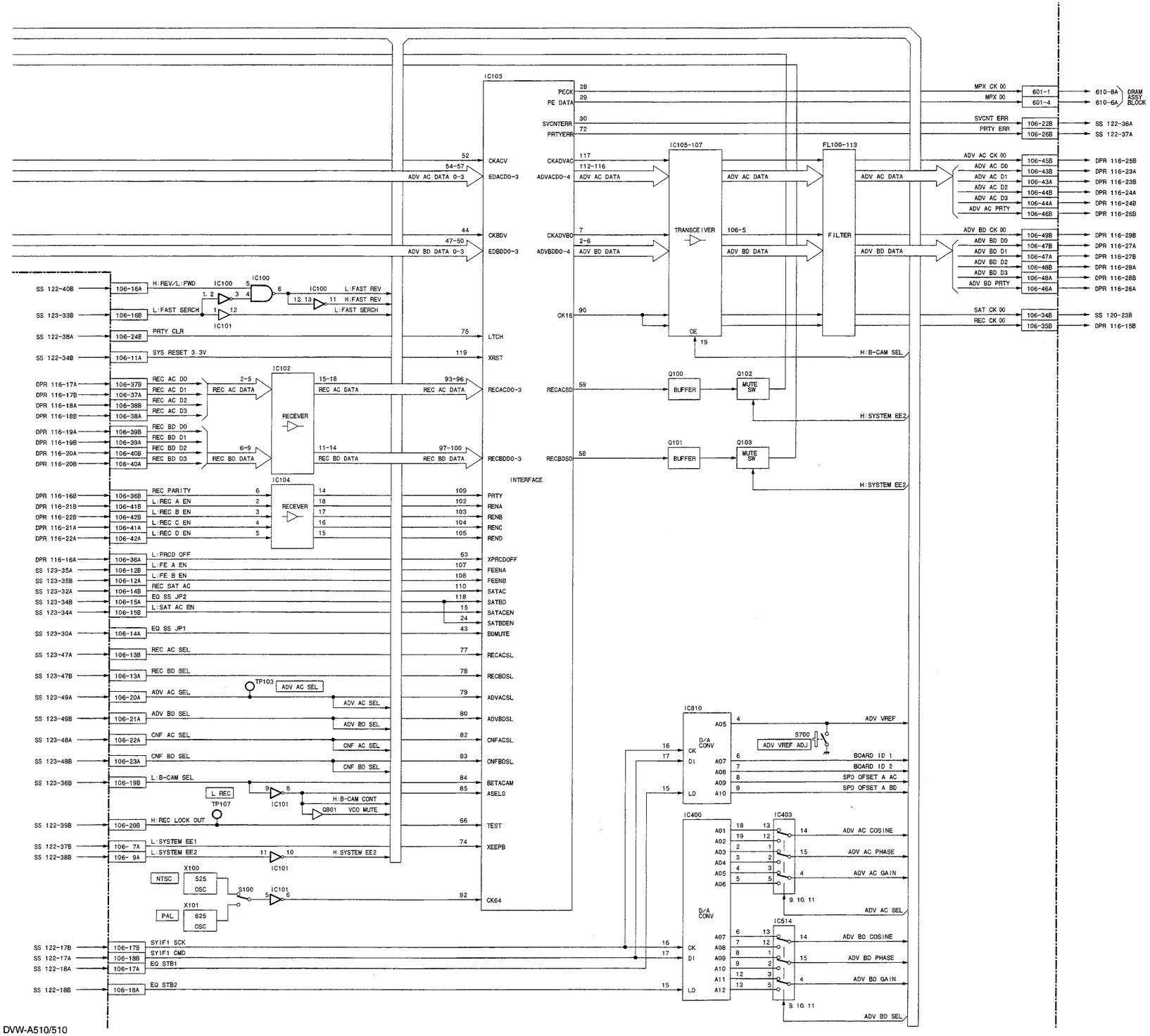
EQ-45B Board -A Side- (Lot No. 002 or higher)



Lot No. 002 and higher

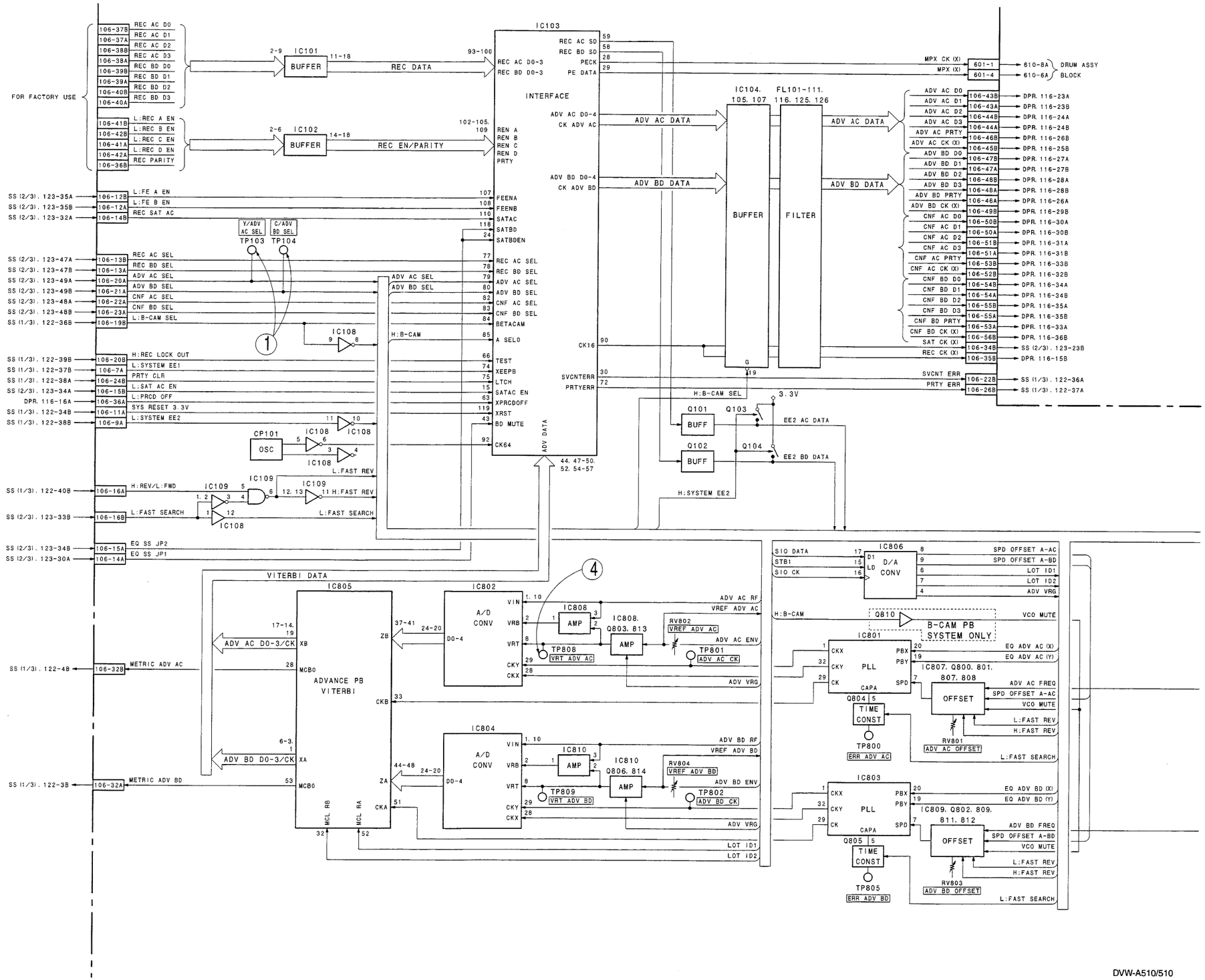
DVW-A510P (EK):	S/N 14301 and higher
DVW-A510 (J):	S/N 10685 and higher
DVW-A510 (UC):	S/N 11644 and higher
DVW-510P (EK):	S/N 11385 and higher
DVW-510 (J):	S/N 10101 and higher
DVW-510 (UC):	S/N 10763 and higher
DVW-CA510P (EK):	S/N 10076 and higher
DVW-CA510 (J):	S/N 10002 and higher
DVW-CA510 (UC):	S/N 10016 and higher

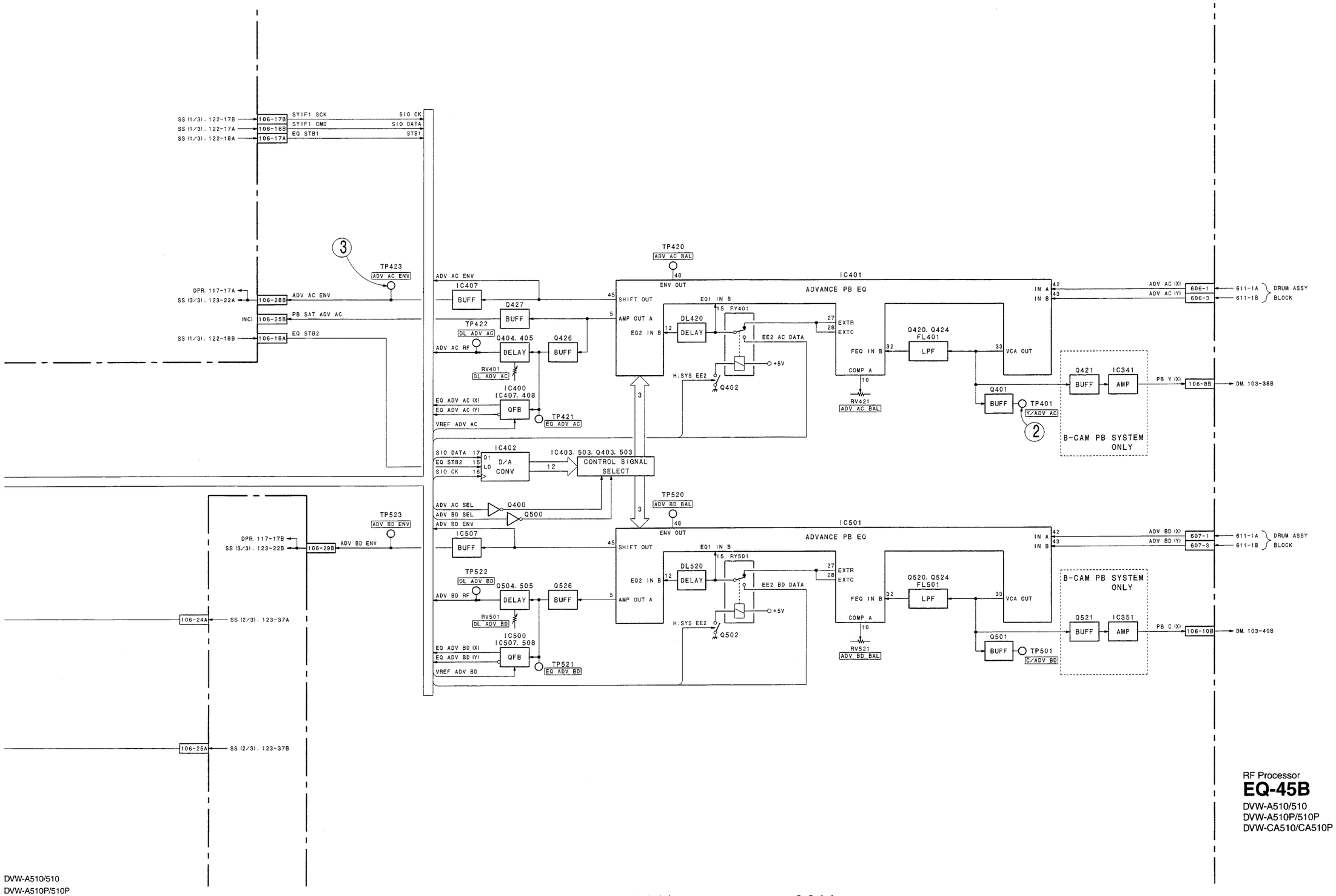




RF Processor
EQ-45B
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

DVW-A510P (EK):	S/N 10001 through 14300
DVW-A510 (J):	S/N 10001 through 10684
DVW-A510 (UC):	S/N 10001 through 11643
DVW-510P (EK):	S/N 10001 through 11384
DVW-510 (J):	S/N 10001 through 10100
DVW-510 (UC):	S/N 10001 through 10762
DVW-CA510P (EK):	S/N 10001 through 10075
DVW-CA510 (J):	S/N 10001
DVW-CA510 (UC):	S/N 10001 through 10015





RF Processor

EQ-45B

DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

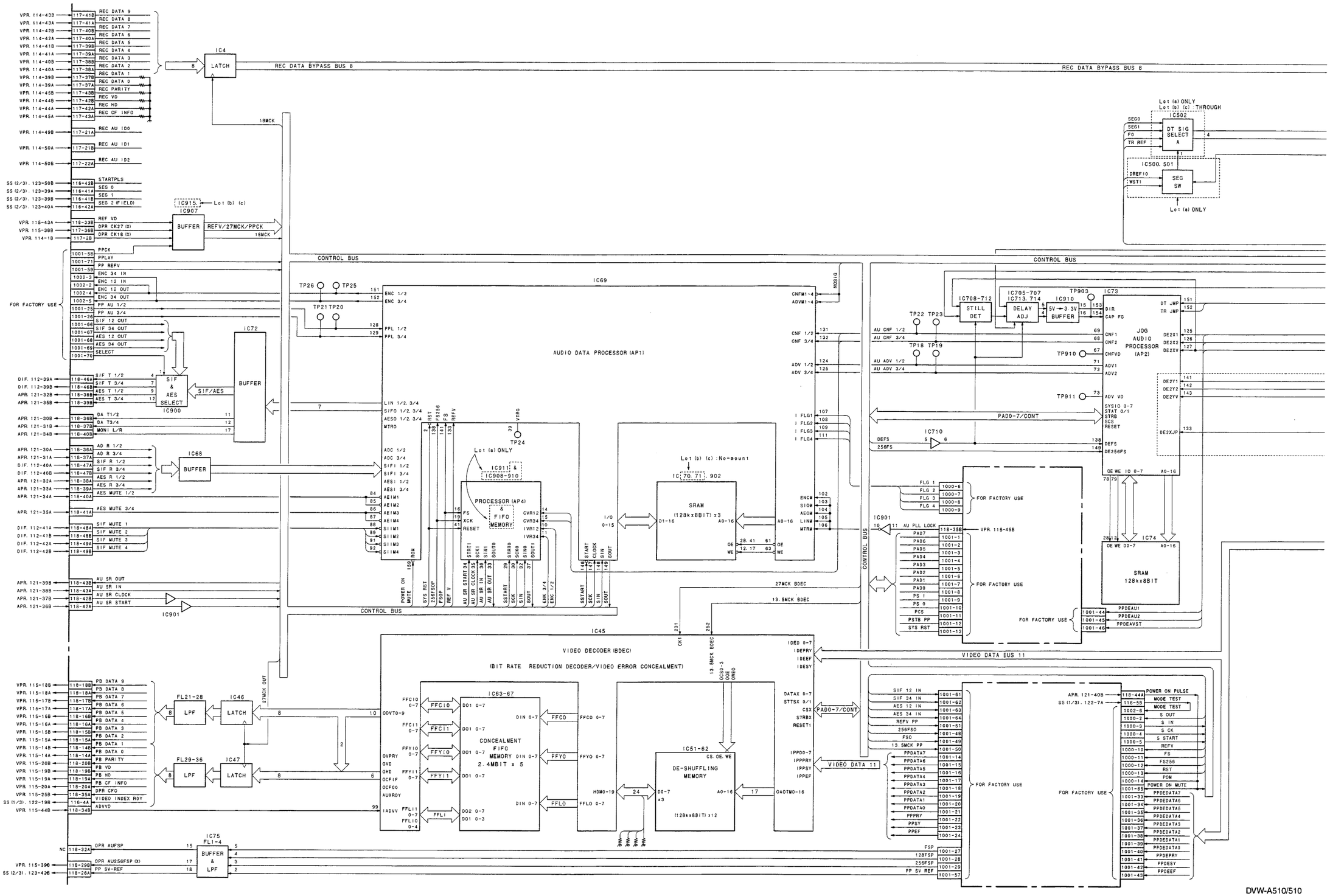
[CIRCUIT DESCRIPTION OF DPR-36H BOARD]

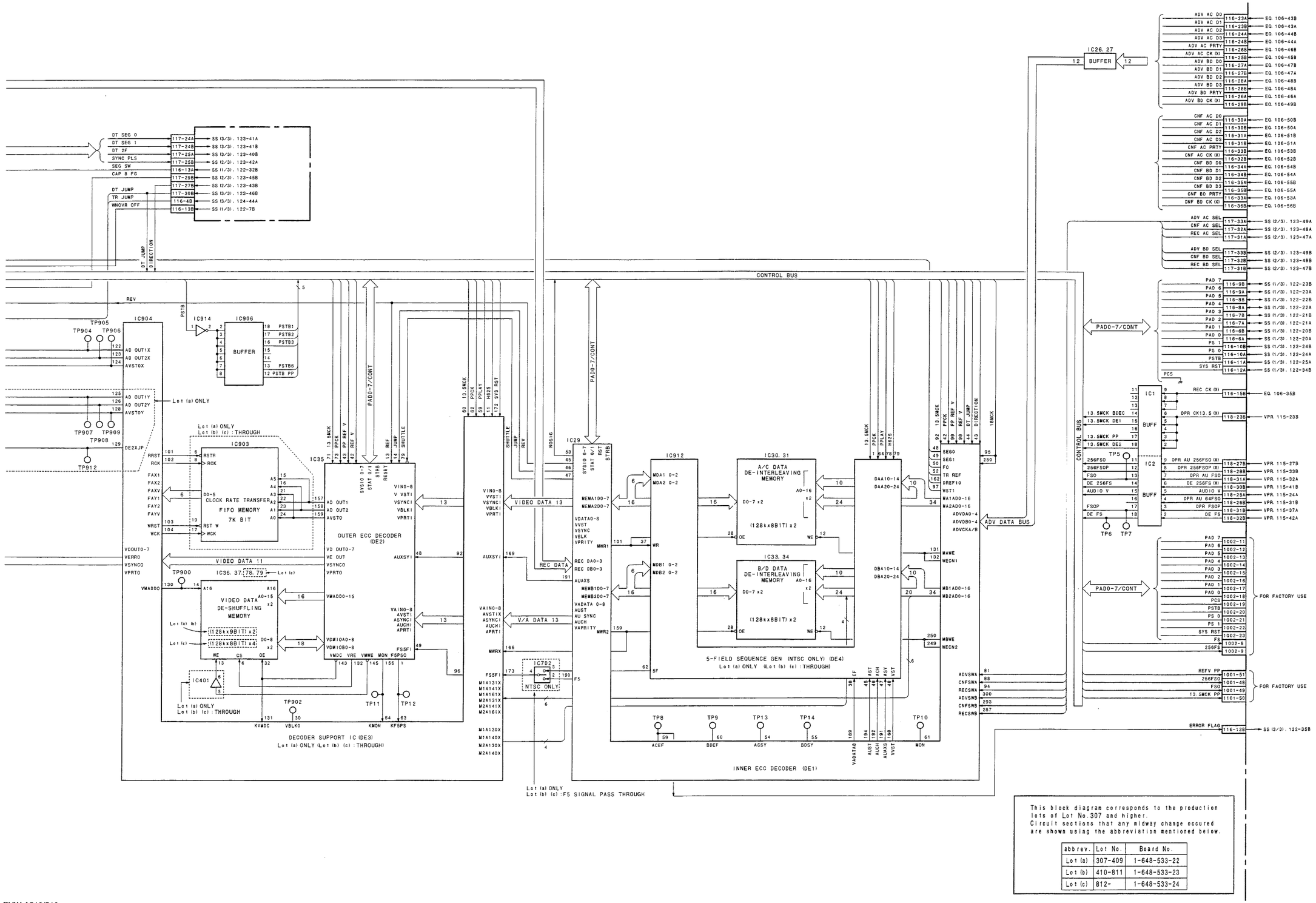
DPR-36H board is a playback digital processor board that decodes the playback digital data.

The playback process is described below.
The two groups of AC/BD ADVANCE PB data sent from EQ-45B board are input to inner ECC decoder (IC29).
The video data for test use ("REC DATA 2 through 9") sent from VPR-1B board in the test mode is also input to IC29.
The inner ECC decoder selects a necessary data from these input data according to the system mode, detects the sync data, performs the inner correction based on the detected sync data, then extracts the ID information.
Based on the extracted ID information, the inner ECC decoder performs the clock rate transfer and de-interleaving for the data via memory (IC30, 31, 33, and 34).
In this process, the two groups of data are multiplexed, then separated into V data and V/A data.
They are sent to the outer ECC decoder (IC35) with each error flag data added.
In the outer ECC decoder, the video data is outer-corrected, de-shuffled via memory (IC36 and IC37), then sent to video decoder (IC45).
The audio data is outer-corrected, de-shuffled via internal memory, then error-concealed.
The resultant data is transferred the clock rate, then sent to the audio data processing system.
As described above, an ECC decoder consists of an inner ECC decoder and an outer ECC decoder.

The video data input to the video decoder (IC45) is decoded by the bit rate reduction process so as to return to the former data rate, and de-shuffled via memory (IC51 through IC62).
The data is then error-concealed via FIFO memory (IC63 through IC67) and sent to VPR-1B board as video PB data ("PB DATA 0 through 9").

Next, the audio data processing system is described below.
IC69 and IC911 are the audio data processor.
The audio data processor performs data processing of digital audio data between the ECC encoder or decoder and the audio system processor boards in the REC or PB mode.
In the PB mode, the decoded audio data is sent to IC73.
IC73 is a jog audio processor.
It compensates the noise during jog or shuttle using external memory (IC74), and sends data to the audio data processor.
The audio data processor performs the gain control, phase adjustment, muting, and other data processing.
It then converts the resultant data into serial audio data "DA T 1/2 and 3/4", "MONI L/R" and "AES T 1/2 and 3/4", and sends them to APR-1B board. In addition, it converts the data into serial audio data "SIF T 1/2 and 3/4", and sends it to DIF-16B board.


IC4
LATCH
REC DATA BYPASS BUS 8
REC DATA BYPASS BUS 8
18MCK
REC DATA 9
REC DATA 8
REC DATA 7
REC DATA 6
REC DATA 5
REC DATA 4
REC DATA 3
REC DATA 2
REC DATA 1
REC DATA 0
REC PARITY
REC VD
REC HD
REC CF INFO
REC AU ID0
REC AU ID1
REC AU ID2
STARTPLS
SEG 0
SEG 1
SEG 2 (FIELD)
IC915
IC907
Lot (b) (c)
BUFFER
REF VD
DPR CK27 (X)
DPR CK18 (X)
REFV/27MCK/PPCK
18MCK
Lot (a) ONLY
Lot (b) (c) THROUGH
IC502
DT SIG SELECT A
SEG0
SEG1
F0
TR REF
IC500, 501
DREF10
WST1
SEG SW
Lot (a) ONLY
CONTROL BUS
PPCK
PPLAY
PP REFV
ENC 34 IN
ENC 12 IN
ENC 12 OUT
ENC 34 OUT
PP AU 1/2
PP AU 3/4
SIF 12 OUT
SIF 34 OUT
AES 12 OUT
AES 34 OUT
SELECT
FOR FACTORY USE
IC72
BUFFER
SIF/AES
SIF & AES SELECT
IC900
SIF T 1/2
SIF T 3/4
AES T 1/2
AES T 3/4
DA T1/2
DA T3/4
MONI L/R
IC68
BUFFER
AD R 1/2
AD R 3/4
SIF R 1/2
SIF R 3/4
AES R 1/2
AES R 3/4
AES MUTE 1/2
AES MUTE 3/4
SIF MUTE 1
SIF MUTE 2
SIF MUTE 3
SIF MUTE 4
AU SR OUT
AU SR IN
AU SR CLOCK
AU SR START
IC901
IC69
AUDIO DATA PROCESSOR (AP1)
ENC 1/2
ENC 3/4
PPL 1/2
PPL 3/4
LIN 1/2, 3/4
SIFO 1/2, 3/4
AESO 1/2, 3/4
MTRO
ADC 1/2
ADC 3/4
SIFI 1/2
SIFI 3/4
AESI 1/2
AESI 3/4
AEIM1
AEIM2
AEIM3
AEIM4
SIIM1
SIIM2
SIIM3
SIIM4
TP26
TP25
TP21
TP20
TP24
VTRG
Lot (a) ONLY
IC911 & IC908-910
PROCESSOR (AP4) & FIFO MEMORY
Lot (b) (c) : No-mount
IC 70, 71, 902
SRAM (128kx8BIT) x3
I/O 0-15
A0-16
CNFM1-4
ADVM1-4
NOSIG
CNF 1/2
CNF 3/4
ADV 1/2
ADV 3/4
I FLG1
I FLG2
I FLG3
I FLG4
ENCM
SIOM
AEOM
LINM
MTRM
27MCK BDEC
13.5MCK BDEC
IC45
VIDEO DECODER (BDEC)
(BIT RATE REDUCTION DECODER/VIDEO ERROR CONCEALMENT)
IC63-67
CONCEALMENT FIFO MEMORY DIN 0-7 2.4MBIT x 5
IC51-62
DE-SHUFFLING MEMORY
(128kx8BIT) x12
IDEO 0-7
IDEPRY
IDEEF
IDESY
DATAX 0-7
STTSX 0/1
CSX
STRBX
RESET1
IPPDO-7
IPPPRY
IPPSY
IPPEF
VIDEO DATA BUS 11
PAD0-7/CONT
VIDEO DATA 11
IC46
LATCH
FL21-28
LPF
IC47
LATCH
FL29-36
LPF
27MCK OUT
IC75
FL1-4
BUFFER & LPF
IC708-712
STILL DET
IC705-707
IC713, 714
DELAY ADJ
IC910
5V→3.3V BUFFER
TP903
IC73
JOG AUDIO PROCESSOR (AP2)
DIR
CAP FG
CNF1
CNF2
CNFVD
ADV1
ADV2
ADV VD
SYSIO 0-7
STAT 0/1
STRB
SCS
RESET
DEFS
DE256FS
OE WE IO 0-7
A0-16
TP22
TP23
TP18
TP19
TP910
TP911
IC710
IC901
AU PLL LOCK
PAD7
PAD6
PAD5
PAD4
PAD3
PAD2
PAD1
PAD0
PS 1
PS 0
PCS
PSTB PP
SYS RST
VPR 115-45B
IC74
SRAM 128kx8BIT
OE WE D0-7
A0-16
FLG 1
FLG 2
FLG 3
FLG 4
FOR FACTORY USE
PPDEAU1
PPDEAU2
PPDEAVST
DT JWP
TR JWP
DE2X1
DE2X2
DE2XV
DE2XJP
DE2Y1
DE2Y2
DE2YV
SIF 12 IN
SIF 34 IN
AES 12 IN
AES 34 IN
REFV PP
256FSO
FSO
13.5MCK PP
PPDATA7
PPDATA6
PPDATA5
PPDATA4
PPDATA3
PPDATA2
PPDATA1
PPDATA0
PPRPY
PPSY
PPEF
FSP
128FSP
256FSP
PP SV REF
APR. 121-40B
SS (1/3), 122-7A
POWER ON PULSE
MODE TEST
MODE TEST
S OUT
S IN
S CK
S START
REFV
FS
FS256
RST
POM
POWER ON MUTE
PPDEDATA7
PPDEDATA6
PPDEDATA5
PPDEDATA4
PPDEDATA3
PPDEDATA2
PPDEDATA1
PPDEDATA0
PPDEPRY
PPDESY
PPDEEF
PB DATA 9
PB DATA 8
PB DATA 7
PB DATA 6
PB DATA 5
PB DATA 4
PB DATA 3
PB DATA 2
PB DATA 1
PB DATA 0
PB PARITY
PB VD
PB HD
PB CF INFO
DPR CFO
VIDEO INDEX RDY
ADVVD
DPR AUFSP
DPR AU256FSP (X)
PP SV-REF



This block diagram corresponds to the production lots of Lot No. 307 and higher.
Circuit sections that any midway change occured are shown using the abbreviation mentioned below.

abbrev.	Lot No.	Board No.
Lot (a)	307-409	1-648-533-22
Lot (b)	410-811	1-648-533-23
Lot (c)	812-	1-648-533-24

Digital Processor
DPR-36H
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

[CIRCUIT DESCRIPTION OF VPR-1B BOARD]

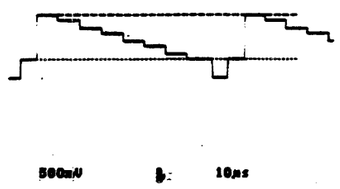
VPR-1B board is a playback video processor board that converts the playback digital video data into a video signal, and generates timing reference signals for video/audio processing.

Before the playback process is described, the explanation for IC307 which exists on the beginning of the circuit is described.
IC307 is originally "TBC BUFFER IC" in which performs TBC processing to input REC video data at a recorder.
However, not only that also IC307 generates video data for test use under the control of the MPU (IC753), receives the "REC DATA", "PB DATA", and "D1 DATA" (encoder outputs) that are fed back as "multiloops", and executes the diagnosis.
In case of the player, functions of IC307 for test use are utilized.
Video data for test use generated in IC307 is sent to DPR-36H board as "REC DATA 0 through 9".

Then, the playback process is described below.
The decoded video PB data ("PB DATA 0 through 9") sent from DPR-36H board is input to the video process IC (IC504).
In case of the player with a Betacam playback function, the TBC-processed Betacam PB data ("B-CAM DATA 0 through 9") is also sent to IC504 from TBC-23 board.
The "EE data 0 through 9" that is bypassed from output of the video data generator (IC307) is also input to IC504. IC504 selects the input data according to the system mode and sends it to encoder IC (IC505).
The encoder IC converts the input data into various 10-bit parallel data (component Y, R-Y, and B-Y data, composite data, VISC Y data, and D1 data) and outputs them together with the control data and clock signals required for after data processing.
The component Y, R-Y, and B-Y data are converted each from digital to analog so as to produce an analog signal, then output via clamp circuits.
The composite data branches into two paths.
One is converted from digital to analog, clamped, output, and divided on CP-218B board to produce "VIDEO OUT 1 and 2" signals.
The another is converted from digital to analog, superimposed a character signal by the switching of IC514, and output as "VIDEO OUT 3" signal.
The VISC Y data extracted from the Betacam PB data is converted from digital to analog, sent through a low-pass filter to TBC-23 board, and used to adjust the video phase of the Betacam PB signal.
The D1 data is sent directly to DIF-16B board.

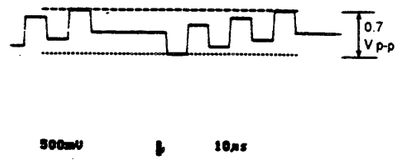
Next, the control system is described below.
Two systems (video process control circuit and timing reference signal generator circuit) are provided for the control system.
The video process control is performed by the MPU (IC753) under the command ("SYIF2 CMD") of the serial communication from the main CPU on SS-52B board.
The MPU sends control signals to each main IC on VPR-1B board, and controls each signal level and phase in D/A conversion systems via EVR (IC754).
For the timing reference signal generation, the timing generator IC (IC1019) controls a PLL circuit to generate a 27MHz reference clock signal according to the sync and burst signals separated from an "INPUT REF VIDEO" signal.
The generated signal is sent to each board as the video process timing reference signal.
Moreover, audio clock generator IC (IC1032), while receiving this signal, generates various reference audio clock signals synchronized with the reference video signal and sends them to each board as the audio process timing reference signal.

①TP601(R-1) PB mode

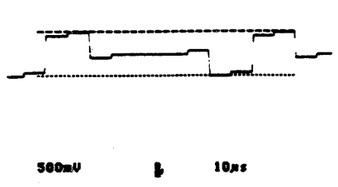


④TP603(R-3) PB mode

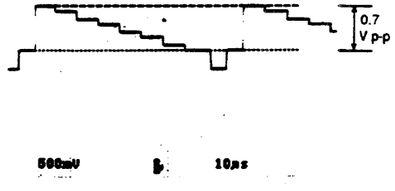
⑦ COMPONENT B-Y OUT PB mode



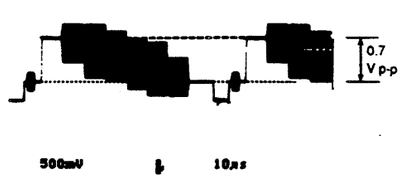
②TP600(FI-2) PB mode



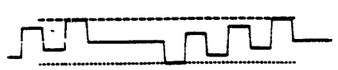
⑤ COMPONENT Y OUT PB mode



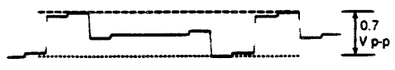
⑧ COMPOSITE OUT PB mode



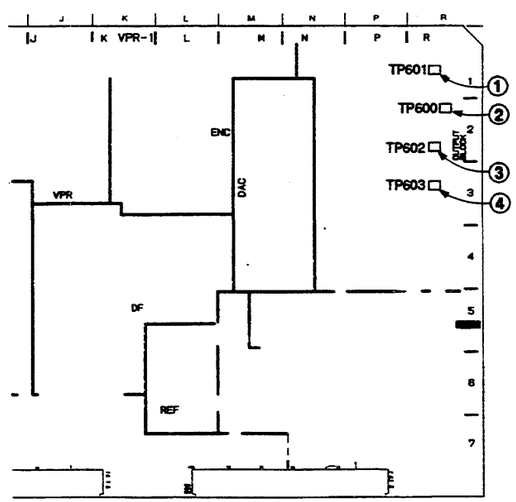
③TP602(R-2) PB mode



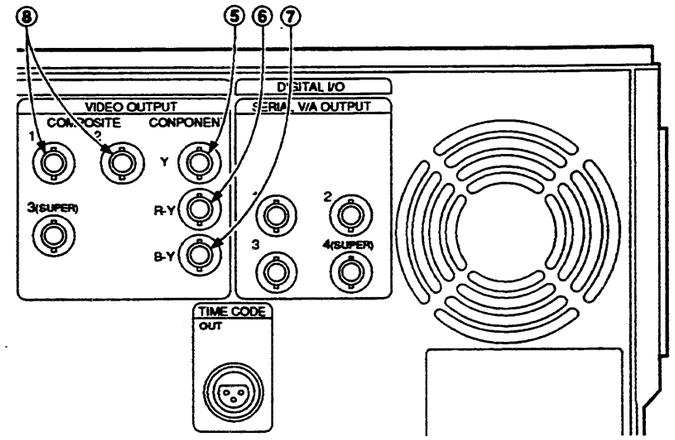
⑥ COMPONENT R-Y OUT PB mode

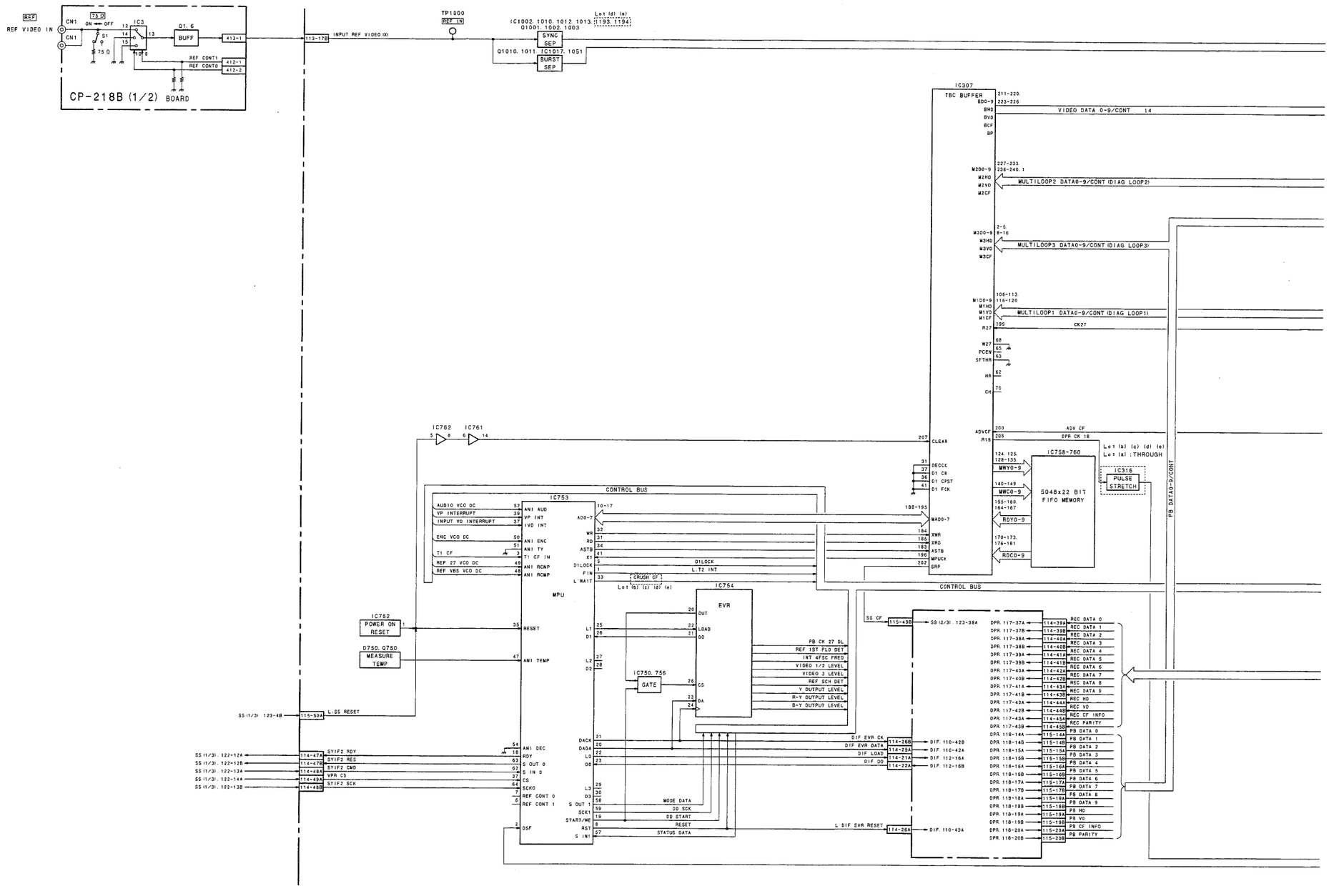


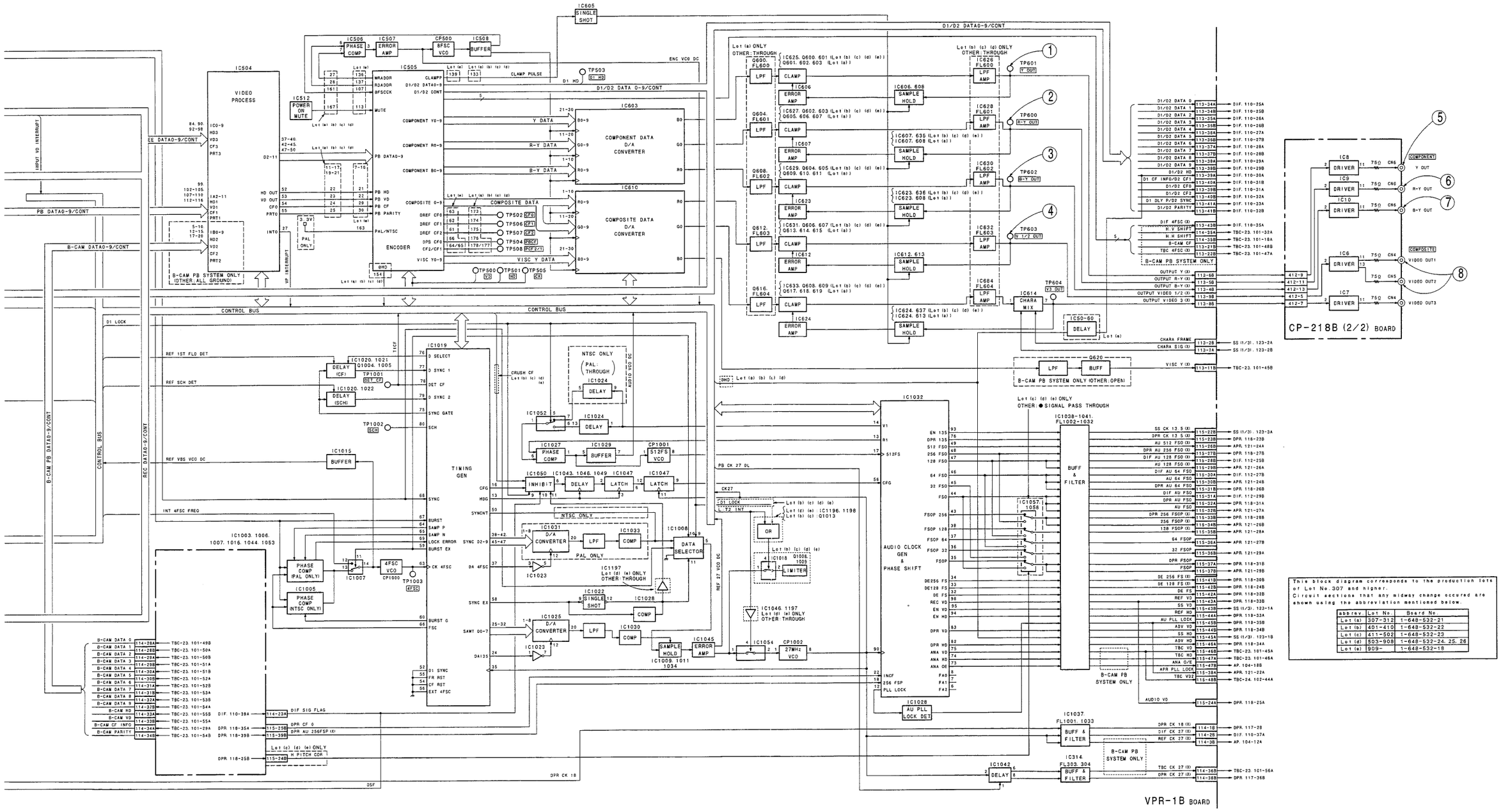
VPR-1B Board -A Side-



Measurement Condition
MODE : PB mode
TAPE : ZR5-1P




REF
REF VIDEO IN
CN1
CN1
75 Ω
ON OFF
S1
IC3
1 of 5
Q1, 6
BUFF
412-1
REF CONT1
REF CONT0
412-1
412-2
CP-218B (1/2) BOARD
113-17B
INPUT REF VIDEO (X)
TP1000
REF IN
Let (d) (e)
IC1002, 1010, 1012, 1013, 1193, 1194
Q1001, 1002, 1003
SYNC SEP
Q1010, 1011
IC1017, 1051
BURST SEP
IC307
TBC BUFFER
800-9
BHD
BVD
BCF
BP
211-220, 223-226
VIDEO DATA 0-9/CONT 14
M2D0-9
M2HD
M2VD
M2CF
227-233, 236-240, 1
MULTILOOP2 DATA0-9/CONT (DIAG LOOP2)
M3D0-9
M3HD
M3VD
M3CF
2-5, 8-16
MULTILOOP3 DATA0-9/CONT (DIAG LOOP3)
M1D0-9
M1HD
M1VD
M1CF
106-113, 116-120
MULTILOOP1 DATA0-9/CONT (DIAG LOOP1)
R27
199
CK27
W27
PCEN
SFTHR
HR
CR
68
65
63
62
70
ADVCF
R19
200
208
ADV CF
DPR CK 18
IC762
IC761
CLEAR
207
DECCK
D1 CR
D1 CPST
D1 FCK
31
37
36
41
Let (b) (c) (d) (e)
Let (a) : THROUGH
IC758-760
124, 125, 128-135
MWY0-9
140-149
MWC0-9
155-160, 164-167
RDY0-9
170-173, 176-181
RDC0-9
5048x22 BIT
FIFO MEMORY
IC316
PULSE
STRETCH
PB DATA0-9/CONT
CONTROL BUS
IC753
AUDIO VCO DC
VP INTERRUPT
INPUT VD INTERRUPT
ENC VCO DC
T1 CF
REF 27 VCO DC
REF VBS VCO DC
52
39
37
50
3
49
48
ANI AUD
VP INT
IVD INT
ANI ENC
ANI TY
T1 CF IN
ANI RCMP
ANI RCMP
MPU
AD0-7
WR
RD
ASTB
X1
D1LOCK
F1N
L WAIT
10-17
32
31
34
41
5
1
33
MAD0-7
188-195
WNR
XRD
ASTB
MPUCK
SRP
184
185
183
186
202
D1LOCK
L.T2 INT
C.CRUSH CF2
Let (b) (c) (d) (e)
IC754
EVR
OUT
LOAD
DO
20
22
21
L1
D1
25
26
L2
D2
27
28
IC752
POWER ON RESET
1
2
35
RESET
D750, Q750
MEASURE TEMP
47
ANI TEMP
IC750, 756
GATE
26
CS
33
DA
24
PB CK 27 DL
REF 1ST FLD DET
INT 4FSC FREQ
VIDEO 1/2 LEVEL
VIDEO 3 LEVEL
REF SCH DET
Y OUTPUT LEVEL
R-Y OUTPUT LEVEL
B-Y OUTPUT LEVEL
CONTROL BUS
SS CF
115-49B
SS 12/31, 123-38A
DPR 117-37A
DPR 117-37B
DPR 117-38A
DPR 117-38B
DPR 117-39A
DPR 117-39B
DPR 117-40A
DPR 117-40B
DPR 117-41A
DPR 117-41B
DPR 117-42A
DPR 117-42B
DPR 117-43A
DPR 117-43B
DPR 118-14A
DPR 118-14B
DPR 118-15A
DPR 118-15B
DPR 118-16A
DPR 118-16B
DPR 118-17A
DPR 118-17B
DPR 118-18A
DPR 118-18B
DPR 118-19A
DPR 118-19B
DPR 118-20A
DPR 118-20B
114-39A
114-39B
114-40A
114-40B
114-41A
114-41B
114-42A
114-42B
114-43A
114-43B
114-44A
114-44B
114-45A
114-45B
115-14A
115-14B
115-15A
115-15B
115-16A
115-16B
115-17A
115-17B
115-18A
115-18B
115-19A
115-19B
115-20A
115-20B
REC DATA 0
REC DATA 1
REC DATA 2
REC DATA 3
REC DATA 4
REC DATA 5
REC DATA 6
REC DATA 7
REC DATA 8
REC DATA 9
REC HD
REC VD
REC CF INFO
REC PARITY
PB DATA 0
PB DATA 1
PB DATA 2
PB DATA 3
PB DATA 4
PB DATA 5
PB DATA 6
PB DATA 7
PB DATA 8
PB DATA 9
PB HD
PB VD
PB CF INFO
PB PARITY
DIF EVR CK
DIF EVR DATA
DIF LOAD
DIF DO
114-26B
114-25A
114-21A
114-22A
DIF 110-42B
DIF 110-42A
DIF 112-16A
DIF 112-16B
L DIF EVR RESET
114-26A
DIF 110-43A
SS 11/31, 123-48
115-50A
L SS RESET
SS 11/31, 122-12A
SS 11/31, 122-12B
SS 11/31, 122-13A
SS 11/31, 122-14A
SS 11/31, 122-13B
114-47A
114-47B
114-48A
114-49A
114-48B
SYIF2 RDY
SYIF2 RES
SYIF2 CMD
VPR CS
SYIF2 SCK
ANI DEC
RDY
S OUT 0
S IN 0
CS
SCKO
REF CONT 0
REF CONT 1
DSF
54
18
63
62
37
64
7
6
2
DACK
DADA
L3
D3
21
20
22
23
29
30
S OUT 1
SCK1
START/WE
RST
S IN1
58
59
19
8
57
MODE DATA
DD SCK
DD START
RESET
STATUS DATA



This block diagram corresponds to the production lots of Lot No. 307 and higher.
Circuit sections that any midway change occured are shown using the abbreviation mentioned below.

abbrev.	Lot No.	Board No.
Lot (a)	307-312	1-648-532-21
Lot (b)	401-410	1-648-532-22
Lot (c)	411-502	1-648-532-23
Lot (d)	503-908	1-648-532-24. 25. 26
Lot (e)	909-	1-648-532-18

Video Processor
VPR-1B CP-218B
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

[CIRCUIT DESCRIPTION OF APR-1B BOARD]

APR-1B board is an playback audio processor board that converts the playback digital audio data into analog audio signals and AES/EBU digital audio signals, and also controls the digital audio system.
In case of the player with a Betacam playback function (APR-1BA board), the function which converts the audio signals played back from the analog Betacam tape into digital data so as to enable to adjust the signal level, is added.

First, the playback process to a digital tape is described below.
Audio data ("DA T 1/2 and 3/4", "MONI L/R", and "AES T 1/2 and 3/4") are sent from DPR-36H board to APR-1B board in the form of serial data two by two audio channels.
The "DA T 1/2", "DA T 3/4", and "MONI L/R" data are input each to the audio digital filter to separate two channels, converted from digital to analog for every channel to produce an analog signal, and output through a de-emphasis amplifier. To "MONI L" and "MONI R" output circuits, the CUE MONITOR signals branched from the CUE output circuits on CUE-1B board are mixed, and the signals output as "MONITOR OUT" are selected by control signals ("DA MUTE" and "CUE MUTE ON") from the MPU.
The "AES T 1/2" and "AES T 3/4" data input to APR-1B board are encoded by AES/EBU transceiver IC (IC1562) (*IC1 and IC3), converted into AES/EBU digital audio signals ("AES O 1/2" and "AES O 3/4") two by two audio channels, then output.
Additionally, "SIF T 1/2 and 3/4" serial audio data are also output from DPR-36H board. However, these data are sent directly to DIF-16B board and encoded to a Serial V/A signal.

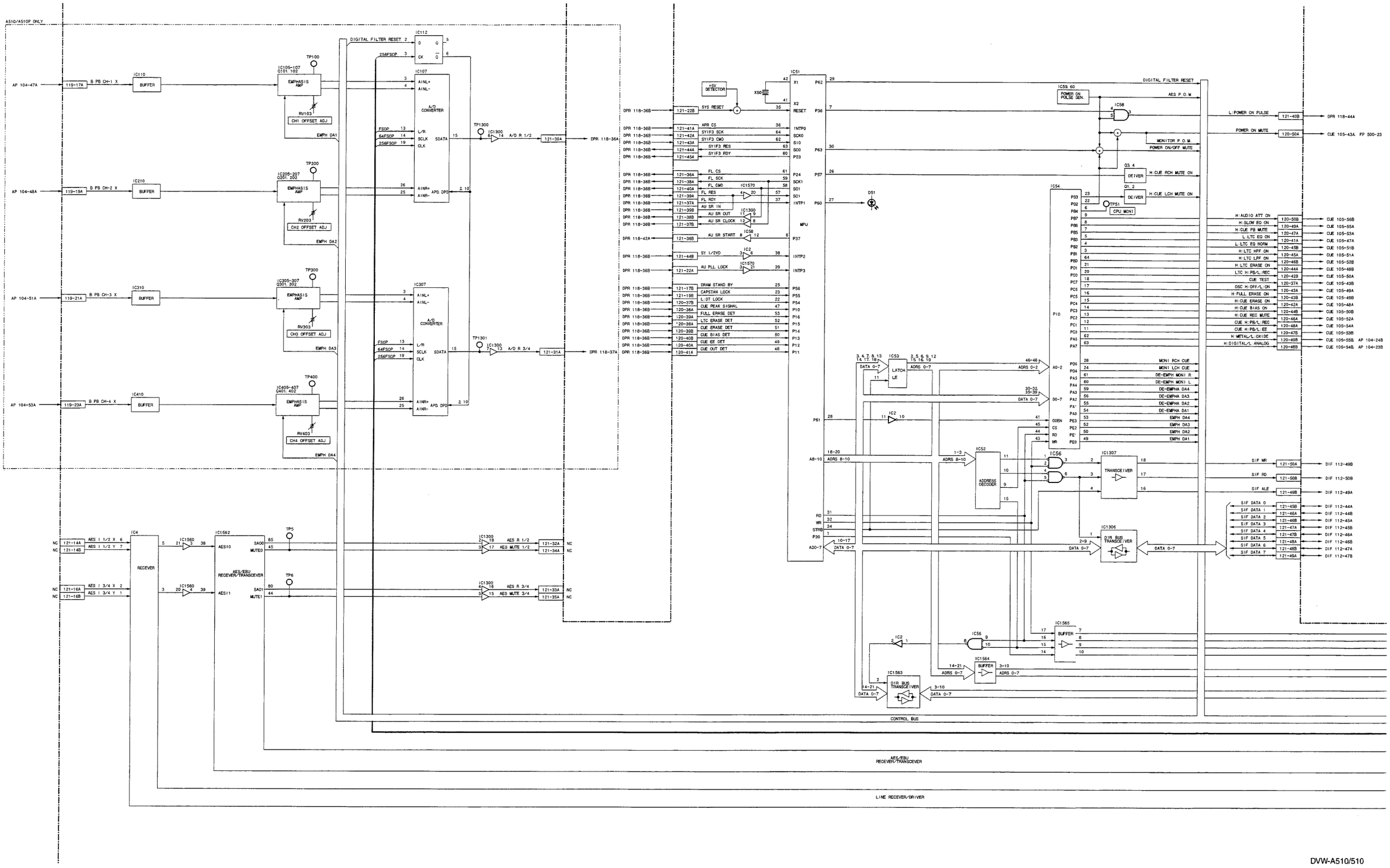
Next, the playback process to an analog Betacam tape is described below.
When an analog Betacam tape is played back, the audio signals ("B PB CH-1 and CH-2") that are played back from the longitudinal tracks of the tape, and the audio signals ("B PB CH-3 and CH-4") that are AFM-demodulated from the PB RF signal in track C, are sent from AP-28 board to APR-1BA board, input through the emphasis amplifiers to the A/D converters, and converted into serial data two by two audio channels.
The resultant data are sent to DPR-36H board via the routes named as "AD R 1/2 and 3/4".
These routes are originally input circuits of recording data.
However, the unit is in the analog PB mode at that time. Therefore, the data input to DPR-36H board are immediately bypassed to the PB circuit and gain-controlled interlocking with the audio PB level adjustment volume control on the control panel.
The data are then returned to APR-1BA board via the same route as in "DA T 1/2 and 3/4" data, passed through the PB processing circuit on APR-1BA board, and output as the PB audio signals of the Betacam tape.

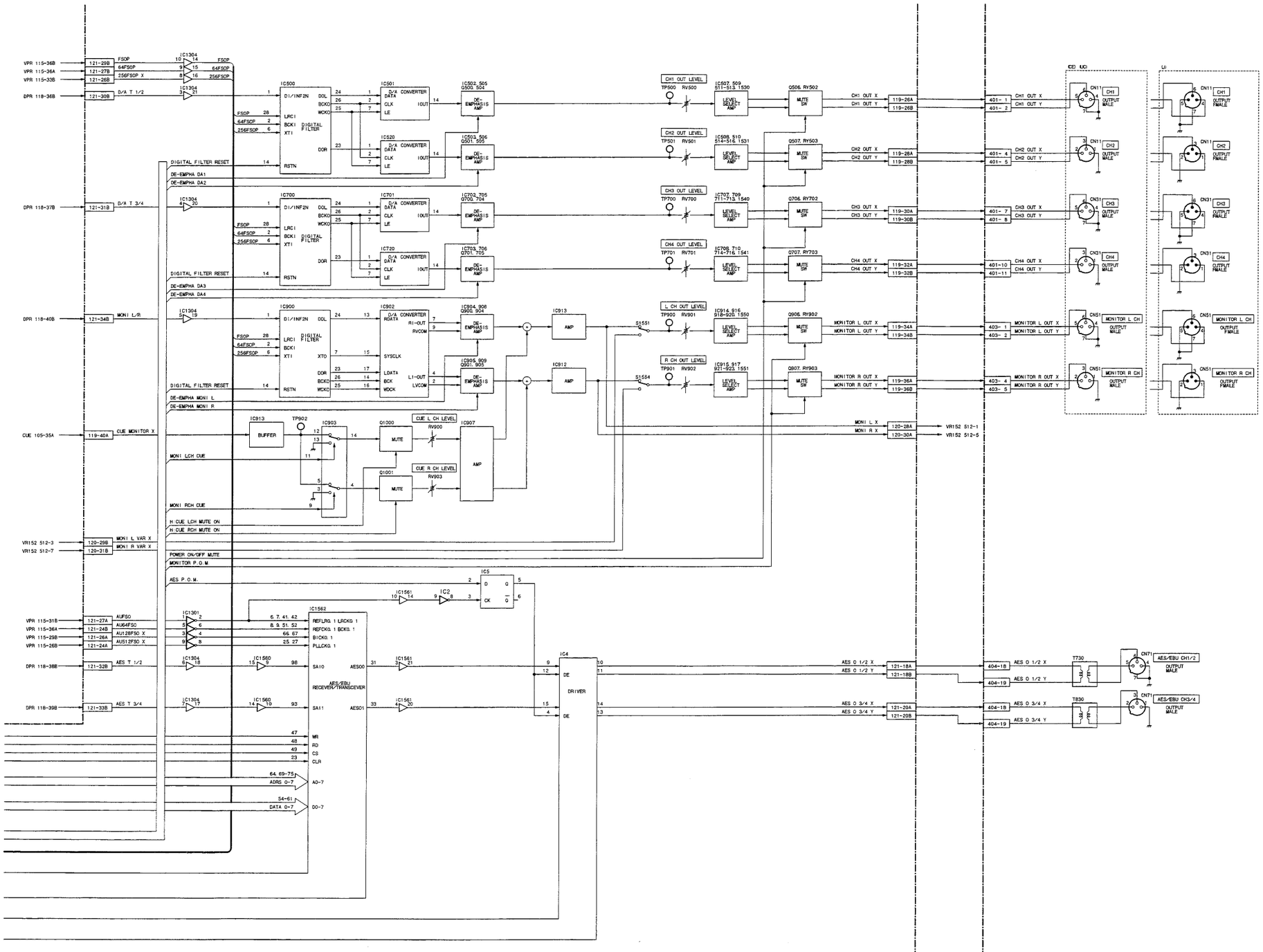
Lastly, the control system is described below.
The digital audio system is controlled by the MPU (IC51) under the command ("SYIF3 CMD") of the serial communication from the main CPU on SS-52B board.
In addition to the control of its own board circuit, this control system controls CUE-1B board via an I/O port (IC54), the audio level meter (fluorescent indicator tube) by serial communication, and the audio data processor on DPR-36H board by serial communication.
The control system also controls the SIF audio process in DIF-16B board while exchanging 8-bit parallel data.
Moreover, it operates as the center of the diagnosis and automatic adjustment functions of the whole audio system.

* : For Lot No. 307 through 909

Lot No. 910 and higher

DVW-A510P (EK):	S/N 14076 and higher	DVW-CA510P (EK):	S/N 10076 and higher
DVW-A510 (J):	S/N 10685 and higher	DVW-CA510 (J):	S/N 10002 and higher
DVW-A510 (UC):	S/N 11544 and higher	DVW-CA510 (UC):	S/N 10016 and higher
DVW-510P (EK):	S/N 11300 and higher		
DVW-510 (J):	S/N 10101 and higher		
DVW-510 (UC):	S/N 10758 and higher		





DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

3-21 (b)

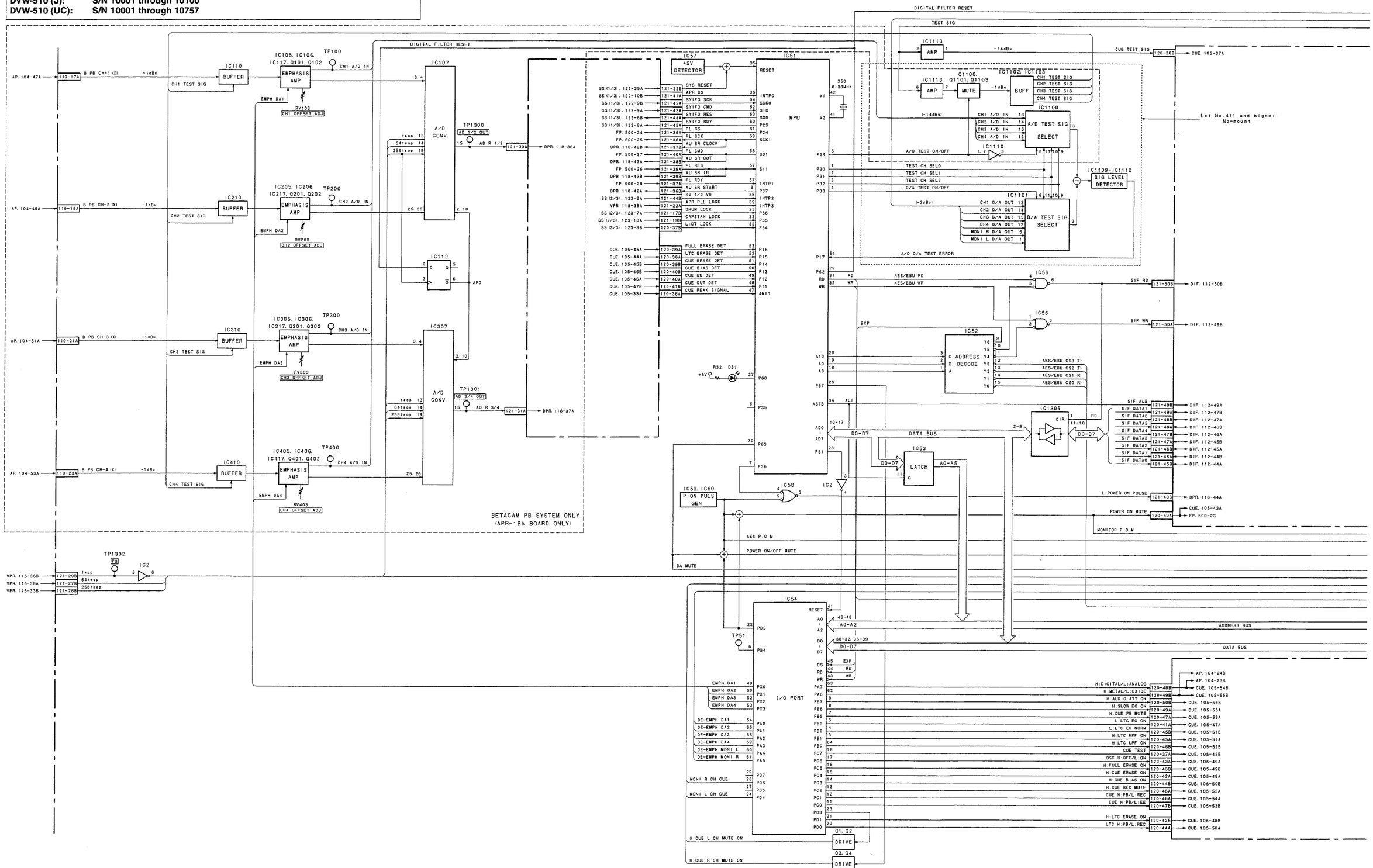
APR-1BA
APR-1B

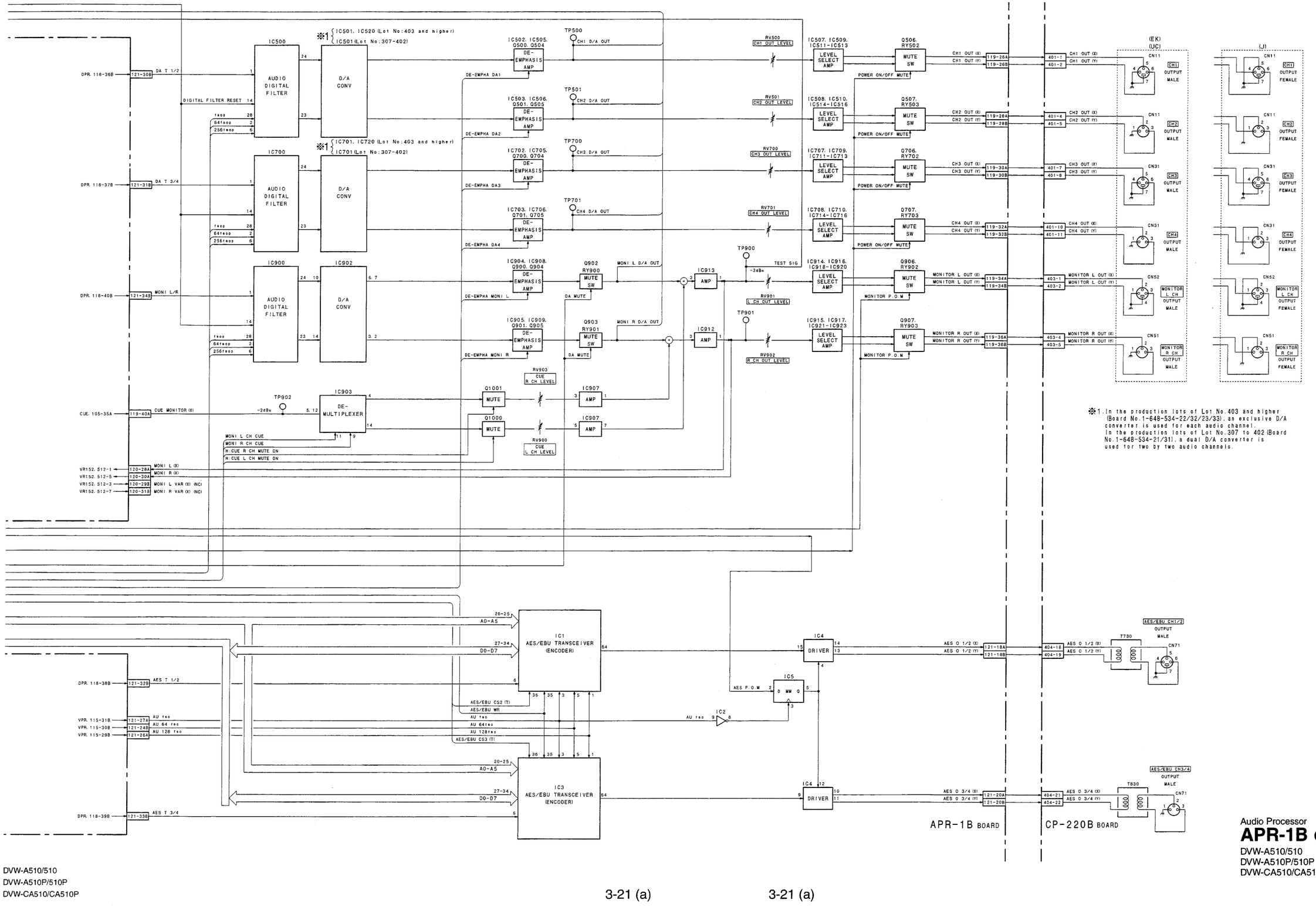
3-21 (b)

CP-220B

Audio Processor
APR-1B CP-220B
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

DVW-A510P (EK):	S/N 10001 through 14075	DVW-CA510P (EK):	S/N 10001 through 10075
DVW-A510 (J):	S/N 10001 through 10684	DVW-CA510 (J):	S/N 10001
DVW-A510 (UC):	S/N 10001 through 11543	DVW-CA510 (UC):	S/N 10001 through 10015
DVW-510P (EK):	S/N 10001 through 11299		
DVW-510 (J):	S/N 10001 through 10100		
DVW-510 (UC):	S/N 10001 through 10757		





Audio Processor
APR-1B CP-220B
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

[CIRCUIT DESCRIPTION OF DIF-16B BOARD]

DIF-16B board is a D-1 serial digital interface board that converts the playback video and audio digital data into a Serial V/A signal.

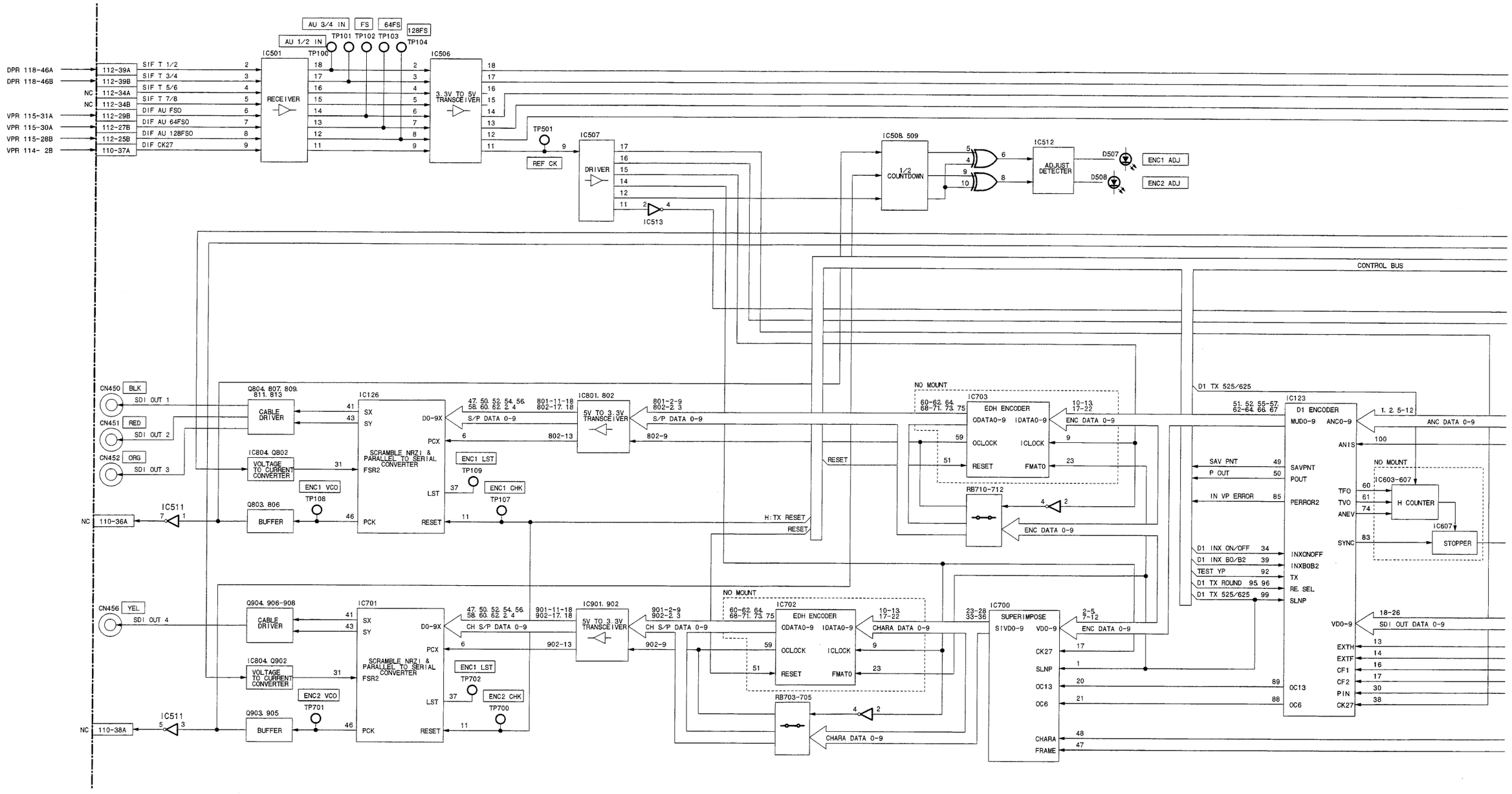
The Serial V/A signal is a digital signal obtained by means that each data of a digital component video signal and four channel digital audio signals are serialized and channel-coded by the S-NRZI (Scrambled Non-return to Zero Inversion) system.

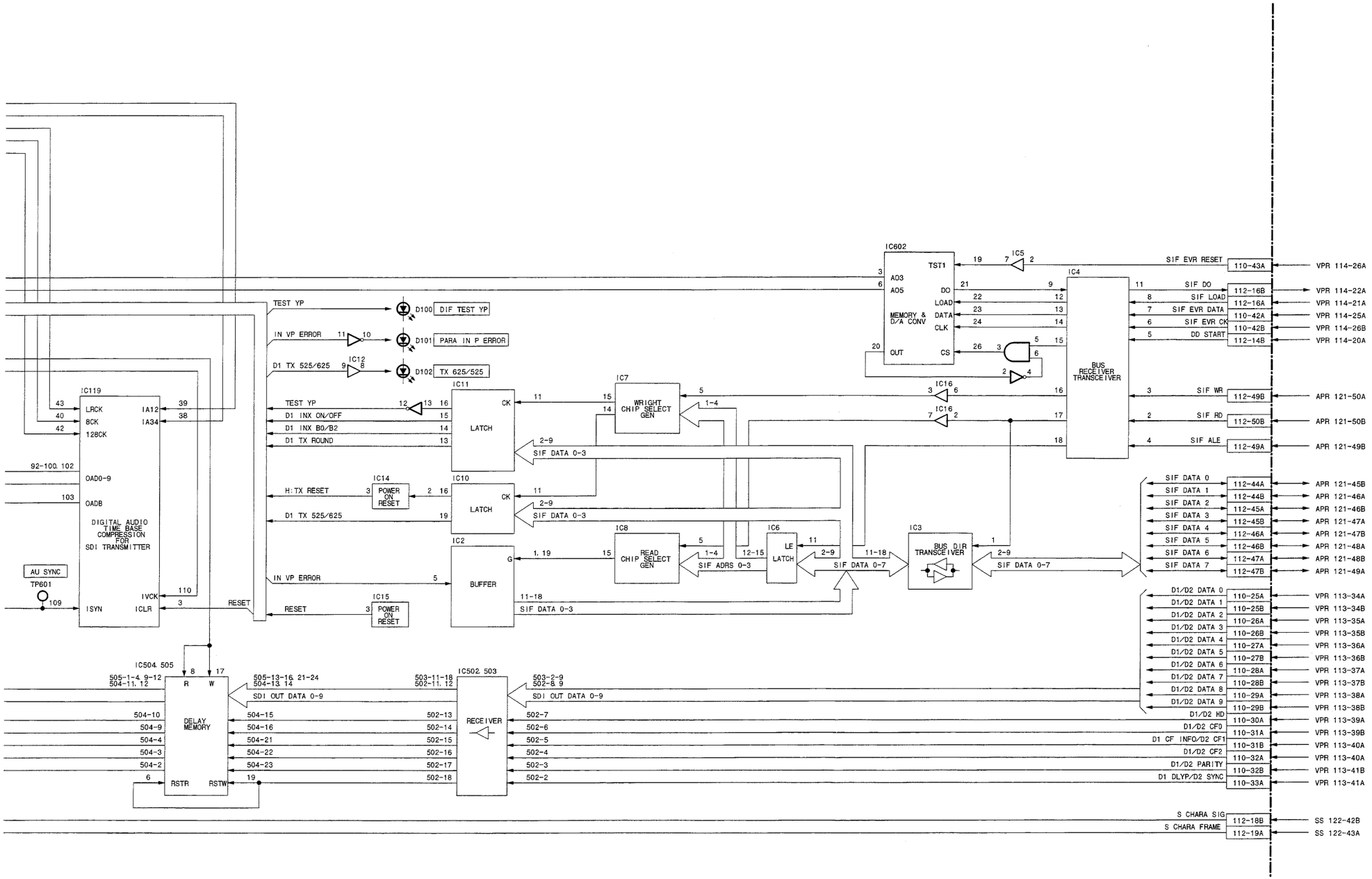
The playback process is described below.
10-bit parallel D1 video data ("D1/D2 DATA 0 through 9") are sent from VPR-1B board, and serial audio data ("SIF T 1/2 and 3/4") two by two audio channels are sent from DPR-36H board to DIF-16B board.
The video data is sent to D1 encoder (IC123).
The audio data is sent to SIF audio transmitter (IC119), converted into 10-bit parallel audio data whose four channels are multiplexed, and sent to the same D1 encoder as in the video data.
In the D1 encoder, the video data and audio data are multiplexed, converted into 10-bit parallel V/A data, then sent.
The sent 10-bit parallel V/A data branches into two paths. One is input to IC124, converted into serial data, and channel-encoded by the S-NRZI system so as to produce the Serial V/A signal.
The resultant signal is output through a cable driver to the "SERIAL V/A OUTPUT 1, 2, and 3" connectors.
The another is input to D1 superimpose IC (IC700) and superimposed a serial character signal sent from SS-52B board.
The resultant data is input to IC701, converted into serial data, channel-encoded by the S-NRZI system so as to produce the "superimposed Serial V/A signal", then output through a cable driver to the "SERIAL V/A OUTPUT 4" connector.

The SIF audio process is controlled by the MPU on APR-1B board. For that reason, DIF-16B board and the MPU on APR-1B board exchange 8-bit parallel data ("SIF DATA 0 through 7").

Lot No. 907 and higher

DVW-A510P (EK):	S/N 14001 and higher
DVW-A510 (J):	S/N 10685 and higher
DVW-A510 (UC):	S/N 11514 and higher
DVW-510P (EK):	S/N 11255 and higher
DVW-510 (J):	S/N 10101 and higher
DVW-510 (UC):	S/N 10758 and higher
DVW-CA510P (EK):	S/N 10076 and higher
DVW-CA510 (J):	S/N 10002 and higher
DVW-CA510 (UC):	S/N 10016 and higher



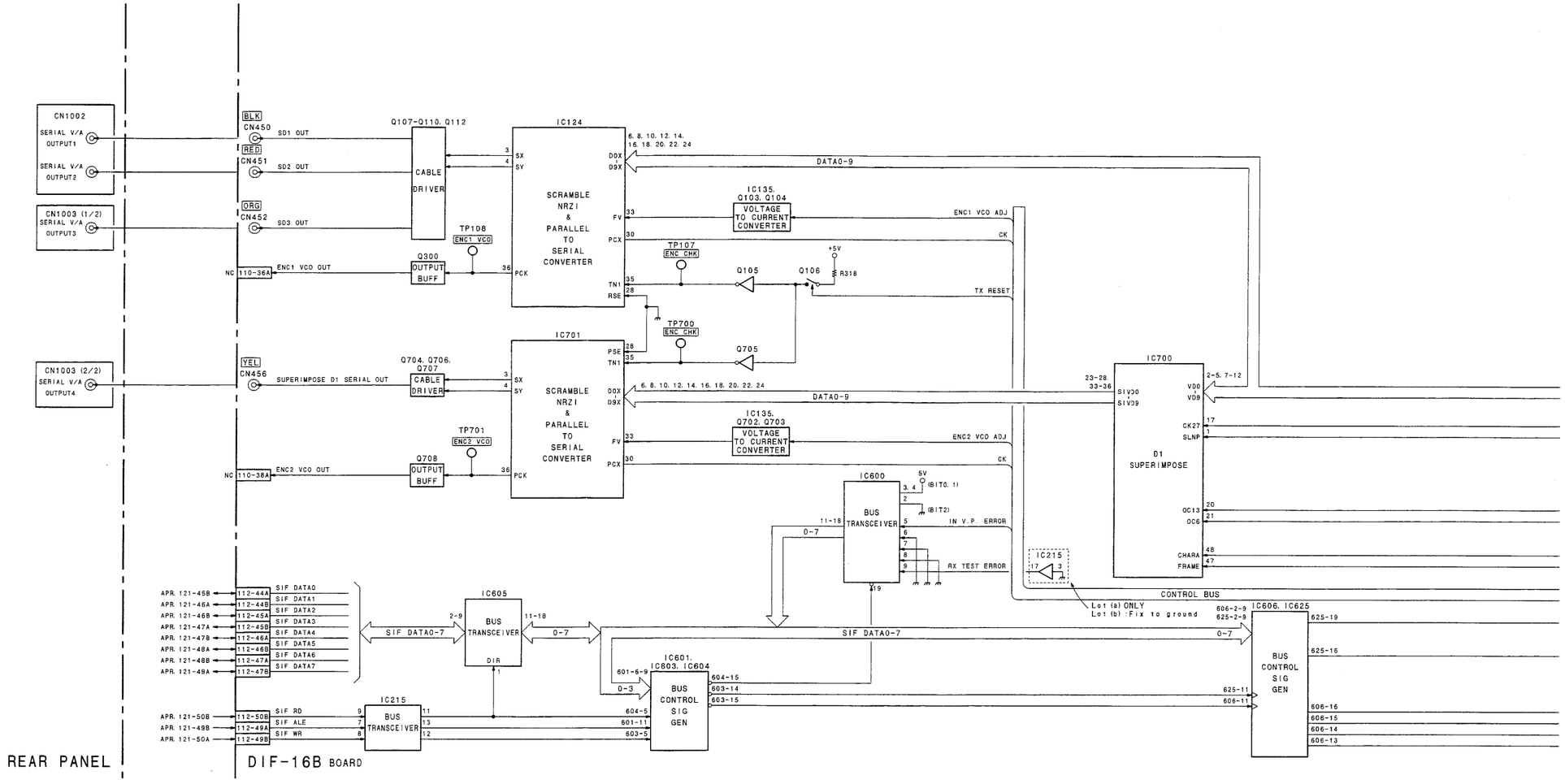


Serial Digital Interface

DIF-16B

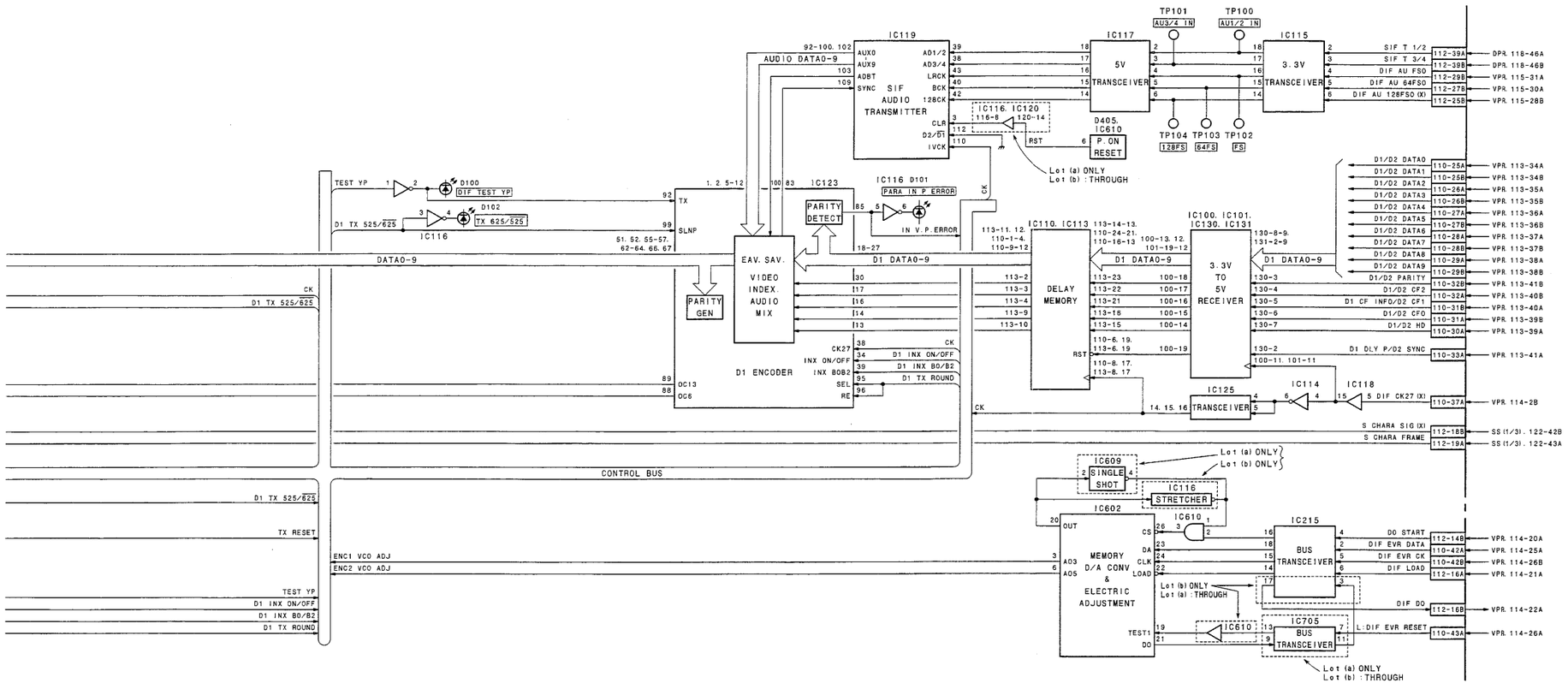
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

DVW-A510P (EK):	S/N 10001 through 14000
DVW-A510 (J):	S/N 10001 through 10684
DVW-A510 (UC):	S/N 10001 through 11513
DVW-510P (EK):	S/N 10001 through 11254
DVW-510 (J):	S/N 10001 through 10100
DVW-510 (UC):	S/N 10001 through 10757
DVW-CA510P (EK):	S/N 10001 through 10075
DVW-CA510 (J):	S/N 10001
DVW-CA510 (UC):	S/N 10001 through 10015



This block diagram corresponds to the production lots of Lot No.307 and higher.
Circuit sections that any midway change occured are shown using the abbreviation mentioned below.

abbrev.	Lot No.	Board No.
Lot (a)	307-410	1-648-531-21
Lot (b)	411-906	1-648-531-22



Serial Digital Interface
DIF-16B
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

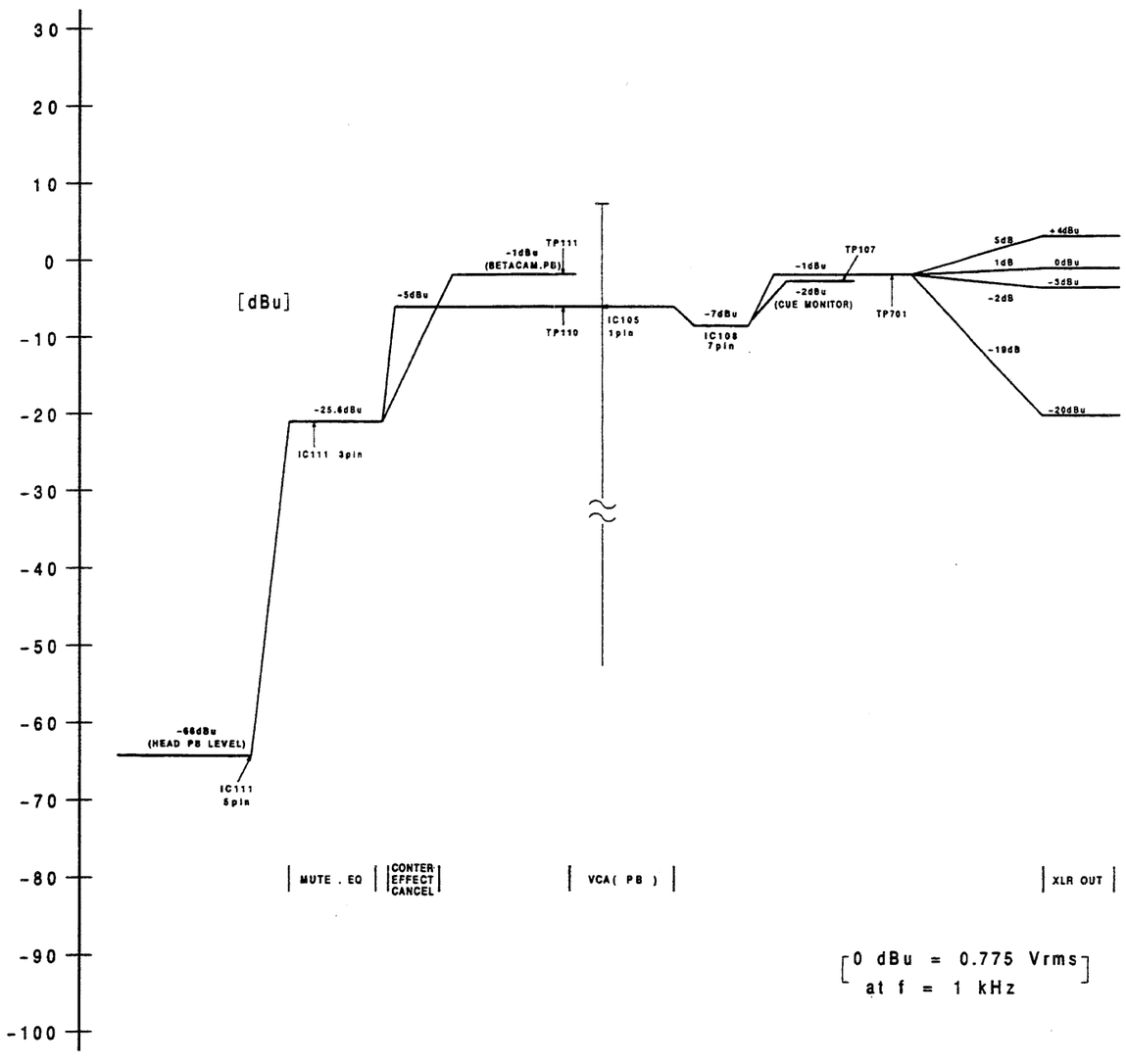
[CIRCUIT DESCRIPTION OF CUE-1B BOARD]

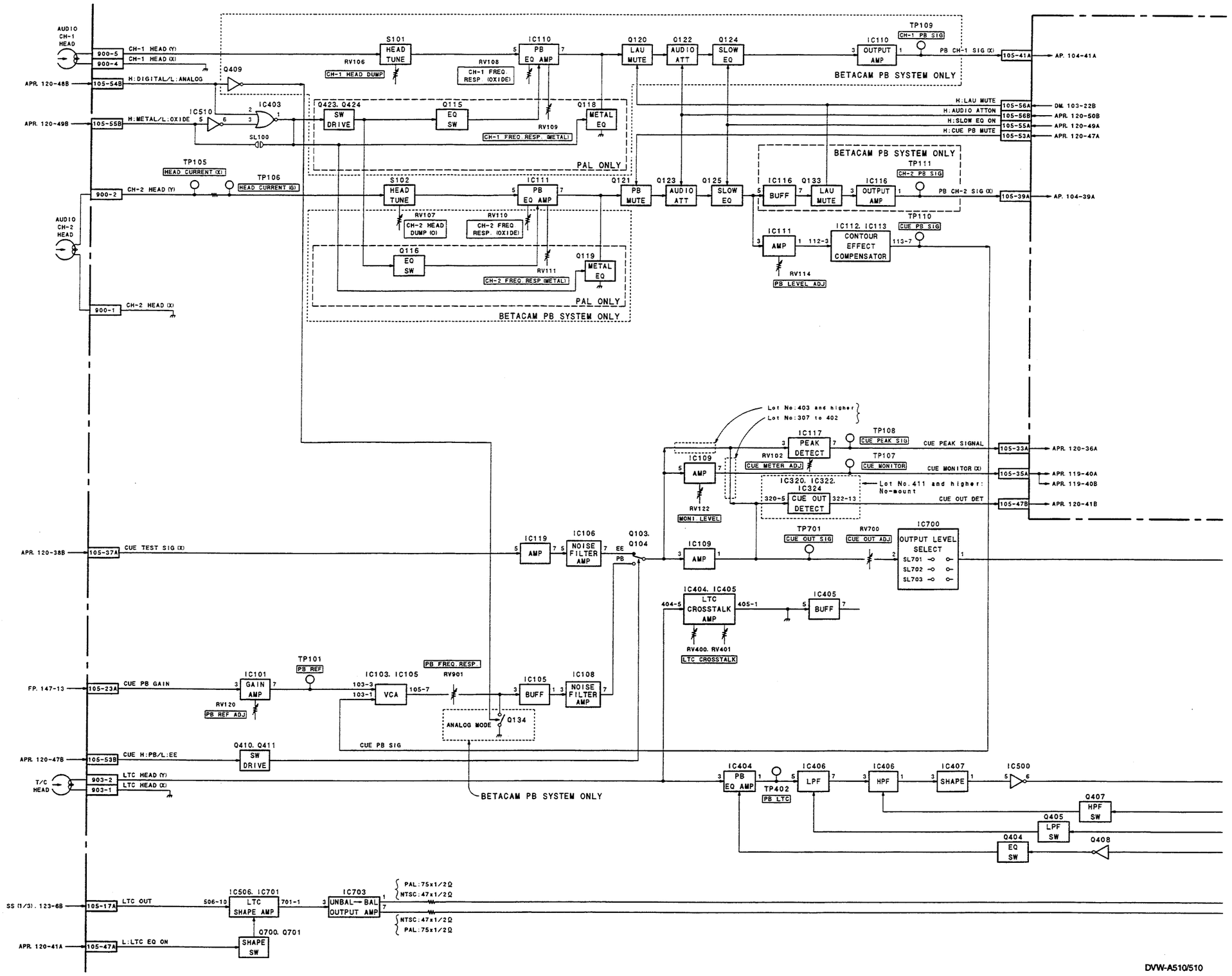
CUE-1B board is a CUE/LTC PB processing board that reproduces the CUE and LTC signals recorded on the longitudinal tracks of the tape.

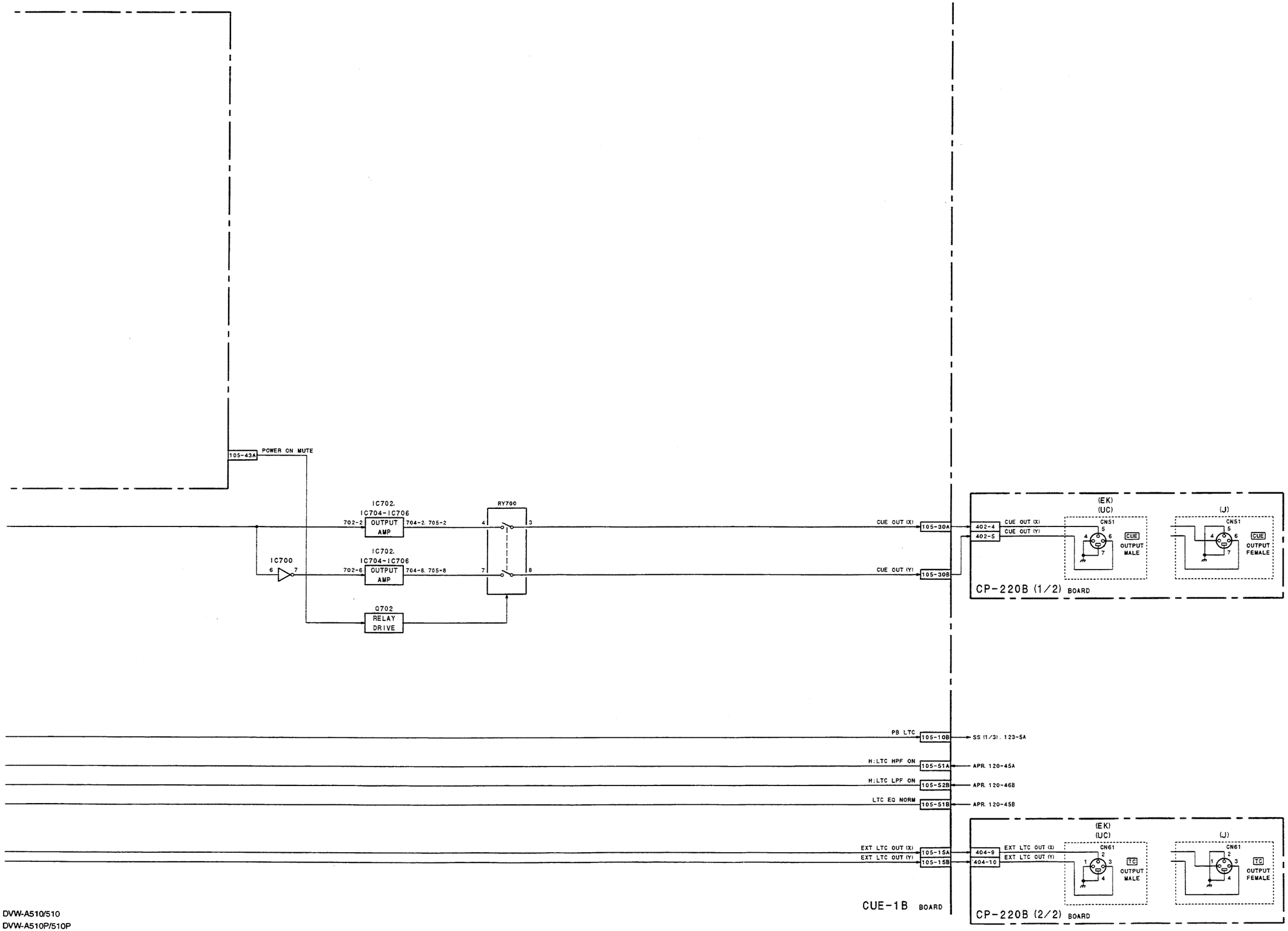
The CUE signal processing circuit is first described below.
The CUE signal is also called a CUE AUDIO signal because an audio signal is usually used as the CUE signal.
In the case of analog Betacam tape, an AUDIO CH2 signal is recorded on the CUE AUDIO track position, and an AUDIO CH1 track is provided in parallel with the CUE AUDIO track. Therefore, two-channel audio heads are provided, and the AUDIO CH2 head is used in common for digital tape PB operation and Betacam tape PB operation.
For tape reproduction, CUE and AUDIO CH2 signals can be reproduced halfway by a same circuit, and an equal circuit is used in AUDIO CH1 during corresponding section.
That is, the signal reproduced by the head is made flat in frequency response using a head tuning circuit and PB equalizer circuit, and passed through the audio attenuator and slow equalizer controlled by the MPU on APR-1B board.
If the PB signals are CH1 and CH2 Betacam PB audio signals, they are sent to AP-28 board from here. If the PB signal is a CUE signal, it is sent to an exclusive PB processing circuit.
In the exclusive PB processing circuit, the CUE signal is compensated in the undulation of a low-frequency response using a contour effect compensator (IC112 and IC113). The compensated signal is then adjusted in level according to the "CUE PB GAIN" instruction (DC voltage) from the control panel, and sent through a noise filter amplifier (IC108) to PB/EE select switch (Q103 and Q104), where a PB or CUE TEST signal is selected according to the command from the MPU on APR-1B board.
The selected signal branches into two paths. One is passed through the output circuit on CUE-1B board as a CUE OUT signal, and output from the "CUE" connector of the "AUDIO OUTPUT" connector group on the rear panel. The another is sent to APR-1B board as a CUE MONITOR signal.
Moreover, a "PEAK DETECT" detector circuit (IC117) is provided. This detector circuit converts the peak level of the CUE signal into a DC voltage and outputs it. The output voltage is sent to the MPU on APR-1B board and used for the CUE level display of an audio level meter.

An LTC signal processing circuit is described next.
The signal reproduced by the TC head is passed through a PB equalizer amplifier (IC404), then a low-pass filter and high-pass filter controlled by the MPU on APR-1B board, and shaped in a waveform using IC407. The PB signal is then sent to the LTC PROCESSOR IC on SS-52B board as a "PB LTC" signal. The signal read by the LTC PROCESSOR IC is sent back to CUE-1B board as an "LTC OUT" signal and shaped in a waveform using IC701. The shaped signal is converted into a balanced signal using IC703 and output to the "TIME CODE OUT" connector.

CUE-1B LEVEL DIAGRAM




AUDIO CH-1 HEAD
900-5
900-4
CH-1 HEAD (Y)
CH-1 HEAD (X)
APR. 120-48B
105-54B
H:DIGITAL/L:ANALOG
APR. 120-49B
105-55B
H:METAL/L:OXIDE
Q409
IC510
IC403
SL100
S101
HEAD TUNE
RV106
CH-1 HEAD DUMP
IC110
PB EQ AMP
RV108
CH-1 FREQ. RESP. (OXIDE)
Q423. Q424
SW DRIVE
Q115
EQ SW
Q118
METAL EQ
RV109
CH-1 FREQ. RESP. (METAL)
PAL ONLY
Q120
LAU MUTE
Q122
AUDIO ATT
Q124
SLOW EQ
IC110
OUTPUT AMP
TP109
CH-1 PB SIG
PB CH-1 SIG (X)
105-41A
AP. 104-41A
BETACAM PB SYSTEM ONLY
H:LAU MUTE
H:AUDIO ATTON
H:SLOW EQ ON
H:CUE PB MUTE
105-56A
105-56B
105-55A
105-53A
DM. 103-22B
APR. 120-50B
APR. 120-49A
APR. 120-47A
TP105
HEAD CURRENT (X)
TP106
HEAD CURRENT (G)
900-2
CH-2 HEAD (Y)
AUDIO CH-2 HEAD
900-1
CH-2 HEAD (X)
S102
HEAD TUNE
RV107
CH-2 HEAD DUMP (O)
IC111
PB EQ AMP
RV110
CH-2 FREQ. RESP. (OXIDE)
Q116
EQ SW
Q119
METAL EQ
RV111
CH-2 FREQ. RESP (METAL)
PAL ONLY
BETACAM PB SYSTEM ONLY
Q121
PB MUTE
Q123
AUDIO ATT
Q125
SLOW EQ
IC116
BUFF
Q133
LAU MUTE
IC116
OUTPUT AMP
TP111
CH-2 PB SIG
PB CH-2 SIG (X)
105-39A
AP. 104-39A
IC111
AMP
RV114
PB LEVEL ADJ
IC112. IC113
CONTOUR EFFECT COMPENSATOR
TP110
CUE PB SIG
112-3
113-7
Lot No.403 and higher
Lot No.307 to 402
IC117
PEAK DETECT
TP108
CUE PEAK SIG
CUE PEAK SIGNAL
105-33A
APR. 120-36A
RV102
CUE METER ADJ
IC109
AMP
TP107
CUE MONITOR
CUE MONITOR (X)
105-35A
APR. 119-40A
APR. 119-40B
RV122
MONI LEVEL
IC320. IC322. IC324
CUE OUT DETECT
Lot No.411 and higher: No-mount
CUE OUT DET
105-47B
APR. 120-41B
APR. 120-38B
105-37A
CUE TEST SIG (X)
IC119
AMP
IC106
NOISE FILTER AMP
Q103. Q104
EE
PB
IC109
AMP
TP701
CUE OUT SIG
RV700
CUE OUT ADJ
IC700
OUTPUT LEVEL SELECT
SL701
SL702
SL703
IC404. IC405
LTC CROSSTALK AMP
404-5
405-1
IC405
BUFF
RV400. RV401
LTC CROSSTALK
FP. 147-13
105-23A
CUE PB GAIN
IC101
GAIN AMP
RV120
PB REF ADJ
TP101
PB REF
IC103. IC105
VCA
103-3
103-1
105-7
PB FREQ. RESP
RV901
IC105
BUFF
IC108
NOISE FILTER AMP
ANALOG MODE
Q134
CUE PB SIG
APR. 120-47B
105-53B
CUE H:PB/L:EE
Q410. Q411
SW DRIVE
T/C HEAD
903-2
903-1
LTC HEAD (Y)
LTC HEAD (X)
BETACAM PB SYSTEM ONLY
IC404
PB EQ AMP
TP402
PB LTC
IC406
LPF
IC406
HPF
IC407
SHAPE
IC500
Q407
HPF SW
Q405
LPF SW
Q404
EQ SW
Q408
SS (1/3). 123-6B
105-17A
LTC OUT
IC506. IC701
LTC SHAPE AMP
506-10
701-1
IC703
UNBAL—BAL OUTPUT AMP
PAL: 75x1/2Ω
NTSC: 47x1/2Ω
NTSC: 47x1/2Ω
PAL: 75x1/2Ω
APR. 120-41A
105-47A
L:LTC EQ ON
SHAPE SW
Q700. Q701



CUE/LTC Processor

CUE-1B CP-220B

DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

[CIRCUIT DESCRIPTION OF DM-89 BOARD]

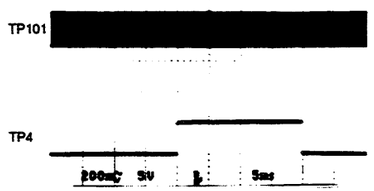
DM-89 board is a Betacam PB demodulator board that equalizes the RF signal reproduced from an analog Betacam tape according to the type and speed of the tape, demodulates it to a video signal, and detects a dropout.

The outline of Betacam tape reproduction is first described below.
The Y RF and C RF signals reproduced from the Y and C (chroma) tracks of an analog Betacam tape are sent through the VCA circuit on EQ-45B board to DM-89 board. On DM-89 board, PB Y and PB C signals are equalized, demodulated, and dropout detected by their respective circuit. The resultant signals are sent to TBC-24 board.
When the analog Betacam tape is reproduced by a digital Betacam VTR, the relative speed of the rotary head to the tape increases about 9 % depending on the diameter of the head drum. Therefore, the signal recorded on the helical track is reproduced in the form that its time base is compressed about 9 %. The FM carrier frequency and deviation also significantly vary depending on the metal tape and oxide tape. During shuttle PB, the PB frequency decreases in the FF mode and increases in the REW mode. On DM-89 board, a signal is properly processed under these conditions, and the same performance as the conventional one can be obtained.

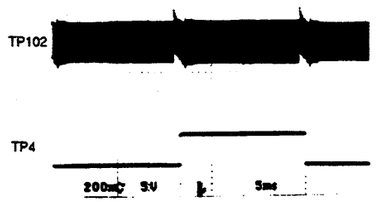
The outline of each circuit is described next. PB Y and PB C systems are provided. In the PB Y system, a high-speed search compensator is added so that a luminance signal can be reproduced in the high-speed search mode. Therefore, the PB Y system is described.
A normal PB circuit is explained below. The PB Y RF signal sent to DM-89 board is attenuated to 2/5 and sent to the input circuit block in IC101. For a metal tape, the input RF signal is attenuated to 1/2 and output via a VCA circuit. Select switches are incorporated into the input stage of this circuit block, and reference marker signals corresponding to the PB RF frequency whose time base is compressed on the metal tape can be input for a test.
The PB Y RF signal passed through a VCA circuit is sent to a cosine equalizer circuit. This circuit is an amplitude equalizing circuit that can correct the amplitude characteristic without changing the phase characteristic by combining a delay line and differential amplifier. The signal that has been equalized in amplitude is passed through an RF low-pass filter, equalized in phase using two-stage phase equalizer circuits, and sent to a video switch (IC102). The RF low-pass filter and phase equalizer circuits are provided in parallel for a metal tape and oxide tape and selected using the video switch (IC102).
After that, the signal is equalized into Y main and Y sub frequency characteristics by the cosine equalizer circuit in the next stage. The Y main frequency characteristic is a flat characteristic that attaches importance to the frequency characteristic. The Y sub-frequency characteristic is a characteristic that attaches importance to the counter measures for overmodulation.
For the PB Y RF signal whose basic equalization has been completed, Y MAIN RF and Y SUB RF signals are sent to the demodulator circuit system, and a Y MAIN RF signal is sent to the dropout detector circuit system.
The Y MAIN RF and Y SUB RF signals sent to the demodulator circuit system enter into an overmodulation compensator (OMC)(IC501) and are mixed via a limiter circuit. The mixed Y RF signal is sent to a demodulator (IC501), where the carrier frequency is multiplied, converted from a frequency into a voltage, then de-emphasized. The resultant signal is sent to the low-pass filter in the next stage to eliminate a frequency-multiplied carrier and demodulated into a video signal. The demodulated Y signal is clamped and nonlinear de-emphasized using IC503, then sent to TBC-24 board as a "Y DEMOD" signal.
The Y MAIN RF signal sent to the dropout detector circuit system is input through a dropout equalizer to dropout detector circuit block IC101, where the signal is compared with the reference voltage. If the signal is less than the reference voltage, a dropout is judged to have occurred. A dropout detection pulse ("Y DO PLS") is then sent to TBC-24 board and other blocks.
The outline of the normal PB circuit is as described above.
The normal PB operation indicates the PB range of -1 to +3 times the normal speed in which noiseless PB operation can be performed using a DT function. In this normal PB operation, various corrections for a signal are performed according to the type of a tape. However, the F/V-conversion gain and de-emphasis characteristic of a demodulator vary depending on the tape speed information. The demodulator can be thus used in PB modes other than normal PB.
During shuttle PB, the PB frequency decreases in the FF mode and increases in the REW mode. In the high-speed search mode, especially, in the high-speed FF mode, the FM carrier frequency and deviation decrease. Consequently, the demodulated video signal level decreases, and the waveform is distorted. This makes it difficult to reproduce the video information. Therefore, a high-speed search compensator mentioned below is added in the PB Y system so that a luminance can be reproduced in the high-speed search mode. Each signal is compensated according to the type and speed of a tape.
"SEARCH SW" gate which consists of three blocks of RF switches is provided. The signal whose only amplitude has been equalized passes the gate via a "FLAT" switch in the high-speed REW mode. The signal that has been passed through a "SEARCH LPF" filter passes the gate via a "LOW" switch in the high-speed FF mode. And the signal that has been equalized passes the gate via a "MID" switch in the middle search speed mode. The signal that has passed the gate is emphasized according to the tape speed by a "SEARCH TUNE" circuit and input to the demodulator (IC501) and dropout detector circuit (IC101) instead of a normal PB signal by the selection of RF switches. In the high-speed FF mode, the frequency-multiplied carrier elimination filter in the stage following the demodulator is also changed to "SEARCH LPF".

Lastly, a control system is described below.
Principal controls for each circuit block corresponding to the type and speed of a tape are performed by the MPU (IC906) on DM-89 board under the command ("SYIF2 CMD") of the serial communication from the main CPU on SS-52B board. The main controls are as follows: METAL/OXIDE selection, each selection in the high-speed search compensator, and analog control of VCAs, cosine equalizers, OMCs, and dropout detection reference value via D/A converters (IC904 and IC905). The backup operation by an EEP-ROM (IC908) is also performed.

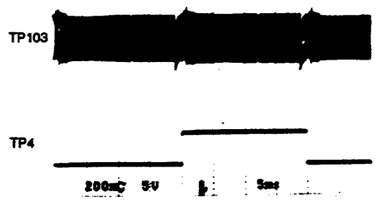
①TP101(F-7) PB mode
TP4(E-1)(TRIG)



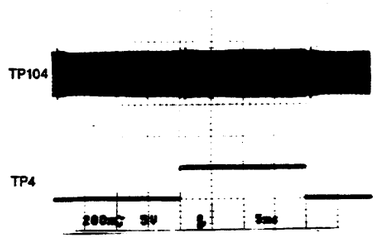
②TP102(E-6) PB mode
TP4(E-1)(TRIG)



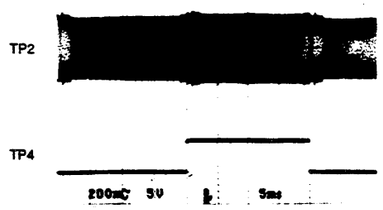
③TP103(E-6) PB mode
TP4(E-1)(TRIG)



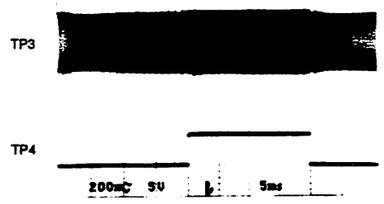
④TP104(F-5) PB mode
TP4(E-1)(TRIG)



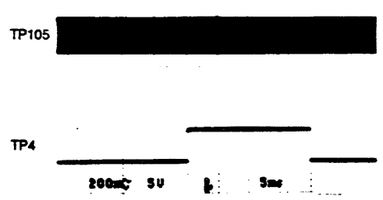
⑤TP2(E-1) PB mode
TP4(E-1)(TRIG)



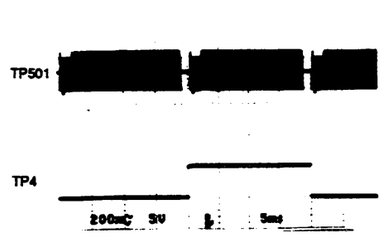
⑥TP3(E-1) PB mode
TP4(E-1)(TRIG)



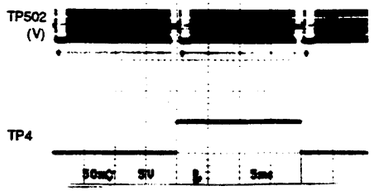
⑦TP105(G-4) PB mode
TP4(E-1)(TRIG)



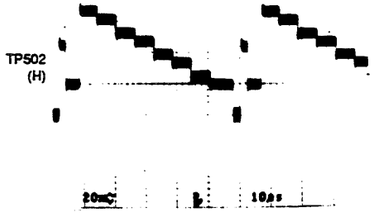
⑧TP501(F-4) PB mode
TP4(E-1)(TRIG)



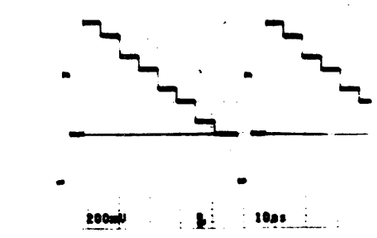
⑨TP502(G-3) PB mode
TP4(E-1)(TRIG)



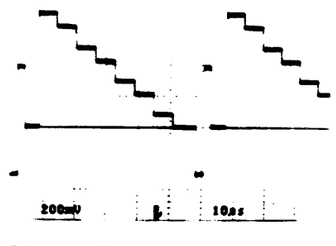
⑩TP504(F-3) PB mode



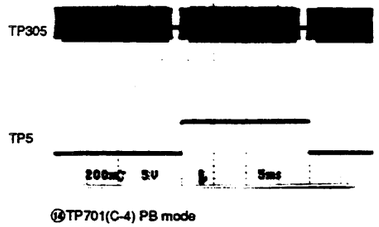
⑪TP505(E-2) PB mode



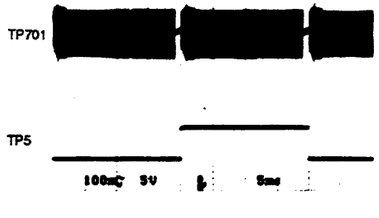
⑫TP1(E-1) PB mode



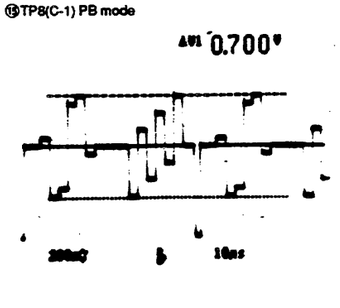
⑬TP305(C-4) PB mode
TP5(D-1)(TRIG)



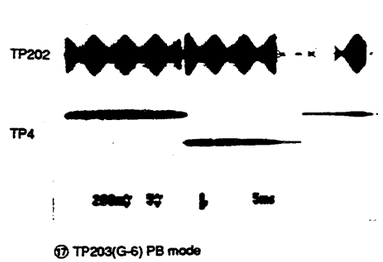
⑭TP701(C-4) PB mode
TP5(D-1)(TRIG)



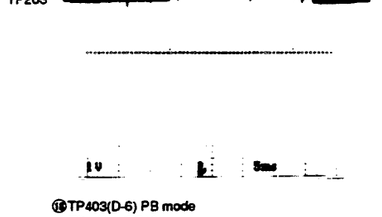
⑮TP8(C-1) PB mode



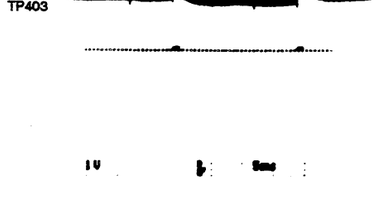
⑯TP202(G-6) × –3 SPEED mode
TP4(E-1)(TRIG)



⑰ TP203(G-6) PB mode
TP4(E-1)(TRIG)

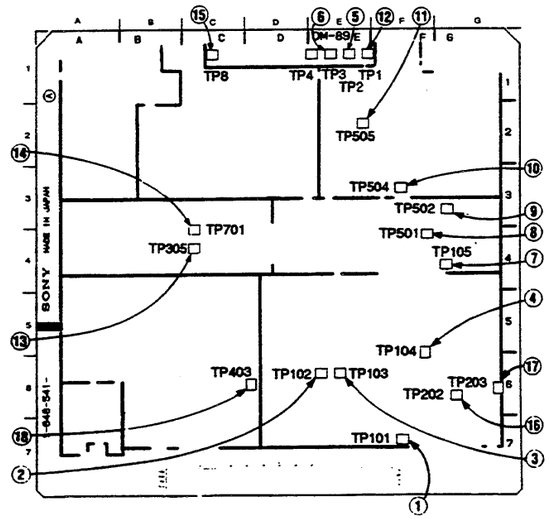


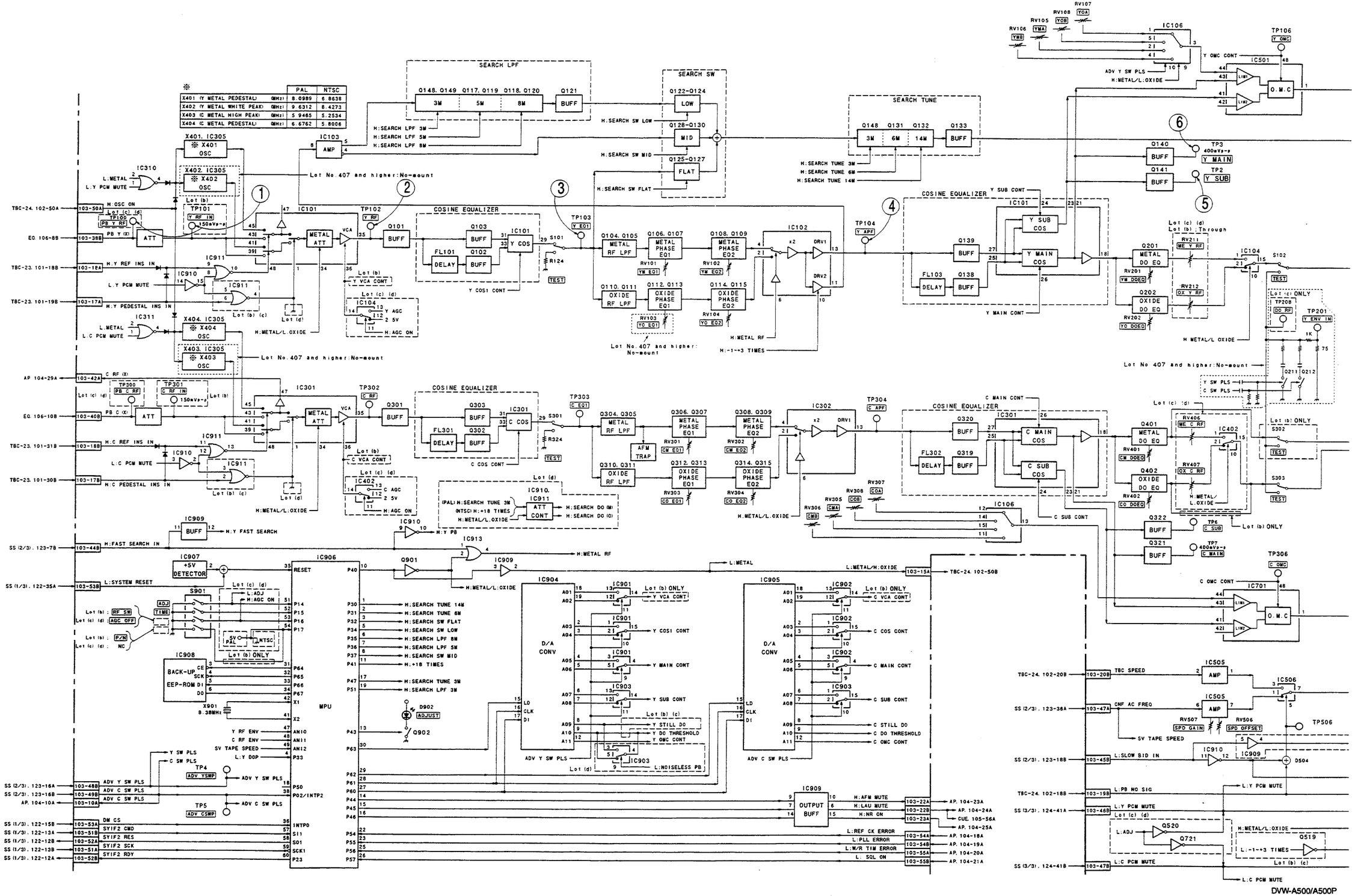
⑱TP403(D-6) PB mode
TP4(E-1)(TRIG)



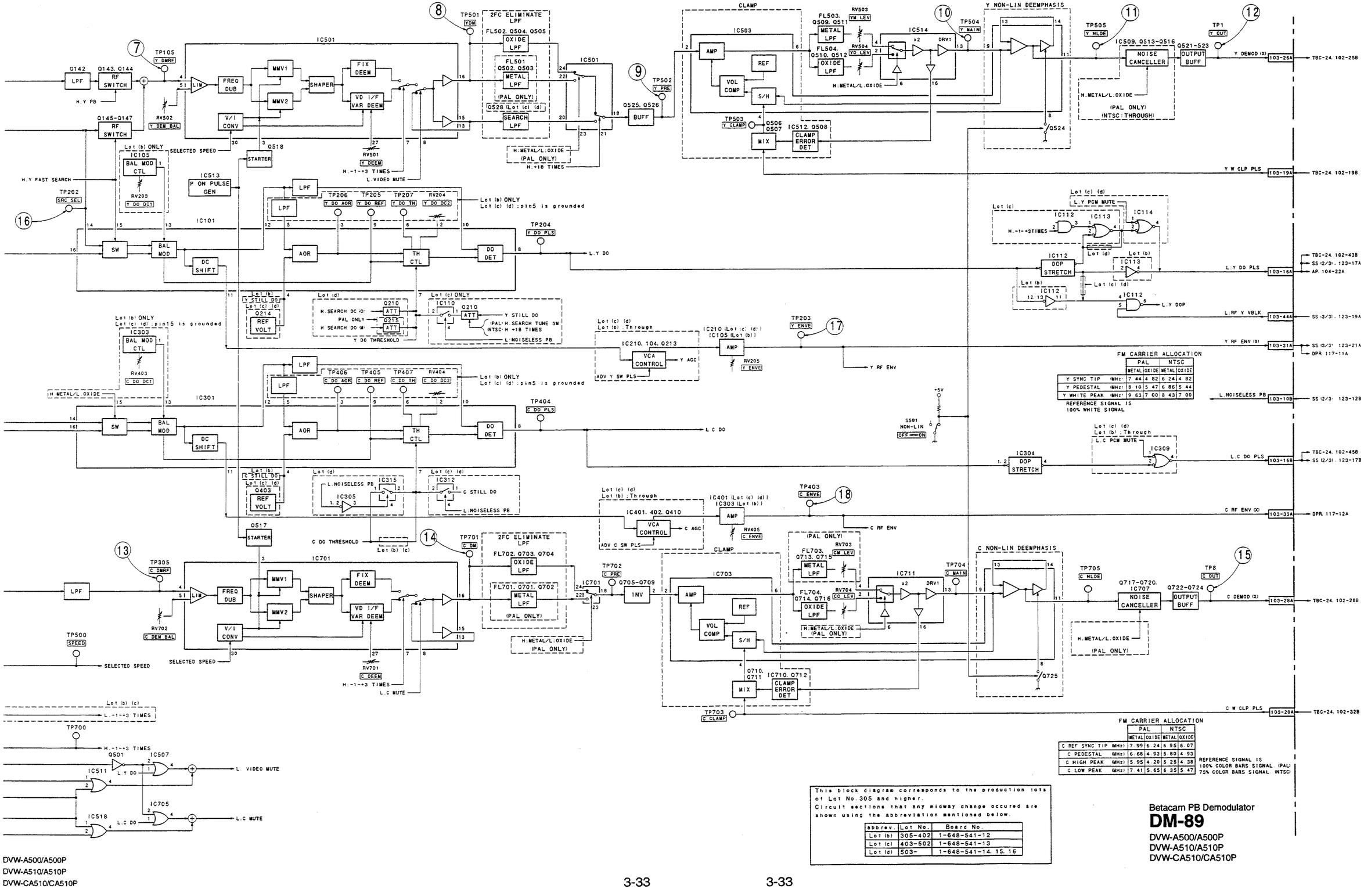
Measurement Condition
MODE : PB mode
: ×–3 SPEED mode
TAPE : CR5-1B PS

DM-89 Board -A Side-





DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P


TP105 Y DMRF
Q142 LPF
Q143. Q144 RF SWITCH
H.Y PB
Q145-Q147 RF SWITCH
RV502 Y DEM BAL
LIM
FREQ DUB
V/I CONV
MMV1
MMV2
SHAPER
FIX DEEM
VD I/F VAR DEEM
IC501
TP501 YDM
2FC ELIMINATE LPF
FL502. Q504. Q505 OXIDE LPF
FL501 Q502. Q503 METAL LPF
(PAL ONLY) Q528 (Lot (c) (d))
SEARCH LPF
H:METAL/L:OXIDE (PAL ONLY)
H:+18 TIMES
TP502 Y PRE
Q525. Q526 BUFF
CLAMP
IC503
AMP
REF
VOL COMP
S/H
TP503 Y CLAMP
Q506 Q507 MIX
IC512. Q508 CLAMP ERROR DET
RV503 YM LEV
RV504 YC LEV
FL503. Q509. Q511 METAL LPF
FL504. Q510. Q512 OXIDE LPF
IC514
x2
DRV1
TP504 Y MAIN
Y NON-LIN DEEMPHASIS
Q524
TP505 Y NLDE
IC509. Q513-Q516 NOISE CANCELLER
H.METAL/L:OXIDE
(PAL ONLY)
(NTSC:THROUGH)
Q521-523 OUTPUT BUFF
TP1 Y OUT
Y DEMOD (X)
103-26A
TBC-24. 102-25B
Y W CLP PLS
103-19A
TBC-24. 102-19B
H.Y FAST SEARCH
TP202 SRC SEL
IC105 BAL MOD CTL
RV203 Y DO DC1
SELECTED SPEED
Q518 STARTER
IC513 P ON PULSE GEN
RV501 Y DEEM
H:-1-+3 TIMES
L:VIDEO MUTE
IC101
SW
BAL MOD
DC SHIFT
AOR
TH CTL
DO DET
LPF
TP206 Y DO AOR
TP205 Y DO REF
TP207 Y DO TH
RV204 Y DO DC2
Lot (b) ONLY
Lot (c) (d) :pin5 is grounded
TP204 Y DO PLS
L.Y DO
Lot (b) Y STILL DO
Lot (c) (d) Q214 REF VOLT
Lot (d)
H.SEARCH DO :0
PAL ONLY
H.SEARCH DO :M
Q210 ATT
Q215 ATT
Y DO THRESHOLD
Lot (c) ONLY
IC110
Y STILL DO
(PAL) H.SEARCH TUNE 3M
NTSC) H +18 TIMES
L:NOISELESS PB
Lot (c) (d) :Through
IC210. 104. Q213 VCA CONTROL
Y AGC
ADV Y SW PLS
IC210 (Lot (c) (d))
IC105 (Lot (b))
AMP
RV205 Y ENVE
TP203 Y ENVE
Y RF ENV
Lot (b) ONLY
Lot (c) (d) :pin5 is grounded
IC303 BAL MOD CTL
RV403 C DO DC1
H:METAL/L:OXIDE
IC301
TP406 C DO AOR
TP405 C DO REF
TP407 C DO TH
RV404 C DO DC2
TP404 C DO PLS
L C DO
Lot (b) C STILL DO
Lot (c) (d) Q403 REF VOLT
L.NOISELESS PB
IC305
IC315
IC312
C STILL DO
Q517 STARTER
C DO THRESHOLD
Lot (b) (c)
IC401 (Lot (c) (d))
IC303 (Lot (b))
IC401. 402. Q410 VCA CONTROL
C AGC
ADV C SW PLS
AMP
RV405 C ENVE
TP403 C ENVE
C RF ENV
C RF ENV (X)
103-33A
DPR. 117-12A
13
TP305 C DMRF
IC701
TP701 C DM
2FC ELIMINATE LPF
FL702. Q703. Q704 OXIDE LPF
FL701. Q701. Q702 METAL LPF
(PAL ONLY)
H:METAL/L:OXIDE (PAL ONLY)
TP702 C PRE
IC701
Q705-Q709 INV
CLAMP
IC703
AMP
REF
VOL COMP
S/H
TP500 SPEED
SELECTED SPEED
RV702 C DEM BAL
RV701 C DEEM
H:-1-+3 TIMES
L.C MUTE
Q710. Q711 MIX
IC710. Q712 CLAMP ERROR DET
TP703 C CLAMP
(PAL ONLY)
RV703 CM LEV
FL703. Q713. Q715 METAL LPF
RV704 CC LEV
FL704. Q714. Q716 OXIDE LPF
H:METAL/L:OXIDE (PAL ONLY)
IC711
x2
DRV1
TP704 C MAIN
C NON-LIN DEEMPHASIS
Q725
TP705 C NLDE
IC707 NOISE CANCELLER
H.METAL/L:OXIDE (PAL ONLY)
Q717-Q720.
Q722-Q724 OUTPUT BUFF
TP8 C OUT
C DEMOD (X)
103-28A
TBC-24. 102-28B
C W CLP PLS
103-20A
TBC-24. 102-32B
Lot (b) (c)
L.-1-+3 TIMES
TP700
H.-1-+3 TIMES
Q501
IC507
L.Y DO
L. VIDEO MUTE
IC511
IC705
L.C DO
IC518
L.C MUTE
Lot (c) (d)
L.Y PCM MUTE
IC112
IC113
IC114
H.-1-+3TIMES
IC112 DOP STRETCH
IC113
IC112
L.Y DOP
L:Y DO PLS
103-16A
TBC-24. 102-43B
SS (2/3). 123-17A
AP. 104-22A
L:RF Y VBLK
103-44A
SS (3/3). 123-19A
Y RF ENV (X)
103-31A
SS (3/3). 123-21A
DPR. 117-11A
FM CARRIER ALLOCATION
PAL NTSC
METAL OXIDE METAL OXIDE
Y SYNC TIP (MHz) 7.44 4.82 6.24 4.82
Y PEDESTAL (MHz) 8.10 5.47 6.86 5.44
Y WHITE PEAK (MHz) 9.63 7.00 8.43 7.00
REFERENCE SIGNAL IS 100% WHITE SIGNAL
L.NOISELESS PB
103-10B
SS (2/3). 123-12B
S501 NON-LIN OFF ON
+5V
Lot (c) (d)
Lot (b) :Through
L.C PCM MUTE
IC304 DOP STRETCH
IC309
L.C DO PLS
103-16B
TBC-24. 102-45B
SS (2/3). 123-17B
C REF SYNC TIP (MHz) 7.99 6.24 6.95 6.07
C PEDESTAL (MHz) 6.68 4.93 5.80 4.93
C HIGH PEAK (MHz) 5.95 4.20 5.25 4.38
C LOW PEAK (MHz) 7.41 5.65 6.35 5.47
REFERENCE SIGNAL IS 100% COLOR BARS SIGNAL (PAL) 75% COLOR BARS SIGNAL (NTSC)
This block diagram corresponds to the production lots of Lot No.305 and higher.
Circuit sections that any midway change occured are shown using the abbreviation mentioned below.
abbrev. Lot No. Board No.
Lot (b) 305-402 1-648-541-12
Lot (c) 403-502 1-648-541-13
Lot (d) 503- 1-648-541-14. 15. 16
Betacam PB Demodulator
DM-89
DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P

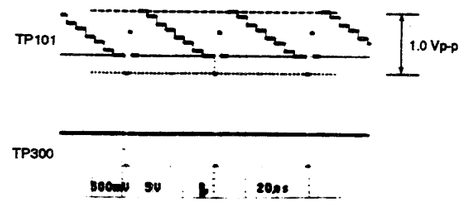
[CIRCUIT DESCRIPTION OF TBC-24 BOARD]

TBC-24 board is a Betacam PB TBC (A/D conversion) board that generates a clock following the jitter of the demodulation video signal from DM-89 board, converts the demodulation video signal into digital video data using this clock, and sends it to TBC-23 board.

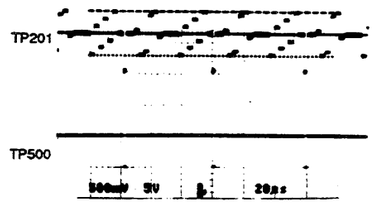
The outline of a process is first described below.
The video signal that is reproduced from a tape and demodulated contains a jitter component. To eliminate the jitter component, a clock that contains the same jitter component is generated using a write clock generator circuit. When a PB video signal is sampled by this write clock, the A/D-converted digital video data becomes data whose jitter component is canceled.
Since Y and C signals are recorded on the different video tracks of a tape, the way in which each jitter is generated also differs. Therefore, two write clock generator circuits and A/D converter circuits for Y and C signal systems are provided on TBC-24 board. These circuits are almost the same respectively in circuit configuration.

The outline of each circuit is described next. Since Y and C signal systems are almost the same in configuration, only the Y signal system is described.
A write clock generator circuit is first explained below. IC301 plays a leading part in a Y write clock generator circuit. IC301 extracts an H sync signal from the input demodulation Y signal and sends it to the sync guard circuit on TBC-23 board. The sync guard circuit eliminates H sync signal with irregular intervals, separates only H sync signal with regular intervals, and sends it back to IC301 as a SELECT H WINDOW (SHW) signal. IC301 doubly differentiates the demodulation Y signal and gates the detected sync edge signal by this SHW signal. After that, IC301 outputs only the sync edge signal, that is judged to be normal, from pin 50 as a SELECT H (SH) signal.
The output SH signal is converted into a sawtooth wave using a sawtooth wave generator in a phase-shift circuit (IC302, IC307, IC308, and IC409). The sawtooth wave inverts a comparator (IC308) by the phase obtained when the "SCH TRACKING" signal from TBC-23 board and the tape speed information are added to the phase set using RV300, and triggers a monostable multivibrator (IC307) to generate a pulse.
The output signal of normal VCO (IC406) (approximately 14.8 MHz during normal PB) is input to pin 67 of IC301 and frequency-divided into the H frequency using a PLL counter that is reset by the output pulse of the phase-shift circuit described above. A COUNT H signal is generated on the basis of this frequency-divided signal. The COUNT H signal is converted into a signal that has a slope for phase comparison in the inversion portion, and output from pins 16 and 17.
The slope of the COUNT H signal output from pin 16 is sampled and held by the output pulse of the phase-shift circuit described above so as to produce a phase error voltage. The phase error voltage is passed through a cutoff switch (IC400) during guard band period and fed back to the normal VCO (IC406) via a normal error amplifier. A PLL loop is formed via this VCO. As a result, the VCO oscillates with the frequency locked to the input demodulation Y signal and is used for a Y write clock. The slope of the COUNT H signal output from pin 17 is detected its gradient. The result is fed back to pin 14 to maintain the gradient of the slope in the specified value.
IC301 incorporates an impact error detector circuit to cancel an impact jitter occurring when the rotary head touches the tape. The impact error detector circuit takes in the phase error voltage before integration through the A/D converter (IC404), then generates the signal data corresponding to the coming impact jitter by methods of memory, analysis, and forecast, and outputs it. The "IMPACT ERROR" signal obtained when this data is converted from digital into analog is added to a "NORMAL ERROR" voltage to control the normal VCO.
The above description applies to the normal PB mode. For high-speed search mode, a wide-range VCO is incorporated in IC301. The phase error voltage is fed back as a "BID ERROR" voltage via an error amplifier for a wide range. At that time, a "BID ERROR" signal corresponding to the tape speed information is also added to control the wide-range VCO.
The normal VCO and wide-range VCO are selected using an "F BID" signal from TBC-23 board. The selected VCO output signal is sent to the PLL counter in IC301, and simultaneously, it is output to an A/D converter circuit as a Y write clock ("Y WCK") signal. A "Y GATED WCK" signal that eight clock periods (including the reset period of the VCO) are muted is also sent to TBC-23 board.
Moreover, IC301 generates a "WZ" (WRITE ZERO) signal when it receives the output signal of the PLL counter, and sends it to TBC-23 board. IC304 also generates a "W CLP PLS" (WRITE CLAMP pulse) when it receives the SH signal, and sends it to the A/D converter circuit, and to the demodulator circuit on DM-89 board.
In the A/D converter circuit, the input demodulation Y signal is passed through a low-pass filter, clamped in pedestal level using a clamping circuit, and sent to an A/D converter (IC100). The error voltage for clamping is generated when the sample-and-hold voltage using the "Y W CLP" pulse that is generated by a write clock generator circuit and the hold voltage of the "Y PDS CONT" data that is fed back from TBC-23 board are compared with the reference voltage. The demodulation Y signal input to the A/D converter (IC100) is sampled using a write clock that is generated by the write clock generator circuit, and converted into eight-bit digital video data whose jitter is corrected. This data is passed through a digital delay line (IC103) so that it coincides in timing with the "Y DO PLS" pulse from DM-89 board. The data is then sent to TBC-23 board.

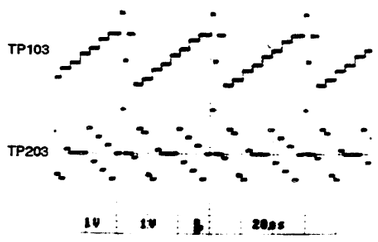
①TP101(E-1) PB mode
TP300(F-3) PB mode



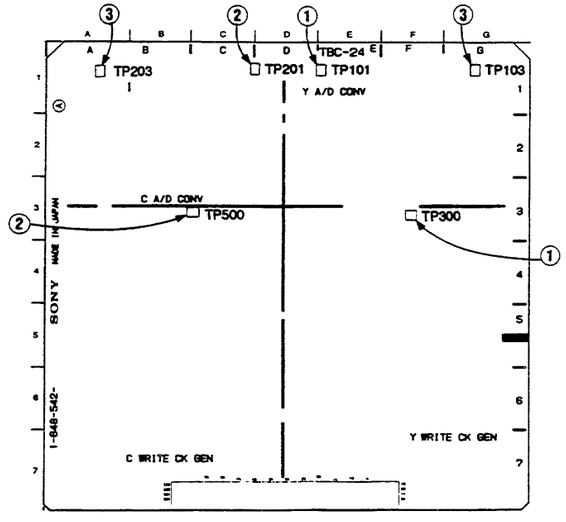
②TP201(C-1) PB mode
TP500(C-3) PB mode



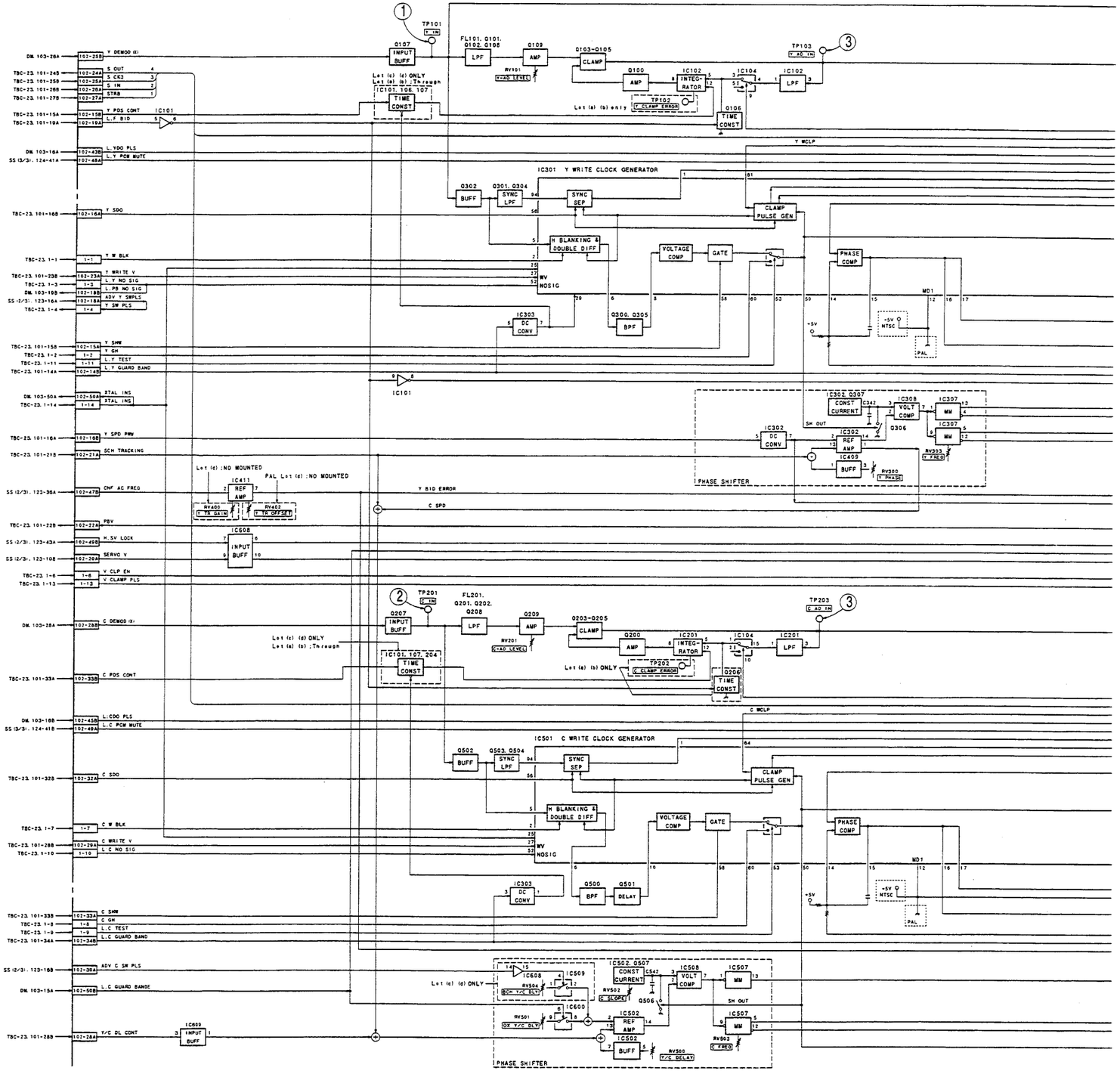
③TP103(G-1) PB mode
TP203(A-1) PB mode

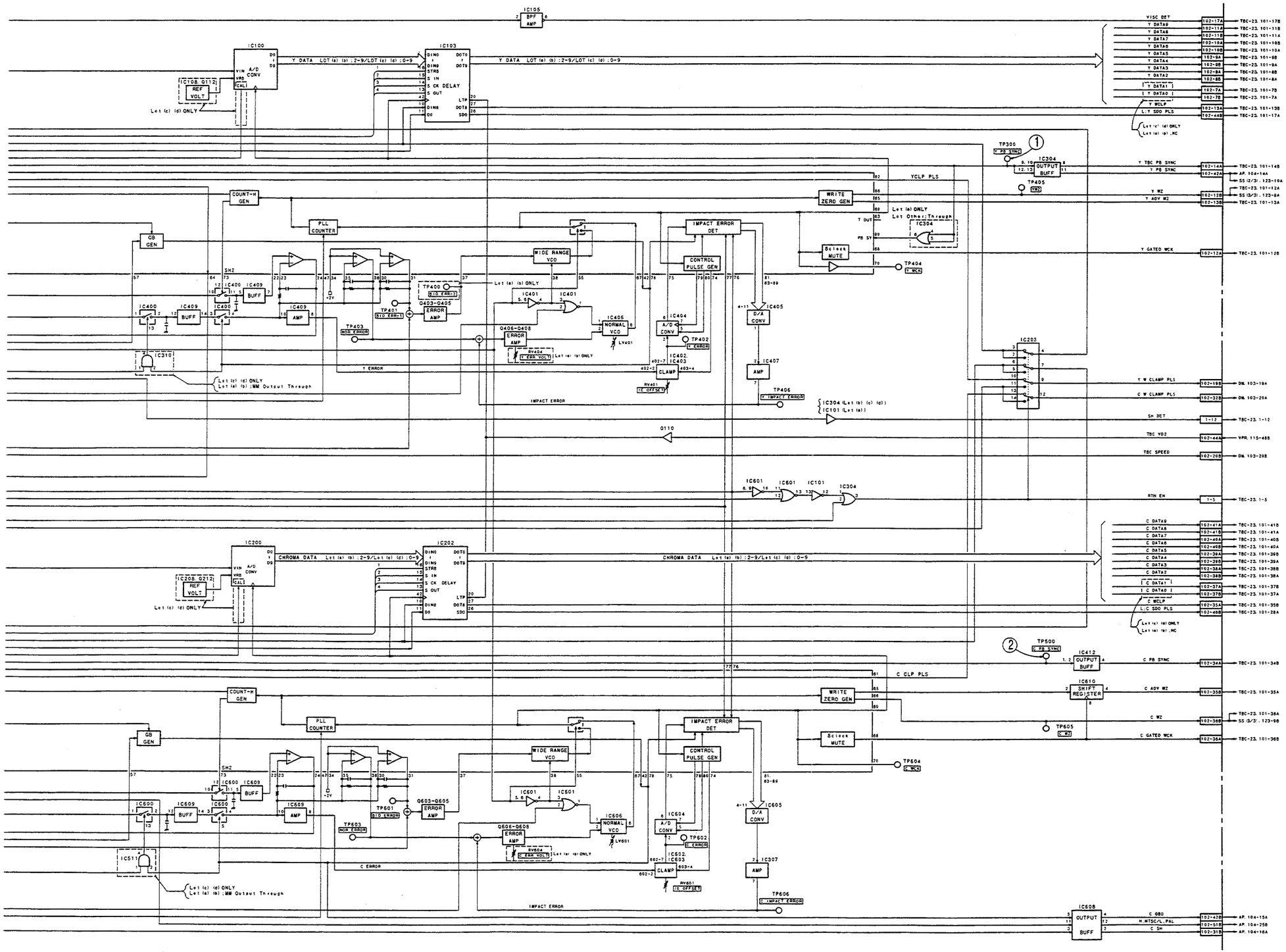


TBC-24 Board -A Side-



Measurement Condition
MODE : PB mode
TAPE : CR5-1B PS


Y DEMOD (E)
S OUT
S CK3
S IN
STRB
Y PDS CONT
L.F BID
L.YDO PLS
L.Y PCM MUTE
Y SDO
Y W BLK
Y WRITE V
L.Y NO SIG
L.PB NO SIG
ADV Y SMPLS
Y SW PLS
Y SHW
Y GH
L.Y TEST
L.Y GUARD BAND
XTAL INS
Y SPD PWM
SCH TRACKING
CNF AC FREQ
PSV
H.SV LOCK
SERVO V
V CLP EN
V CLAMP PLS
C DEMOD (E)
C PDS CONT
L.CDO PLS
L.C PCM MUTE
C SDO
C W BLK
C WRITE V
L.C NO SIG
C SHW
C GH
L.C TEST
L.C GUARD BAND
ADV C SW PLS
L.C GUARD BAND
Y/C DL CONT
TP101 (Y IN)
Q107 INPUT BUFF
FL101, Q101, Q102, Q106
LPF
Q109 AMP
RV101 (Y-20 LEVEL)
Q103-Q105 CLAMP
Q100 AMP
IC102 INTEGRATOR
TP102 (Y CLAMP ERROR)
Q106 TIME CONST
IC104
IC102 LPF
TP103 (Y AD IN)
Y MCLP
IC301 Y WRITE CLOCK GENERATOR
Q302 BUFF
Q301, Q304 SYNC LPF
SYNC SEP
CLAMP PULSE GEN
H BLANKING & DOUBLE DIFF
VOLTAGE COMP
GATE
PHASE COMP
MV
NOSIG
IC303 DC CONV
Q300, Q305 BPF
MD1
+5V NTSC
PAL
IC101
IC302, Q307 CONST CURRENT
C342
IC308 VOLT COMP
IC307 MM
Q306
SH OUT
IC302 DC CONV
IC302 REF AMP
IC409 BUFF
RV303 (Y FINE)
RV300 (Y PHASE)
PHASE SHIFTER
Lot (c) :NO MOUNTED
IC411 REF AMP
RV400 (Y TR GAIN)
RV402 (Y TR OFFSET)
PAL Lot (c) :NO MOUNTED
Y BID ERROR
C SPD
IC608 INPUT BUFF
TP201 (C IN)
FL201, Q201, Q202, Q208
Q207 INPUT BUFF
Q209 AMP
RV201 (C-AD LEVEL)
Q203-Q205 CLAMP
Q200 AMP
IC201 INTEGRATOR
TP202 (C CLAMP ERROR)
Q206 TIME CONST
IC104
IC201 LPF
TP203 (C AD IN)
Lot (c) (d) ONLY
Lot (a) (b) :Through
IC101, 107, 204 TIME CONST
Lot (a) (b) ONLY
C WCLP
IC501 C WRITE CLOCK GENERATOR
Q502 BUFF
Q503, Q504 SYNC LPF
SYNC SEP
CLAMP PULSE GEN
H BLANKING & DOUBLE DIFF
VOLTAGE COMP
GATE
PHASE COMP
MV
NOSIG
IC303 DC CONV
Q500 BPF
Q501 DELAY
MD1
+5V NTSC
PAL
IC502, Q507 CONST CURRENT
IC508 VOLT COMP
IC507 MM
SH OUT
Q506
IC608
IC509
RV504 (SCH Y/C DLY)
IC600
RV501 (CX Y/C DLY)
IC502 REF AMP
IC502 BUFF
RV502 (C SLOPE)
RV503 (C FINE)
RV505 (Y/C DELAY)
PHASE SHIFTER
Lot (c) (d) ONLY
IC609 INPUT BUFF



This block diagram corresponds to the production lots of Lot No.302 and higher.
Circuit sections that any midway change occured are shown using the abbreviation mentioned below.

Abbrev.	Lot No.	Board No.
Let (a)	302-304	1-648-542-11
Let (b)	305-402	1-648-542-12
Let (c)	403-502	1-648-542-13
Let (d)	503-	1-648-542-14

Betacam PB TBC (A/D Conversion)

TBC-24

DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P

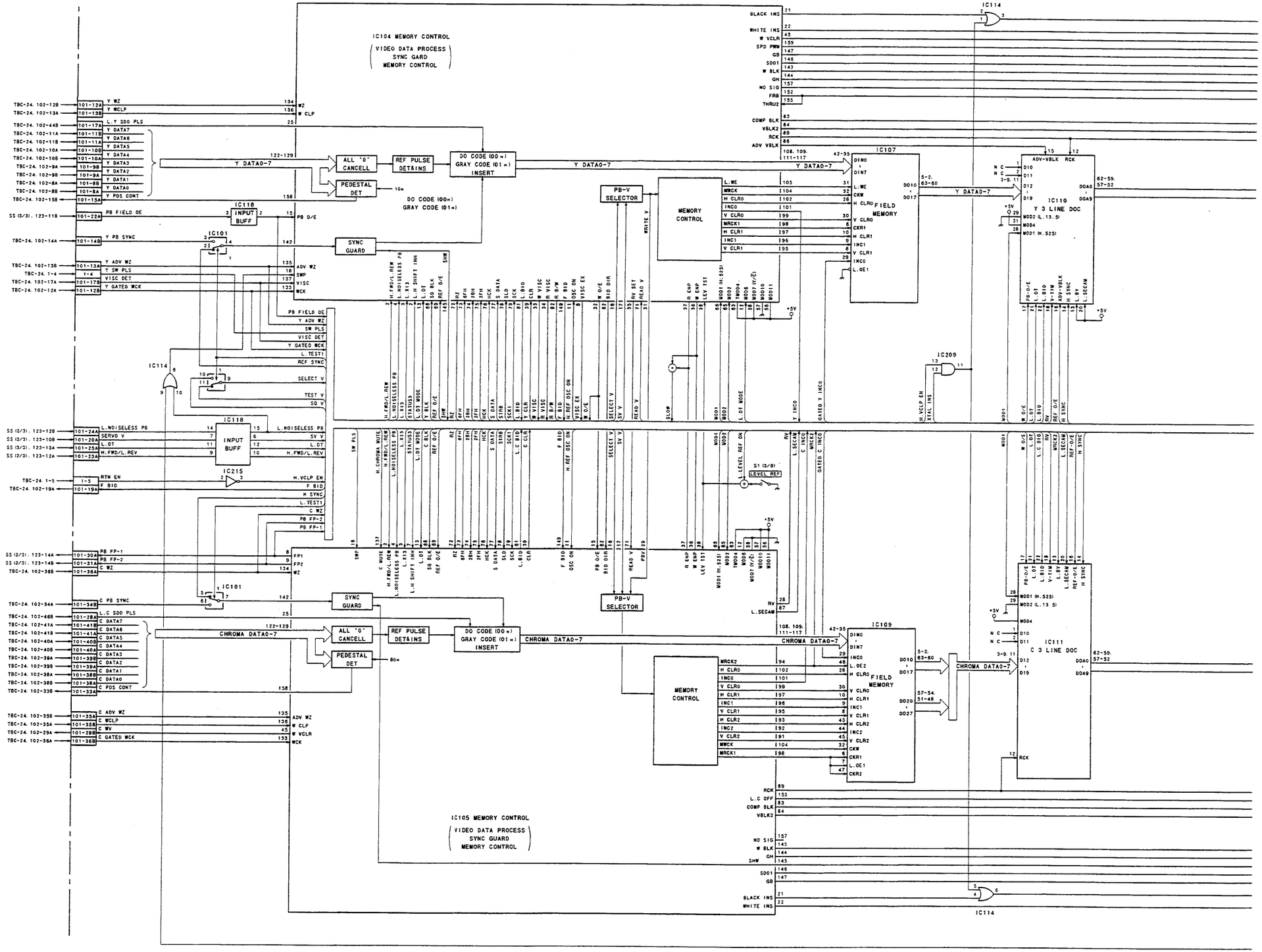
[CIRCUIT DESCRIPTION OF TBC-23 BOARD]

TBC-23 board is a Betacam PB TBC (sequence/reference) board that corrects the time base, dropout, and picture quality and controls the phase by a VISC, with respect to the digital video data from TBC-24 board, and generates various timing signals used in a TBC block.

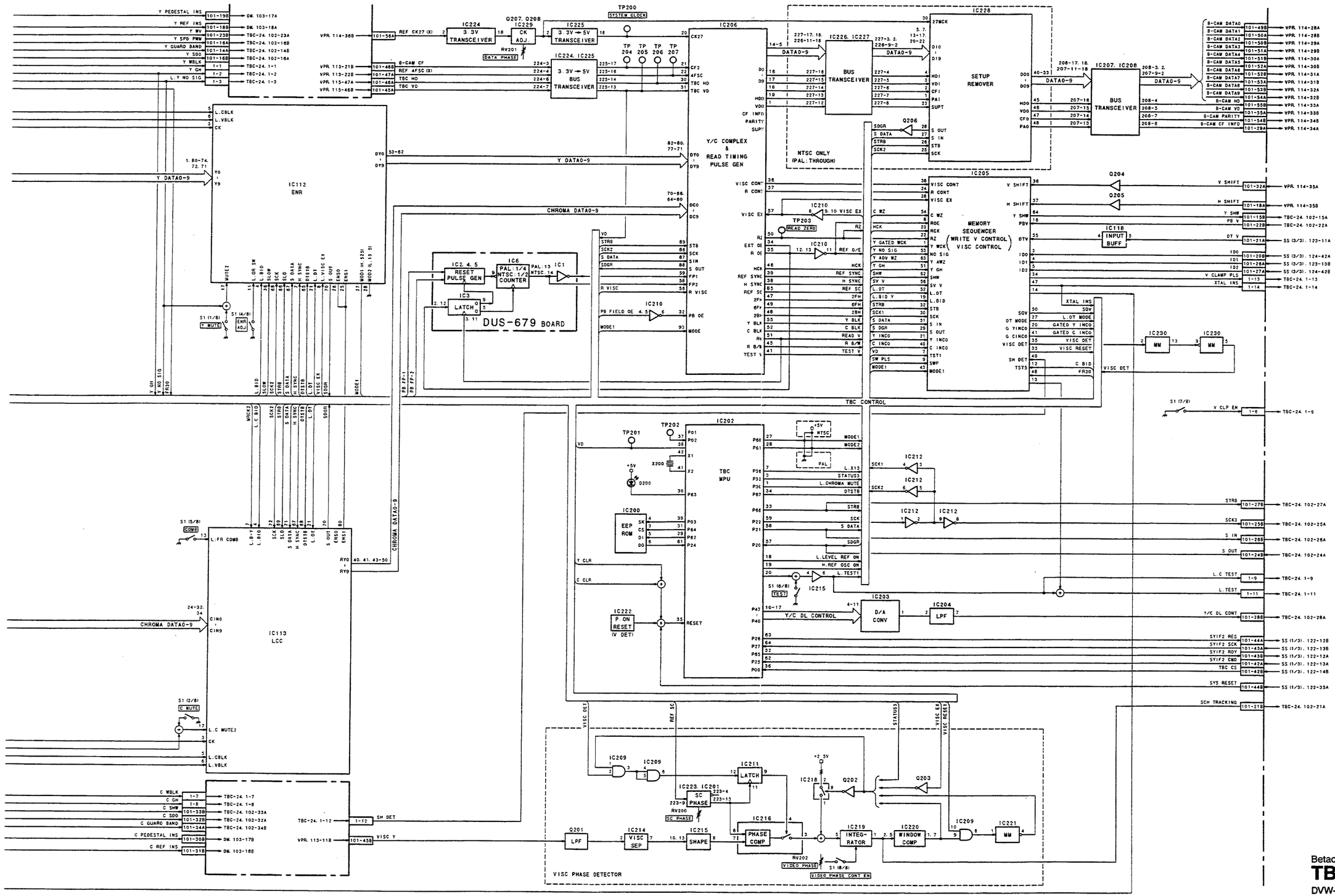
A sequence processing circuit is first described below.
Since Y and C signal systems are similar in configuration, only the Y signal system is primarily described except the complementary explanation of the block peculiar to the C signal system.
The eight-bit Y data from TBC-24 board is sent to a video data processing circuit in IC104, and the guard band period is replaced by a gray code (01H) and the dropout detection block is replaced by a DO code (00H) as the preparation of dropout compensation. After that, the data is written in field memory (IC107) under the control of a memory control circuit in IC104. Pedestal data is detected in the initial stage of the video data processing circuit, and "PDS CONT" data is fed back to TBC-24 board so that a level of 10H (80H for a chroma signal) is obtained. IC104 also has a sync guard circuit and separates only H sync signal with regular intervals from the H sync signal from the write clock generator circuit on TBC-24 board and sends it back as an SHW (SELECT H WINDOW) signal.
The Y data written in the field memory (IC107) is read by the read clock locked to the reference signal under the control of the memory control circuit in IC104. As a result, the Y data whose time base is corrected is obtained.
The reference V timing signal uses an "SQ V" signal in the normal and DT PB modes and uses an "SV V" signal in the high-speed PB mode.
An analog Betacam chroma signal is recorded on the tape by a system called CTDM (Compressed Time Division Multiplex) in which the R-Y and B-Y signals whose time base is compressed are arranged within an H period. Therefore, when a chroma signal is read from the field memory (IC109), R-Y and B-Y data are alternately read to convert into a signal in which the time-base corrected R-Y and B-Y data are alternately arranged for every clock.
The Y data whose time base has been corrected is input to the three-line dropout compensator (IC110) in the next stage to compensate for a dropout and sent to the next stage as 10-bit data. In the three-line dropout compensator, signals before and after 1H are prepared via delay lines. If a dropout occurs, the signal is replaced by the average data of the signals before and after 1H . If a dropout occurs in the signal after 1H, too, the signal is replaced by the data before 1H.
In the edge noise reducer (ENR) in the next stage, the Y data whose dropout has been compensated is corrected in picture quality by a digital correlation circuit. Chroma data is also corrected in picture quality by a line crawl canceler (LCC)(IC113). The Y data and chroma data are then input to IC206, output as 10-bit digital video data that is multiplexed in the order of "CB, Y, CR, Y, CB, Y, CR, Y, ...", and sent to VPR-1B board as "B-CAM DATA 0 to 9".
In case that a setup is added to the signal in NTSC system, the data is removed the setup and corrected the level by IC228 (NTSC only) in the later stage of IC206, then output.

A reference system is described next. A circuit that generates various timing signals used in the TBC block and a circuit that controls the TBC process are provided in the reference system.
The timing signals used in the TBC block are generated by IC206. IC206 has a "Read Timing Pulse Generator" function as well as a "Y/C Complex" function that multiplexes the Y and C data described above. IC206 generates various timing signals on the basis of the timing reference signals ("REF CK 27", "REF 4FSC", "B-CAM CF", "TBC VD", and "TBC HD") from the timing reference signal generator circuit on VPR-1B board, and sends them to ICs of each sequence process block.
The TBC process is controlled by the MPU (IC202) on TBC-23 board under the command ("SYIF2 CMD") of the serial communication from the main CPU on SS-52B board. The MPU sends the mode information and operation command to each main IC of the TBC process, outputs eight-bit Y/C delay control data, test commands, and other control signals, and saves the adjustment data of the circuit on TBC-23 board in an EEP-ROM (IC200).
The eight-bit Y/C delay control data output from the MPU is converted into an analog "Y/C DL CONT" signal using a D/A converter (IC203) and sent to TBC-24 board. The data is then added to the phase-shift circuit in a C write clock generator circuit to shift the phase of a chroma signal and synchronize the Y and chroma signals.
The IC (IC205) called a memory sequencer receives the command from IC206, and controls a V timing signal and the phase detection of a VISC signal.
The V timing signal is controlled as described below. IC205 takes in the "PB V", "DT V", SV V" signals, other timing signals and control information from SS-52B board, VPR-1B board, and a TBC block, generates an "SQ V" signal from the correlation of these signals, and outputs it. This "SQ V" signal is used as the reference of time base correction in the normal PB and DT PB modes.
The phase detection of the VISC signal is controlled as described below. The "VISC Y" signal that is extracted from Betacam PB data on VPR-1B board, converted from digital to analog, and fed back is sent to the VISC phase detector circuit on TBC-23 board, where the phase of a separated VISC signal is compared with the phase of a fine-adjusted REF SC signal (IC216). IC205 outputs a "VISC DET" pulse in proper timing on the basis of various signals and information. The "VISC DET" pulse turns on and off the switch in the phase comparator IC216 to sample and hold the phase compare output signal. The resultant phase error voltage is sent to TBC-24 board as an "SCH TRACKING" signal. The signal is then added to the phase-shift circuit in Y and C write clock generator circuits so as to shift the phase of the Y and C signals and to make the phase of a subcarrier (VISC) during REC coincide with that of an output subcarrier.

DVW-A500P	S/N ; 10001 through 11695 (EK)
DVW-A500P	S/N ; 10001 through 10030 (UC)
DVW-A500	S/N ; 10001 through 10370 (J)
DVW-A500	S/N ; 10001 through 11280 (UC)
DVW-A510P	S/N ; 10001 through 10520 (EK)
DVW-A510	S/N ; 10001 through 10250 (UC)
DVW-CA510P	S/N ; 10001 through 10020 (EK)
DVW-CA510	S/N ; 10001 through 10004 (UC)



DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P



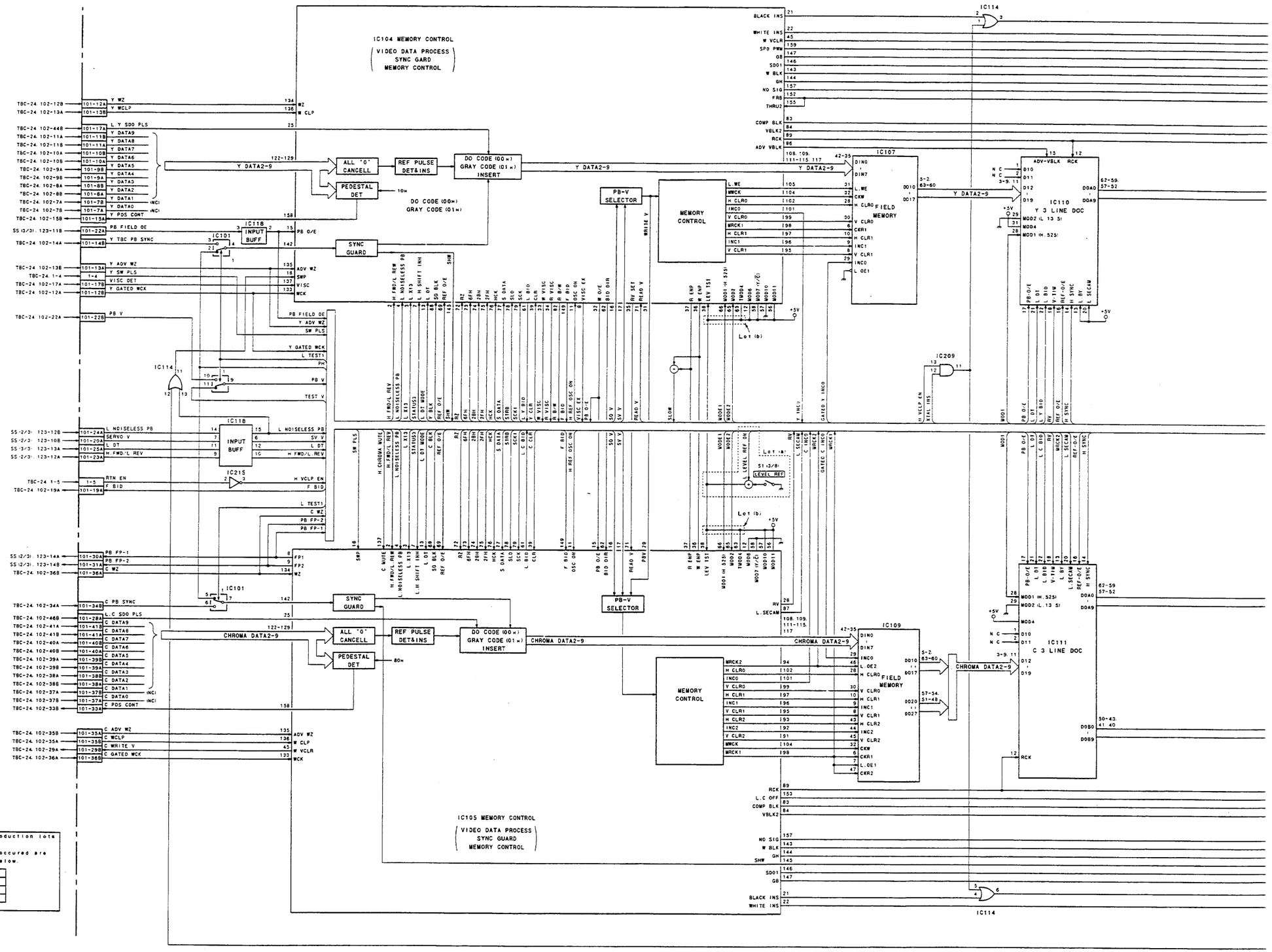
Betacam PB TBC (Sequence/Reference)

TBC-23

DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P

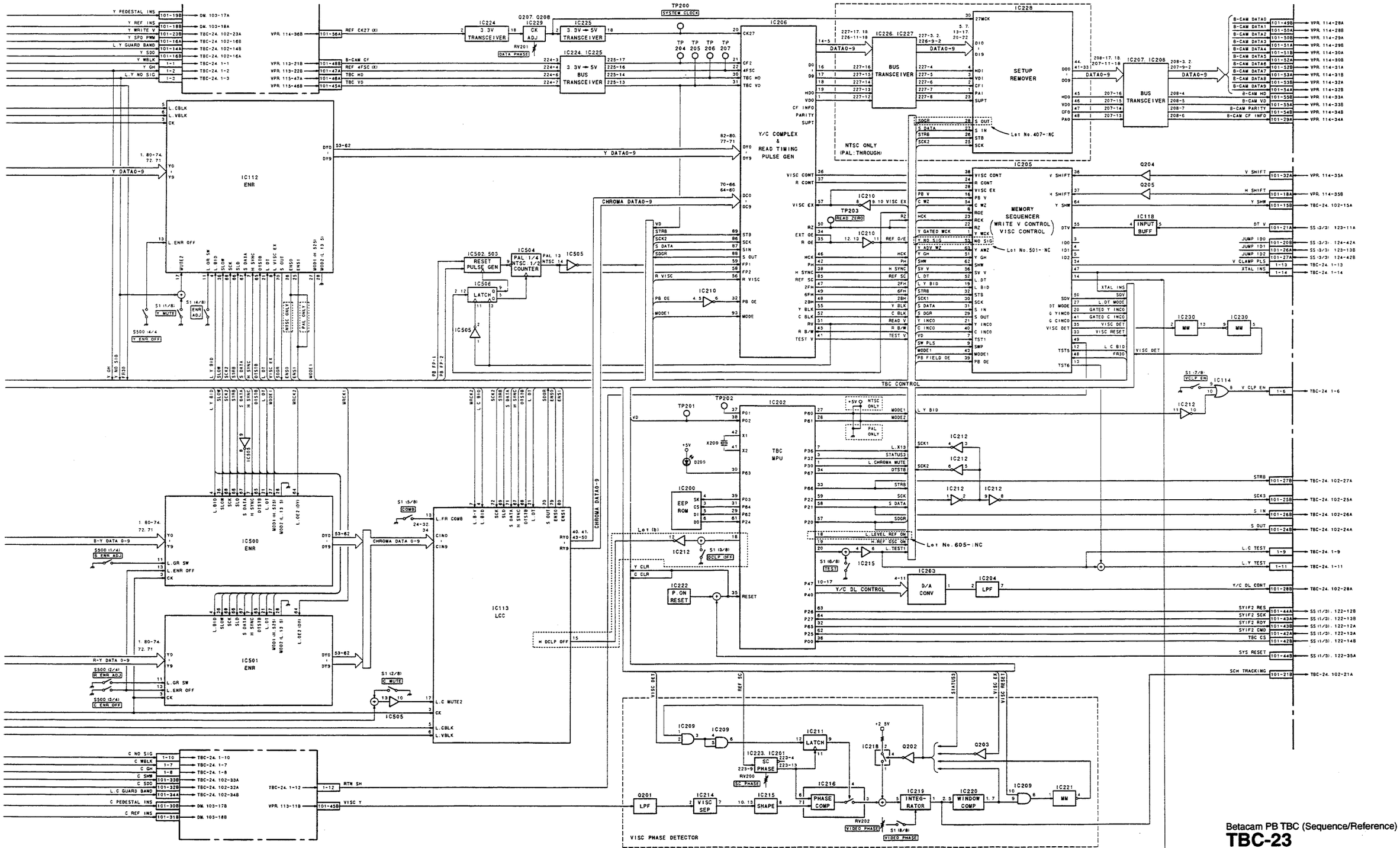
Lot No ; 401 and higher

DVW-A500P	S/N ; 11696 and higher (EK)
DVW-A500P	S/N ; 10031 and higher (UC)
DVW-A500	S/N ; 10371 and higher (J)
DVW-A500	S/N ; 11281 and higher (UC)
DVW-A510P	S/N ; 10520 and higher (EK)
DVW-A510	S/N ; 10071 and higher (J)
DVW-A510	S/N ; 10251 and higher (UC)
DVW-CA510P	S/N ; 10021 and higher (EK)
DVW-CA510	S/N ; 10001 and higher (J)
DVW-CA510	S/N ; 10005 and higher (UC)



This block diagram corresponds to the production lots of Lot No. 401 and higher.
Circuit sections that any midway change occured are shown using the abbreviation mentioned below.

abbrev.	Lot No.	Board No.
Lot (a)	401~604	1-648-543-14
Lot (b)	605~	1-648-543-15


IC112 ENR
IC500 ENR
IC501 ENR
IC113 LCC
Y/C COMPLEX & READ TIMING PULSE GEN
IC206
IC228
SETUP REMOVER
IC226. IC227
BUS TRANSCEIVER
IC207. IC208
IC205
MEMORY SEQUENCER (WRITE V CONTROL) (VISC CONTROL)
IC202
TBC MPU
IC200
EEP ROM
IC203
D/A CONV
IC204
LPF
IC222
P.ON RESET
IC224
3.3V TRANSCEIVER
IC225
3.3V ⇔ 5V TRANSCEIVER
IC224. IC225
3.3V ⇔ 5V BUS TRANSCEIVER
IC229
CK ADJ
IC504
PAL 1/4 NTSC 1/3 COUNTER
IC502. 503
RESET PULSE GEN
IC506
LATCH
IC505
IC210
IC209
IC211
LATCH
IC223. IC201
SC PHASE
IC216
PHASE COMP
IC214
VISC SEP
IC215
SHAPE
IC219
INTEG-RATOR
IC220
WINDOW COMP
IC221
MM
IC230
MM
IC212
IC218
IC114
IC118
INPUT BUFF
IC215
Q200
Q201
Q202
Q203
Q204
Q205
TP200 SYSTEM CLOCK
TP201
TP202
TP203 READ ZERO
TP204 TP205 TP206 TP207
RV201 DATA PHASE
RV202 VIDEO PHASE
X200
D200
S500 (4/4) Y ENR OFF
S500 (1/4) B ENR ADJ
S500 (2/4) R ENR ADJ
S500 (3/4) C ENR OFF
S1 (1/8) Y MUTE
S1 (4/8) ENR ADJ
S1 (5/8) COMB
S1 (6/8) TEST
S1 (7/8) VCLP EN
S1 (8/8) VIDEO PHASE
S1 (2/8) C MUTE
S1 (3/8) DCLP OFF
Y DATA0-9
B-Y DATA 0-9
R-Y DATA 0-9
CHROMA DATA0-9
CHROMA DATA 0-9
TBC CONTROL
VISC PHASE DETECTOR
Lot No. 407- :NC
Lot No. 501- :NC
Lot No. 605- :NC
Lot (b)
NTSC ONLY (PAL: THROUGH)
PAL ONLY
Y PEDESTAL INS
Y REF INS
Y WRITE V
Y SPD PWM
L Y GUARD BAND
Y SDO
Y WBLK
Y GH
L Y NO SIG
REF CK27 (X)
B-CAM CF
REF 4FSC (X)
TBC HD
TBC VD
B-CAM DATA0
B-CAM DATA1
B-CAM DATA2
B-CAM DATA3
B-CAM DATA4
B-CAM DATA5
B-CAM DATA6
B-CAM DATA7
B-CAM DATA8
B-CAM DATA9
B-CAM HD
B-CAM VD
B-CAM PARITY
B-CAM CF INFO
V SHIFT
H SHIFT
Y SHM
DT V
JUMP 1D0
JUMP 1D1
JUMP 1D2
V CLAMP PLS
XTAL INS
V CLP EN
SYIF2 RES
SYIF2 SCK
SYIF2 RDY
SYIF2 CMD
TBC CS
SYS RESET
SCH TRACKING
C NO SIG
C WBLK
C GH
C SHM
C SDO
L.C GUARD BAND
C PEDESTAL INS
C REF INS
RTN SH
VISC Y
Y CLR
C CLR
P.ON RESET
Y/C DL CONTROL
H DCLP OFF
L.C MUTE2
L.FR COMB
L.GR SW
L.ENR OFF
L.CBLK
L.VBLK
L.Y BID
L.C BID
L.DT MODE
GATED Y INCO
GATED C INCO
VISC DET
VISC RESET
L.X13
STATUS3
L.CHROMA MUTE
DTSTB
L.LEVEL REF ON
H.REF OSC ON
L.TEST1
SC PHASE
VIDEO PHASE
FR30
SQV
L.CK27
L.4FSC
L.TBC HD
L.TBC VD
L.DT0-9
L.OE1 (DY1)
L.OE2 (DY2)
MODE1 (L 13 S1)
MODE2 (L 13 S)
WRCK1
WRCK2
SCK1
SCK2
SCK3
STRB
SCK
S DATA
SDQR
S IN
S OUT
Y INCO
C INCO
VD
SW PLS
MODE1
MODE2
PB FIELD OE
PB FF-1
PB FF-2
R VISC
PB OE
MODE1
TEST V
R B/W
H SYNC
REF SC
2FH
6FH
28H
Y BLK
C BLK
RV
READ V
EXT OE
R OE
VISC CONT
R CONT
VISC EX
PB V
C WZ
ROE
RCK
RZ
Y GATED WCK
Y NO SIG
Y AWZ
Y GH
SHM
SV V
L DT
L Y BID
STB
SCK
S IN
S OUT
Y INCO
C INCO
TST1
SWP
MODE1
PB OE
TST5
TST6
HCK
PH
RZ
DTSTB
P.ON RESET
RESET
P63
P64
P62
P24
P47
P40
P26
P27
P65
P25
P00
P36
P32
P30
P67
P66
P22
P21
P20
P60
P61
P03
P01
P02
P00
P10
P11
P12
P13
P14
P15
P16
P17
P04
P05
P06
P07
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P37
P50
P51
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P94
P95
P96
P97
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PC0
PC1
PC2
PC3
PC4
PC5
PC6
PC7
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
PE0
PE1
PE2
PE3
PE4
PE5
PE6
PE7
PF0
PF1
PF2
PF3
PF4
PF5
PF6
PF7
PG0
PG1
PG2
PG3
PG4
PG5
PG6
PG7
PH0
PH1
PH2
PH3
PH4
PH5
PH6
PH7
PI0
PI1
PI2
PI3
PI4
PI5
PI6
PI7
PJ0
PJ1
PJ2
PJ3
PJ4
PJ5
PJ6
PJ7
PK0
PK1
PK2
PK3
PK4
PK5
PK6
PK7
PL0
PL1
PL2
PL3
PL4
PL5
PL6
PL7
PM0
PM1
PM2
PM3
PM4
PM5
PM6
PM7
PN0
PN1
PN2
PN3
PN4
PN5
PN6
PN7
PO0
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PO3
PO4
PO5
PO6
PO7
PQ0
PQ1
PQ2
PQ3
PQ4
PQ5
PQ6
PQ7
PR0
PR1
PR2
PR3
PR4
PR5
PR6
PR7
PS0
PS1
PS2
PS3
PS4
PS5
PS6
PS7
PT0
PT1
PT2
PT3
PT4
PT5
PT6
PT7
PU0
PU1
PU2
PU3
PU4
PU5
PU6
PU7
PV0
PV1
PV2
PV3
PV4
PV5
PV6
PV7
PW0
PW1
PW2
PW3
PW4
PW5
PW6
PW7
PX0
PX1
PX2
PX3
PX4
PX5
PX6
PX7
PY0
PY1
PY2
PY3
PY4
PY5
PY6
PY7
PZ0
PZ1
PZ2
PZ3
PZ4
PZ5
PZ6
PZ7

[CIRCUIT DESCRIPTION OF AP-28 BOARD]

AP-28 board is a Betacam PB AFM demodulator board that demodulates the AFM signal reproduced from an analog Betacam tape into an audio signal. This board also mounts a DOLBY decoding circuit for the audio signal (LAU signal) reproduced from the longitudinal tracks of the analog Betacam tape.

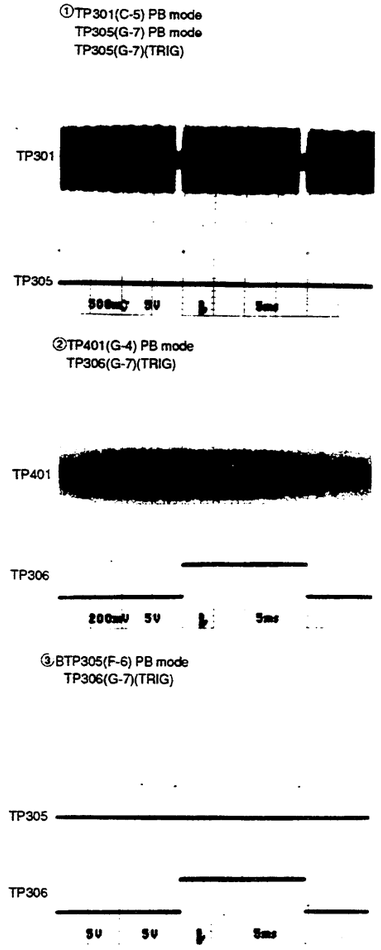
The outline of an AFM system is first described below.
In the Betacam SP format, the audio signals in channels 1 and 2 of four-channel audio input signals are recorded on the longitudinal tracks of the tape by an AC bias system, and the audio signals in channels 3 and 4 are recorded on chroma video tracks (track C) by an AFM system. The AFM system frequency-multiplexes FM-modulated audio signals into the FM-modulated chroma signal, then records it. The carrier frequencys of FM audio signals use frequencys lower than the carrier frequency of a chroma signal as described below.

Carrier frequency CH3 : 310 kHz, CH4 : 540 kHz
Maximum frequency deviation 75 kHz

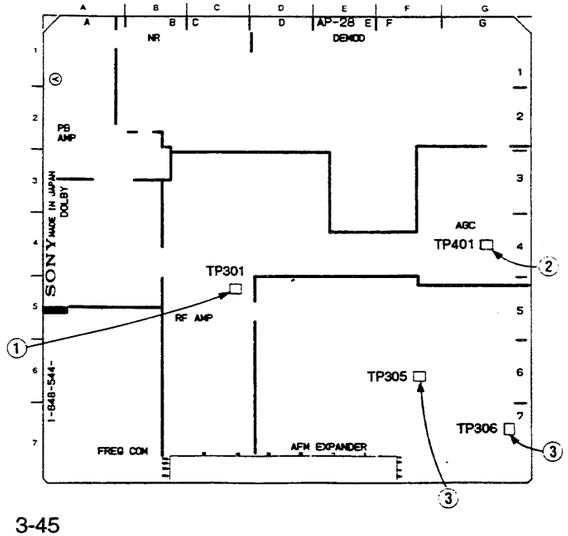
To pay attention on AFM reproduction is that rotary heads C-A and C-B are switched in the course of continued signal because an audio signal contains no blanking period that a video signal contains. Since the switching noise of an RF signal appears as a high noise during FM demodulation, proper measures against the noise are required.
When the analog Betacam tape is reproduced by a digital Betacam VTR, the AFM signal is also reproduced in the form that its time base is compressed about 9% because of the difference of the drum diameter. Therefore, a circuit for time-base correction is added on AP-28 board.

The outline of an AFM signal processing circuit is described next.
The C RF signal that branches in the PB C input circuit on DM-89 board is sent to AP-28 board. This signal is sent to a 800-kHz low-pass filter to eliminate chroma signal components and to produce an AFM RF signal, then adjusted in level using an RF amplifier in the next stage.
The resultant signal is converted into eight-bit data using an A/D converter (IC308) and written in field memory (IC313) via a selector (IC311). The data is written four bits at a time using the selector. The reason is that the field memory consists of four bits per word. Among the data written in the field memory, the CH-A data reproduced by the C-A head is read from pins 5 to 8 four bits at a time and sent to IC312. The CH-B data reproduced by the C-B head is read from pins 35 to 32 four bits at a time and sent to IC312.
Each data mentioned above is restored to eight-bit data using the switch in IC312.
The above process is controlled by IC312. IC312 called a "digital AFM expander" functions as an "AFM TBC" circuit.
IC312 controls a PLL circuit and generates a write clock locked to the C SH (C SELECT H) signal generated on TBC-24 board. Using this write clock, the A/D converter (IC308) samples the AFM RF signal and converts it into jitter-canceled data. IC312 also corrects the time base by reading data from the field memory (IC313) using a read clock that is generated from reference signal "REF CK 27".
For the RF signal recorded on the tape, CH-A and CH-B data are not completely switched every time the drum rotates by a half turn, but overlap areas of some hundreds of micro-second are added before and after each channel. When the analog Betacam tape is reproduced by a digital Betacam VTR, data can be transmitted in one line until it is written in the field memory because the CH-A and CH-B data whose time base is compressed are alternately reproduced at slight intervals. However, when data is read from the field memory, the respective line is required because the time base is corrected.
IC312 alternately links the read CH-A and CH-B data whose time base is corrected and generates time-base corrected AFM RF data. At that time, IC312 uses two select switches for data fetching, and generates the AFM RF data with longer CH-A data and the AFM RF data with longer CH-B data and outputs them by setting high- and low-selection duty cycles and controlling them. These AFM RF data are passed through a D/A converter and 800-kHz low-pass filter, respectively.
As a result, the AFM RF signal with longer CH-A signal ("AFM 1" signal) and the AFM RF signal with longer CH-B signal ("AFM 2" signal) are produced.
The "AFM 1" and "AFM 2" signals are passed through AGC amplifier and branch into two paths, respectively. These signals are then passed through 310-kHz or 540-kHz bandpass filter and demodulator, respectively. As the result, four signals (CH3 audio signal with longer CH-A signal, CH3 audio signal with longer CH-B signal, CH4 audio signal with longer CH-A signal, and CH4 audio signal with longer CH-B signal) are produced.
Using two pairs of select switches (IC503 for CH3 and IC603 for CH4) for signal fetching, therefore, the CH-A and CH-B signal portions (not including a high demodulation noise occurring at the joint of RF signals) are alternately fetched and linked under the control from IC312.
After that, both signals are amplified and passed through 25-kHz low-pass filter, respectively, then sent to a noise reduction circuit (IC701) to produce noise-free AFM demodulation audio signals ("B PB CH3" and "B PB CH4"). The produced signals are sent to APR-1B board.
When a dropout occurs in the AFM RF signal, it is detected in the AGC amplifier (IC403) for the "AFM 2" signal. The dropout portion is temporarily held in each demodulator according to the dropout information, and the relevant portion of a demodulated audio signal is interpolated linearly.

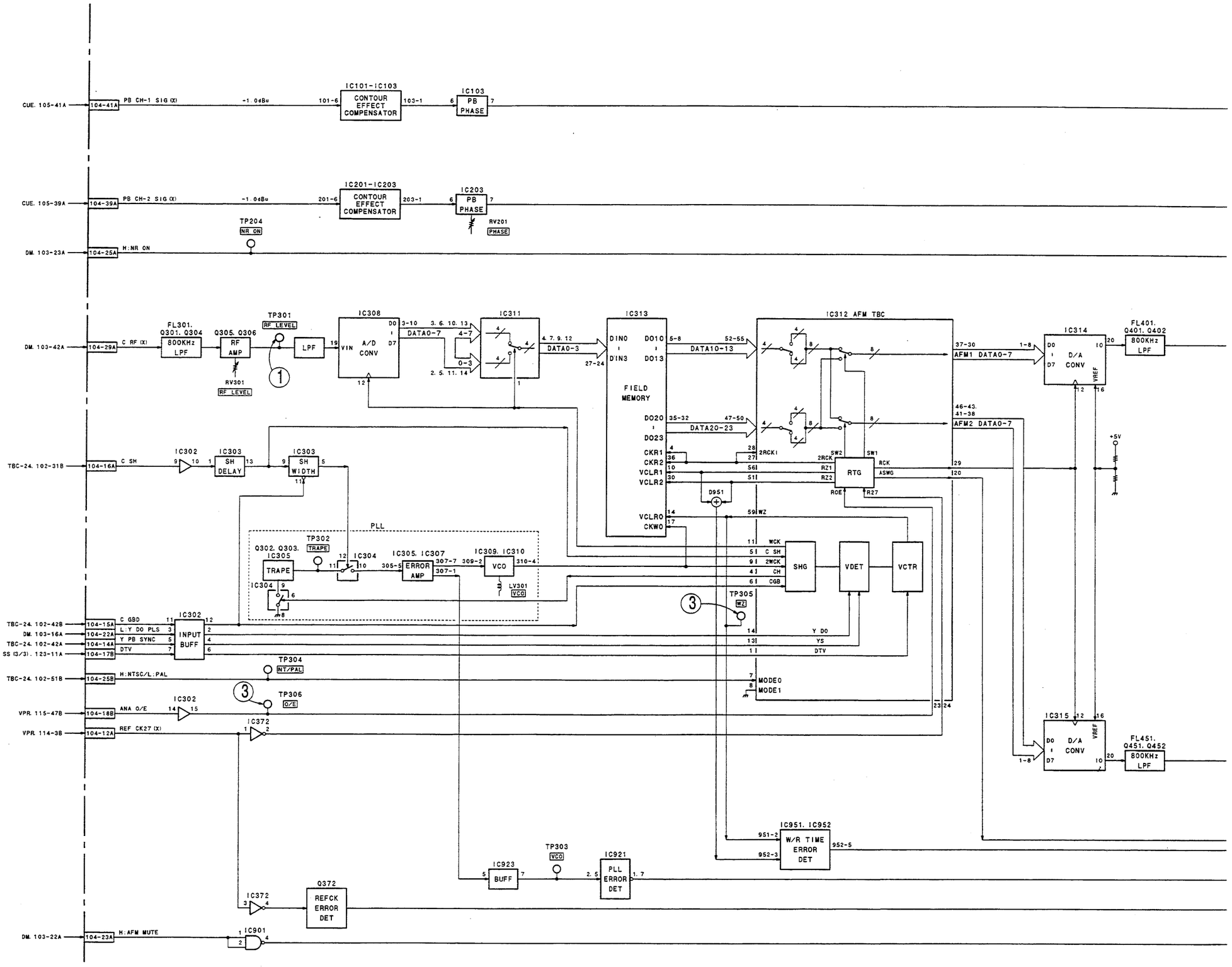
Lastly, an LAU signal processing circuit is described below.
The audio signals reproduced from the longitudinal tracks of the analog Betacam tape are equalized in a frequency characteristic on CUE-1B board and sent to AP-28 board.
On AP-28 board, the input audio signals are compensated in the undulation of a low-frequency response using contour effect compensator, respectively. After that, the phases in both channels are adjusted using a phase adjustment circuit. The resultant audio signals are sent through 15-kHz low-pass filters to a DOLBY C noise reduction IC (IC105), where the audio signals are DOLBY-decoded and output, then sent to APR-1B board as "B PB CH1" and "B PB CH2" signals.

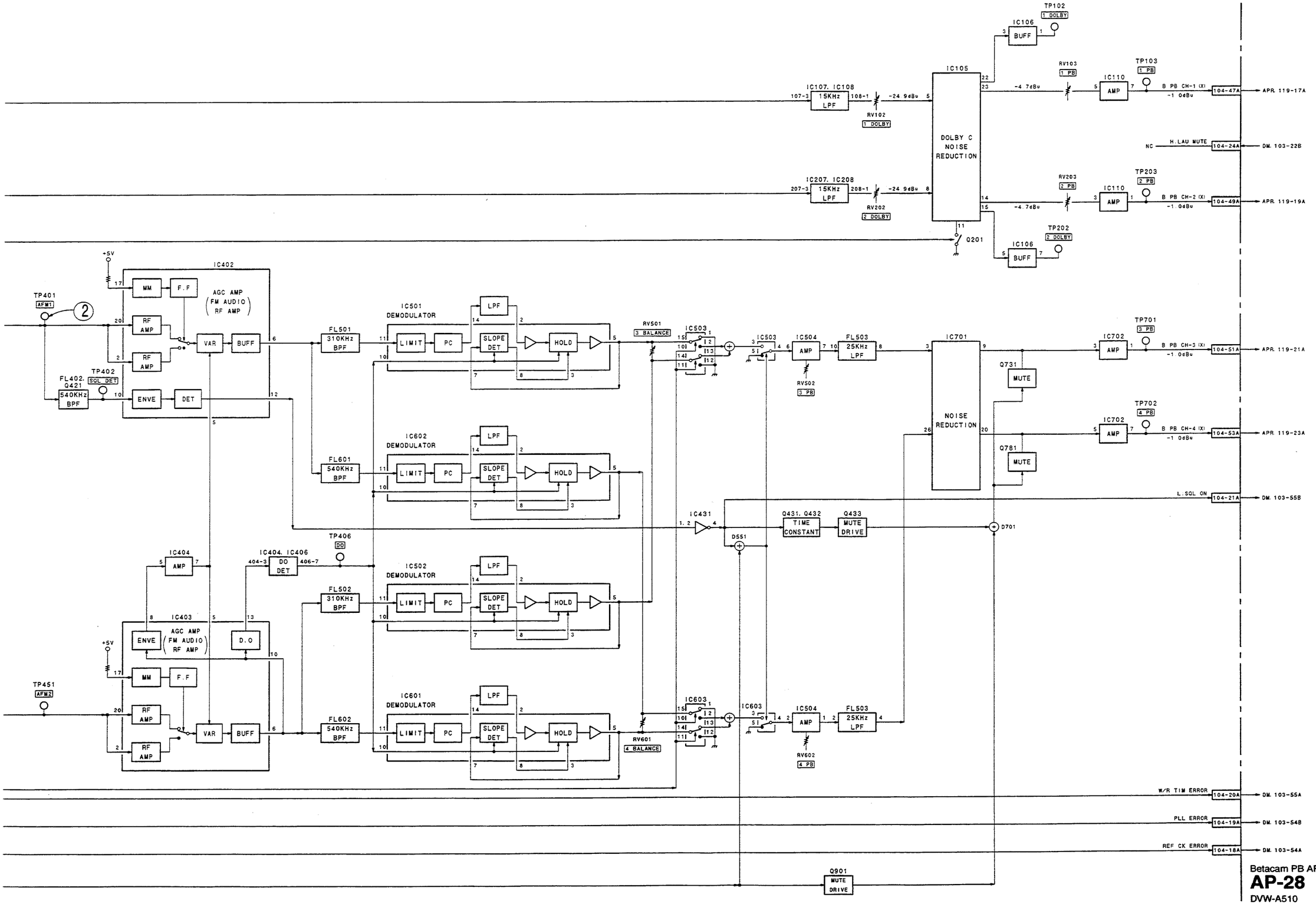


AP-28 Board -A Side-



Measurement Condition
MODE : PB mode
TAPE : CR5-1B PS (AFM 400Hz SINE WAVE)


CUE. 105-41A
104-41A
PB CH-1 SIG (X)
-1.06Bu
101-6
IC101-IC103
CONTOUR EFFECT COMPENSATOR
103-1
6
IC103
PB PHASE
7
CUE. 105-39A
104-39A
PB CH-2 SIG (X)
-1.06Bu
201-6
IC201-IC203
CONTOUR EFFECT COMPENSATOR
203-1
6
IC203
PB PHASE
7
TP204
NR ON
RV201
PHASE
DM. 103-23A
104-25A
H:NR ON
DM. 103-42A
104-29A
C RF (X)
FL301. Q301. Q304
800KHz LPF
Q305. Q306
RF AMP
RV301
RF LEVEL
TP301
RF LEVEL
LPF
19
IC308
A/D CONV
VIN
D0
D7
12
3-10
3. 6. 10. 13
DATA0-7
4-7
0-3
2. 5. 11. 14
IC311
4. 7. 9. 12
DATA0-3
27-24
IC313
DIN0
DIN3
DO10
DO13
FIELD MEMORY
DO20
DO23
CKR1
CKR2
VCLR1
VCLR2
VCLR0
CKW0
5-8
52-55
DATA10-13
35-32
47-50
DATA20-23
IC312 AFM TBC
37-30
1-8
AFM1 DATA0-7
46-43. 41-38
AFM2 DATA0-7
IC314
D/A CONV
VREF
FL401. Q401. Q402
800KHz LPF
+5V
SW2
SW1
2RCK
2RCK1
RZ1
RZ2
RTG
RCK
ASWG
ROE
R27
D951
59 WZ
11 WCK
5 C SH
9 2WCK
4 CH
6 CGB
SHG
VDET
VCTR
TP305
WZ
14 Y DO
13 YS
1 DTV
MODE0
MODE1
TBC-24. 102-31B
104-16A
C SH
IC302
IC303
SH DELAY
IC303
SH WIDTH
PLL
TP302
TRAPE
Q302. Q303. IC305
TRAPE
IC304
IC305. IC307
ERROR AMP
307-7
307-1
IC309. IC310
VCO
310-4
309-2
LV301
VCO
TBC-24. 102-42B
104-15A
C GBD
DM. 103-16A
104-22A
L:Y DO PLS
TBC-24. 102-42A
104-14A
Y PB SYNC
SS (3/3). 123-11A
104-17B
DTV
IC302
INPUT BUFF
TP304
NT/PAL
TBC-24. 102-51B
104-25B
H:NTSC/L:PAL
TP306
O/E
VPR. 115-47B
104-18B
ANA O/E
IC302
VPR. 114-38
104-12A
REF CK27 (X)
IC372
IC372
Q372
REFCK ERROR DET
DM. 103-22A
104-23A
H:AFM MUTE
IC901
IC923
BUFF
TP303
VCO
IC921
PLL ERROR DET
IC951. IC952
W/R TIME ERROR DET
951-2
952-3
952-5
IC315
D/A CONV
FL451. Q451. Q452
800KHz LPF



Betacam PB AFM Demodulator

AP-28

DVW-A510
DVW-A510P
DVW-CA510/CA510P

[CIRCUIT DESCRIPTION OF SS-52B BOARD (1/3)]

SS-52B board (1/3) is a system control system block that controls man-machine interface, processor control, and overall system.

SS-52B board consists of the following blocks.
SS-52B (1/3): System control system block
SS-52B (2/3): Servo control system block
SS-52B (3/3): DT control system block
These blocks incorporate CPUs (MPU), respectively, and control their own system while they communicate mutually via dual port RAMs. Especially, the system control system controls the overall system as well as its own system.
The system control system is described below.
The outline of the system control system is first described.
The CPU system which constitutes the center of the system control system consists of main and sub CPU systems. The main CPU (IC5) controls the basic functions for peripheral boards and the overall system. The sub CPU (IC50) controls the key panel including the time counter display.
The flow of the controls performed by each CPU are summarized as described below.

Main CPU
- CPU system configuration : Main CPU (V25)(IC5)
  Address decoder (IC7(2/2))
  ROM (256k bytes)(IC12)
  RAM (32k bytes)(IC10)
  NOVRAM (8k bytes)(IC13)
  Interrupt controller (IC16)
- Communicates with the sub CPU via dual port RAM (IC37 and IC38).
- Communicates with the servo CPU via dual port RAM (IC34 and IC35).
- Controls DPR-36H board while exchanging the system data and control signals ("PAD 0 to 7/CONT") via parallel bus interface (IC28, IC29, and IC30).
- Controls EQ-45B board via RF block interface (IC7(1/2) and IC8).
- Controls APR-1B, FP-58B, SWC-19B, and RM-130 boards via MPU communication controller (IC25 and IC22).
- Controls VPR-1B, DM-89, and TBC-23 boards via MPU communication controller (IC27 and IC26).
- Controls the superimpose IC (IC46) via the circuit mentioned above to send character signals to VPR-1B and DIF-16B boards.
- Controls the LTC processor IC (IC42) to read the LTC signal.
- Communicates with the outside via a serial interface (IC15) by the RS-232C protocol (using the RS-232C connector).

Sub CPU
- CPU system configuration : Sub CPU (Z80)(IC50)
  Address decoder (IC53(1/2))
  ROM (64/256k bytes)(IC54)
  RAM (8k bytes)(IC52)
- Communicates with the main CPU via dual port RAM (IC37 and IC38).
- Controls the key panel (overall lower control panel including the time counter display and search dial assembly) by the serial communication with the MPU on KY-231B board.
- Communicates with the outside via a remote interface (IC53(2/2)) by the RS-422 protocol (using the 9-pin remote connector).
- Sends a watchdog reset pulse to the main CPU when an error is detected during communication with the main CPU.

A few complementary explanation is given for the contents of the above description.

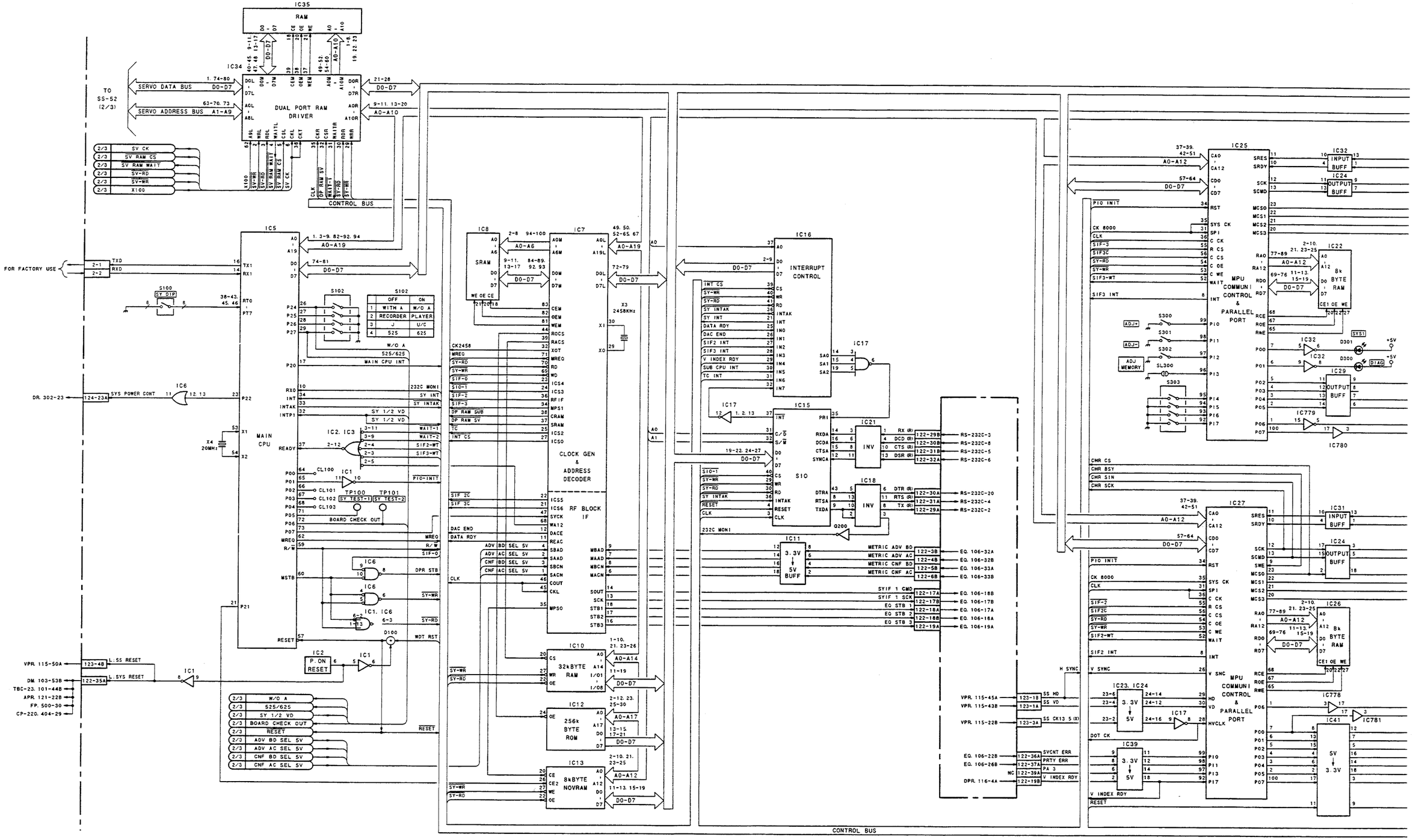
(1) NOVRAM
The NOVRAM (IC13) is used as an error logger that saves the data at that time when each error occurs. This RAM has no backup function.

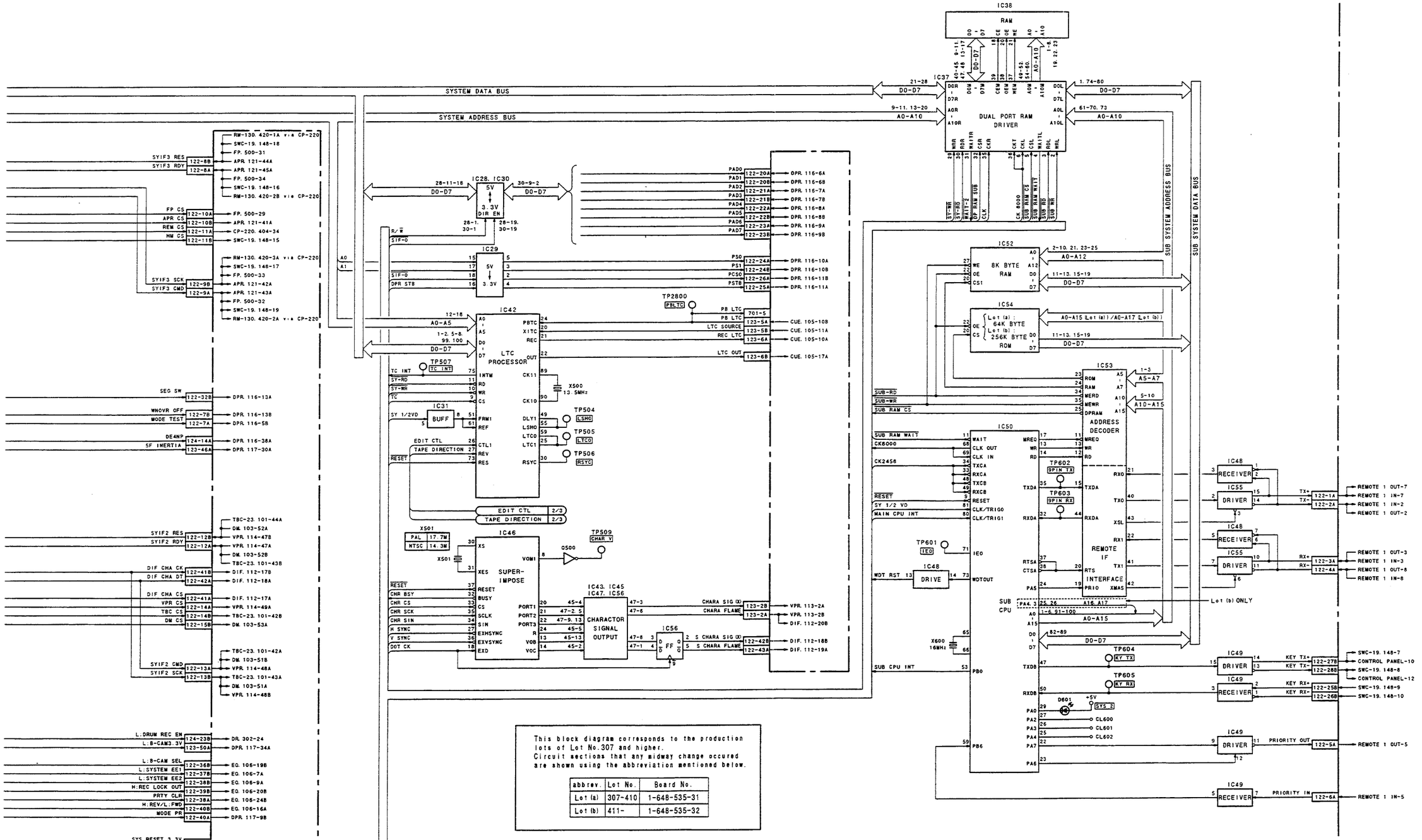
(2) RF block interface
The RF block interface (IC7(1/2) and IC8) reads the D/A converter control data set in the RAM, converts the data into the serial data ("SYIF1 CMD") in which four-bit D/A channel numbers are added, and sends it to EQ-45B board together with a clock signal and strobe signals, to set the various control data to the three 12-channel D/A converter on EQ-45B board.
The RF block interface also counts the metric pulses from the VITERBI ICs on EQ-45B board, using the head select signals as the gate windows, and sends the count data to the CPU. The CPU controls the gain and phase of each equalizer circuit so that the metric pulses decrease.

(3) MPU communication controller
The MPU communication controllers (IC25 and IC22, and IC27 and IC26) can communicate with eight MPUs (maximum) by serial communication, respectively. IC25 sends a "SYIF3 CMD" command to each board together with a clock signal and chip select signals, and IC27 sends a "SYIF2 CMD" command to each board together with a clock signal and chip select signals. These commands control the basic function of the MPUs on each board.
The MPU communication controller also have 16 parallel ports (eight input ports and eight output ports). These ports are used for the input operations by switches, and the signal exchange between DPR-36H or EQ-45B board and the CPU.

For each CPU, LEDs that display each operation state are mounted on the board.
D301 displays the operation state of the main CPU, and D601 displays the operation state of the sub CPU. Each LED blinks at intervals of approximately 1 Hz if the operation state is normal.

3-49


IC35
RAM
IC34
DUAL PORT RAM DRIVER
TO SS-52 (2/3)
SERVO DATA BUS D0-D7
SERVO ADDRESS BUS A1-A9
CONTROL BUS
IC5
MAIN CPU
FOR FACTORY USE
S100
SW DIP
S102
W/O A
525/625
MAIN CPU INT
SY 1/2 VD
WAIT-1
WAIT-2
SIF2-WT
SIF3-WT
PIO-INIT
DPR STB
SY-WR
SY-RD
WDT RST
RESET
IC6
SYS POWER CONT
IC2
P.ON RESET
IC1
L.SS RESET
L.SYS RESET
VPR 115-50A
DM 103-53B
TBC-23. 101-44B
APR 121-22B
FP 500-30
CP-220. 404-29
BOARD CHECK OUT
ADV BD SEL 5V
ADV AC SEL 5V
CNF BD SEL 5V
CNF AC SEL 5V
IC8
SRAM
IC7
CLOCK GEN & ADDRESS DECODER
RF BLOCK IF
X3
2458KHz
IC10
32kBYTE RAM
IC12
256k BYTE ROM
IC13
8kBYTE NOVRAM
IC16
INTERRUPT CONTROL
IC17
IC15
S10
IC21
IC18
INV
IC11
3.3V 5V BUFF
Q200
METRIC ADV BD
METRIC ADV AC
METRIC CNF BD
METRIC CNF AC
SYIF 1 CMD
SYIF 1 SCK
EQ STB 1
EQ STB 2
EQ STB 3
RS-232C-3
RS-232C-8
RS-232C-5
RS-232C-6
RS-232C-20
RS-232C-4
RS-232C-2
EQ. 106-32A
EQ. 106-32B
EQ. 106-33A
EQ. 106-33B
EQ. 106-18B
EQ. 106-17B
EQ. 106-17A
EQ. 106-16A
EQ. 106-19A
IC25
MPU COMMUNI CONTROL & PARALLEL PORT
IC32
INPUT BUFF
IC24
OUTPUT BUFF
IC22
8k BYTE RAM
S300
S301
S302
S303
SL300
ADJ MEMORY
IC29
IC779
IC780
IC27
IC31
IC26
IC778
IC41
IC781
IC23. IC24
IC39
H SYNC
V SYNC
DOT CK
V INDEX RDY
SS HD
SS VD
SS CK13.5 (X)
SVCNT ERR
PRTY ERR
PA 3
V INDEX RDY
CHR CS
CHR BSY
CHR SIN
CHR SCK
CONTROL BUS



This block diagram corresponds to the production lots of Lot No.307 and higher. Circuit sections that any midway change occured are shown using the abbreviation mentioned below.

abbrev.	Lot No.	Board No.
Lot (a)	307-410	1-648-535-31
Lot (b)	411-	1-648-535-32

System Control
SS-52B (1/3)
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

SS-52B (2/3)

[CIRCUIT DESCRIPTION OF SS-52B BOARD (2/3)]

SS-52B board (2/3) is a servo control system block that gathers the feedback information from sensors and mechanical devices, performs detection processing for the information, and controls the mechanical devices via DR-307/200 board according to the result of the detection.

The configuration of the servo control system block is summarized below.
The servo CPU system (IC750, etc.) constitutes the center of the servo control system, and controls the overall servo system. The servo CPU connects with the servo IC (IC774) and two I/O ports (IC762 and IC782) by data bus, and connects with the drum MPU (IC700), MPU on DR-307/200 board, by serial communication.

The outline of each portion is described below.

(1) Servo CPU system
CPU system configuration : Servo CPU (16-bit)(IC750)
Address decoder (IC756, IC757, etc.)
ROM (4M-16 bits)(IC761)
RAMs (2k bytes x 2)(IC751 and IC758)
The servo CPU constitutes the center of the servo control system. It controls the servo system except a DT function. This servo CPU communicates with the CPU of the system control system via the dual port RAM (IC34 and IC35) (on SS-52B board(1/3)) and communicates with the CPU of the DT control system via dual port RAM (IC2113 and IC2115) (on SS-52B board(3/3)).
The servo CPU has serial ports, so communicates with the drum MPU (IC700) and the MPU on DR-307/200 board in serial, and controls these MPUs.
The servo CPU has analog input terminals, so takes in motor currents, tape tensions, and other analog data, and converts them into digital data. Moreover, it takes in digital data and detection data via the MPU on DR-307/200 board and the servo IC (IC774), and controls the servo according to these data items.

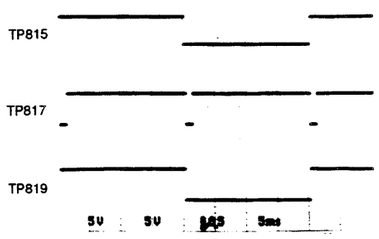
(2) Servo IC
The servo IC (IC774) receives the CTL signal and various FG pulse signals that are fed back from DR-307/200 board, calculates the timing, and outputs PWM signals for each motor control to DR-307/200 board.
However, the PWM signal output from pin 31 provides a speed offset for the PLL circuit in the VITERBI processing system on EQ-45B board. The pulse width of this PWM signal varies depending on the tape speed. This signal is DC-converted using IC765, then time-shared into four PB RF identifying DC signals using analog switches (IC771 and IC775), and sent to EQ-45B board.
In addition to the above description, the servo IC also detects the rotating direction of the capstan motor, generates a 1/2 VD pulse, and outputs them.

(3) Drum MPU
The drum MPU (IC700) sends a PWM signal for drum motor control to DR-307/200 board under the control of the servo CPU, and outputs the select signals for each rotary head to EQ-45B and DPR-36H boards.

(4) CPU operation state display by LED
For each CPU, LEDs that display each operation state are mounted on the board. D711 displays the operation state of the servo CPU, and D800 displays the operation state of the drum MPU. Each LED blinks at intervals of approximately 1 Hz if the operation state is normal.
Moreover, D800 displays the drum operation state by the duty cycle of the blink. The operation of the LED that lights for a longer time indicates "DRUM LOCK". The operation of the LED that goes off for a longer time indicates "DRUM UNLOCK".

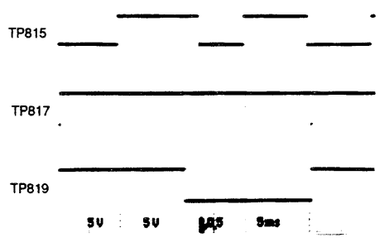
CR5-1B PS PB mode
(In only case of the VTR with a Betacam PB function)

①TP815(H-1) PB mode
TP817(H-1) PB mode
TP819(J-1) PB mode

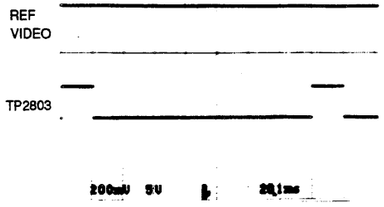


ZR5-1P

①TP815(H-1) PB mode
TP817(H-1) PB mode
TP819(J-1) PB mode

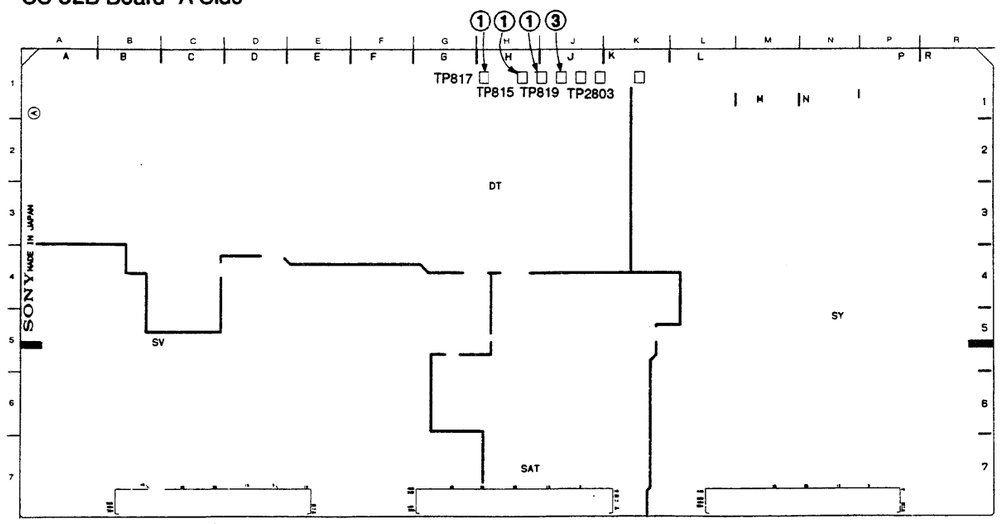


③TP2803(J-1)STOP(E-E) mode



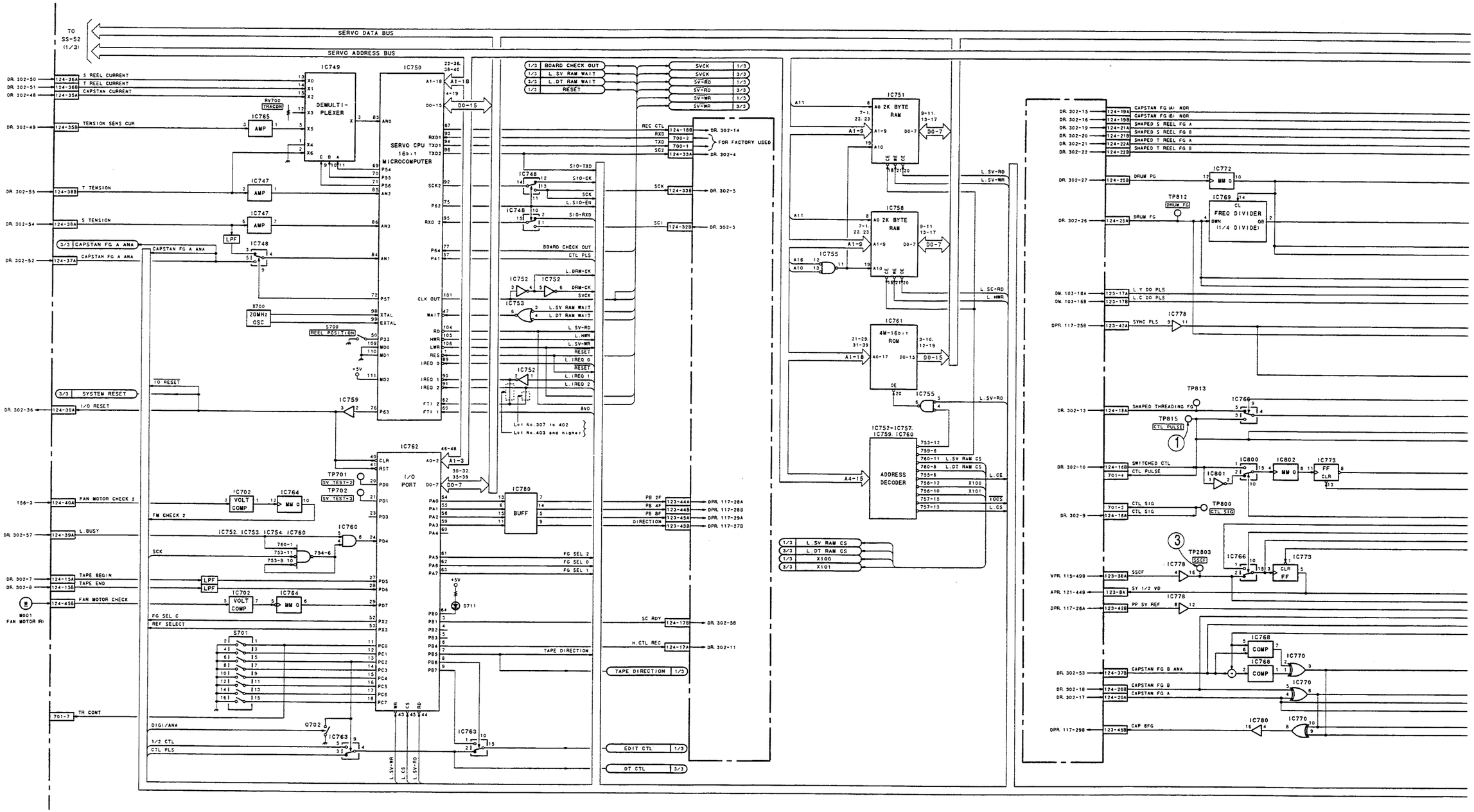
Measurement Condition
MODE : PB mode
: STOP (E-E) mode
: STILL mode
TAPE : ZR5-1P
: CR5-1B PS

SS-52B Board -A Side-

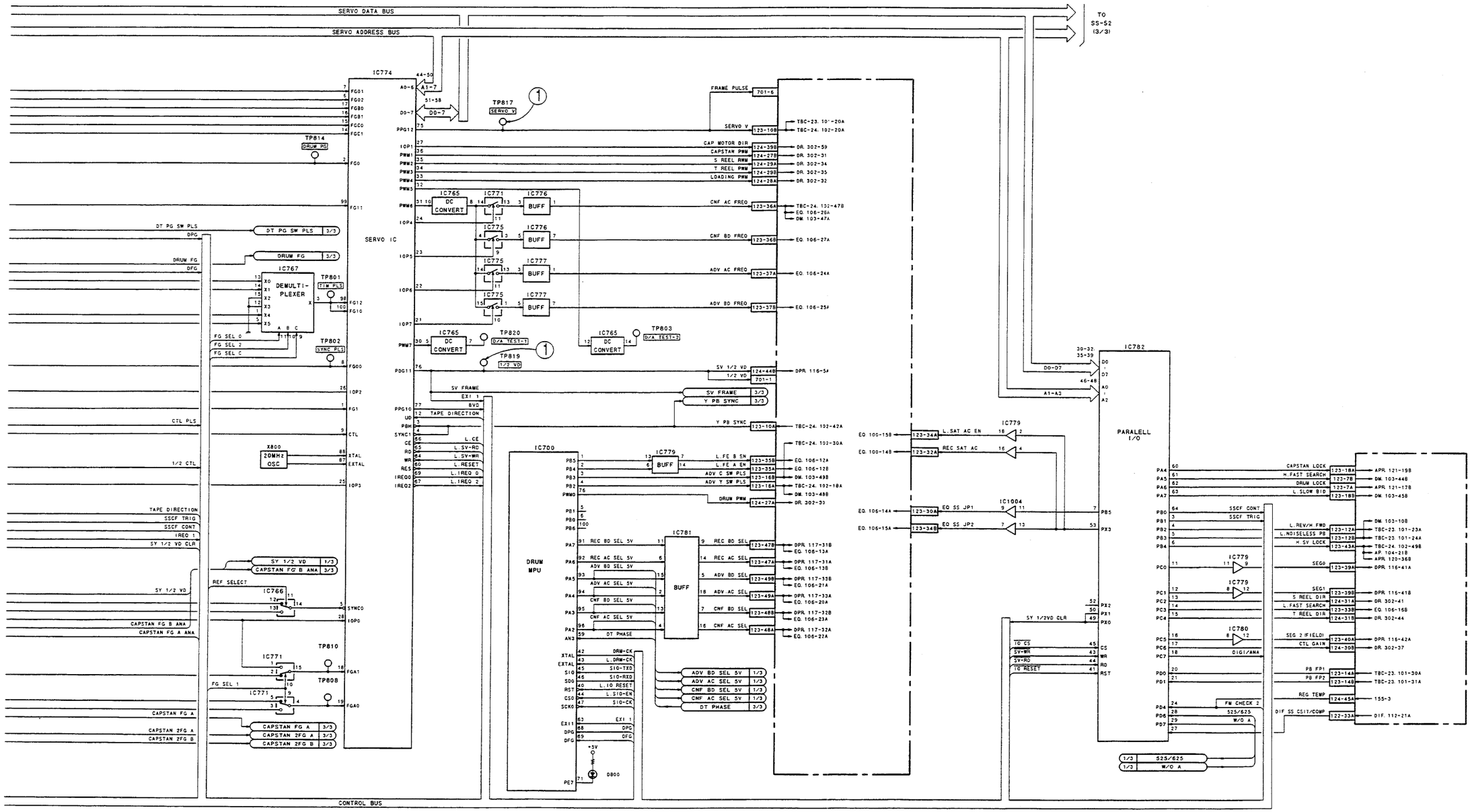


3-53

SS-52B (2/3)


TO SS-52 (1/3)
SERVO DATA BUS
SERVO ADDRESS BUS
IC749
DEMULTI-PLEXER
IC750
SERVO CPU 16bit MICROCOMPUTER
S REEL CURRENT
T REEL CURRENT
CAPSTAN CURRENT
TENSION SENS CUR
T TENSION
S TENSION
CAPSTAN FG A ANA
LPF
X700 20MHz OSC
S700 REEL POSITION
TO RESET
SYSTEM RESET
I/O RESET
FAN MOTOR CHECK 2
L BUSY
TAPE BEGIN
TAPE END
FAN MOTOR CHECK
M001 FAN MOTOR (R)
TR CONT
IC759
IC762
I/O PORT
IC780
BUFF
IC760
IC763
IC764
IC765
IC747
IC748
IC752
IC753
IC754
IC702
VOLT COMP
MM Q
AMP
TP701
TP702
S701
Q702
D711
FM CHECK 2
SCK
REF SELECT
DIGI/ANA
1/2 CTL
CTL PLS
FG SEL C
FG SEL 2
FG SEL 0
FG SEL 1
TAPE DIRECTION
BOARD CHECK OUT
L.SV RAM WAIT
L.DT RAM WAIT
RESET
SIO-TXD
SIO-CK
SCK
L.SIO-EN
SIO-RXD
CTL PLS
L.DRM-CK
DRM-CK
SVCK
L.SV RAM WAIT
L.DT RAM WAIT
L.SV-RD
L.HWR
L.SV-WR
RESET
L.IREQ 0
L.IREQ 1
L.IREQ 2
Lot No.307 to 402
Lot No.403 and higher
REC CTL
RXD
TXD
SC2
SC1
SC RDY
H.CTL REC
EDIT CTL
DT CTL
FOR FACTORY USED
IC751
IC758
IC761
IC755
4M-16bit ROM
A0 2K BYTE RAM
ADDRESS DECODER
L.SV RAM CS
L.DT RAM CS
X100
X101
L.CE
TOCS
L.CS
IC772
MM Q
IC769
FREQ DIVIDER (1/4 DIVIDE)
IC778
IC766
IC768
IC770
IC773
IC800
IC801
IC802
TP812 DRUM FG
TP813
TP815 CTL PULSE
TP800 CTL SIG
TP2803 SSCF
DRUM PG
DRUM FG
SHAPED THREADING FG
SWITCHED CTL
CTL PULSE
CTL SIG
SSCF
SY 1/2 VD
PP SV REF
CAPSTAN FG B ANA
CAPSTAN FG B
CAPSTAN FG A
CAP BFG
SYNC PLS
L.Y DO PLS
L.C DO PLS
SHAPED S REEL FG A
SHAPED S REEL FG B
SHAPED T REEL FG A
SHAPED T REEL FG B
CAPSTAN FG (A) NOR
CAPSTAN FG (B) NOR

3-54



Servo Control
SS-52B (2/3)
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

[CIRCUIT DESCRIPTION OF SS-52B BOARD (3/3)]

SS-52B board (3/3) is a DT control system block that detects a tracking error from the PB signal of the DT head, generates a bimorph drive signal together with the feedback data processing result, and sends it to DT-34B board (bimorph drive board) for dynamic tracking.

DT control system configuration
- DT system control block
  - DT CPU system
  - Servo IC
- Tracking error detection block
  - Wobbling signal generator circuit
  - Digital tracking error detector circuit
  - Analog tracking error detector
- Bimorph control block
  - Bimorph control circuit
  - Bimorph drive circuit (DT-34B board)

The outline of each block is described below.

(1) DT system control block
The DT system control block consists of a DT CPU system (consisting of a DT CPU (IC2104), address decoder (IC2108), ROM (IC2110), and I/O port (IC2109)) and a servo IC (IC2200).
The DT CPU communicates with the servo CPU via the dual port RAM (IC2113 and IC2115), performs detection processing for the feedback data jointly with the servo IC, and controls the DT system according to the result.
The servo IC detects the tape speed from capstan FG signals, calculates the timing of the tracking from a CTL PB signal, and sends the calculated tracking data and others in the form of PWM signal to the bimorph control circuit.

(2) Tracking error detection block
Since a digital Betacam tape has a narrow track width and high trace speed, the degree and direction of a tracking error are detected from the envelope waveform of a PB RF signal by wobbling the DT head (ADVANCE head) in the PB mode. For an analog Betacam tape, the tracking data generated in the DT system control block is corrected from the PB RF level detection and from the PB phase difference detection between channels Y and C by IC2401, as before.
- Wobbling signal generator circuit

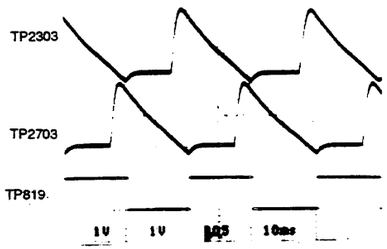
Wobbling data is generated by three CTC counters (IC2202, IC2204, and IC2207), converted into a wobbling signal of 1.5 kHz by a D/A converter (IC2210), and added to bimorph drive signals in the mode of "WOBBLING ON".
The timing pulses generated by the above CTC counters are sent through an wobbling control circuit (IC2100, IC2205, and IC2209) to the tracking error detector circuit to control the timing of the error detection.
- Digital tracking error detector circuit

The ADVANCE head is wider in width than the REC head. Two ADVANCE heads are installed on one bimorph plate in pairs so that the portions of the remaining width protrude from the both outsides of the tracks recorded in pairs.
When the bimorph plate wobbles, if the head deflects to the outside of pair tracks, the track width that can be reproduced decreases. Therefore, the amplitude of the PB RF signal decreases.
If the head deflects to the inside of pair tracks, the portion of the head got in the adjacent track cannot reproduce because the azimuth angle differs. However, since the outer edge of the track is covered by the portion of the remaining width of the head, the track width that can be reproduced does not change. For the adjacent head, the same change described above appears in an opposite phase.
If a tracking error occurs, the above change appears more remarkably in the shifted outside head. In the inside head, the change decreases. Therefore, a wobbling component (1.5 kHz) is extracted from the envelope waveform of the PB RF signal in each head, and the difference is obtained using a differential amplifier. As a result, the degree and direction of the tracking error can be detected.
IC2500 to IC2508 are a digital tracking error detector circuit. For the envelope waveform of the PB RF signal from EQ-45B board, only the video RF portion is extracted in the timing of the "PEAK HOLD OFF" signal from a wobbling control circuit, and a wobbling component is taken out using a bandpass filter of 1.5 kHz and half-wave rectified. The resultant half-wave rectification output signals in a pair channel are input to the differential amplifier to taken out the difference and passed through a low-pass filter. As the result, a DC voltage whose polarity and dimensions correspond to the direction and degree of the tracking error is obtained. This voltage is fed back to the bimorph control circuit in the corresponding channel in the mode of "WOBB A/B ON" or "WOBB C/D ON".

(3) Bimorph control block
IC2300 to IC2305 and IC2700 to IC2705 are a bimorph control circuit. In principle, the feedback strain gauge signal and the tracking data calculated by a DT system control block are compared using phase compensators (IC2300 and IC2700), and the difference voltage is output as a bimorph drive signal.
Tracking error detection data is fed back in the course of a tracking data circuit for a digital tape to correct the tracking data. For an analog tape, the tracking error detection data is fed back to the DT system control block to correct the tracking data. Moreover, for a digital tape, a wobbling signal is added to the bimorph drive signal.
An "STG OFFSET" signal contains a same noise component as in the strain gauge signal and is used to cancel the noise. The gain djustment is performed by changing the ON/OFF duty cycle of a charge/dischage switch by a PWM signal. A "TRACK SIGN" signal inverts the polarity of a "TRACKING" signal. The band eliminators (IC2305 and IC2705) in the later stage are used to eliminate bimorph resonant frequency component of 700 to 800 Hz.

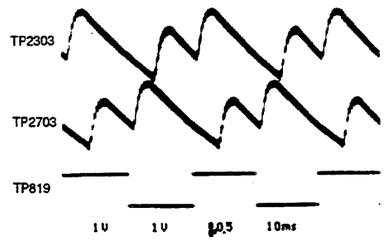
CR5-1B PS PB mode
(In only case of the VTR with a Betacam PB function)

① TP2703(J-1) STILL mode
TP2303(J-1) STILL mode
TP819(J-1)(TRIG)



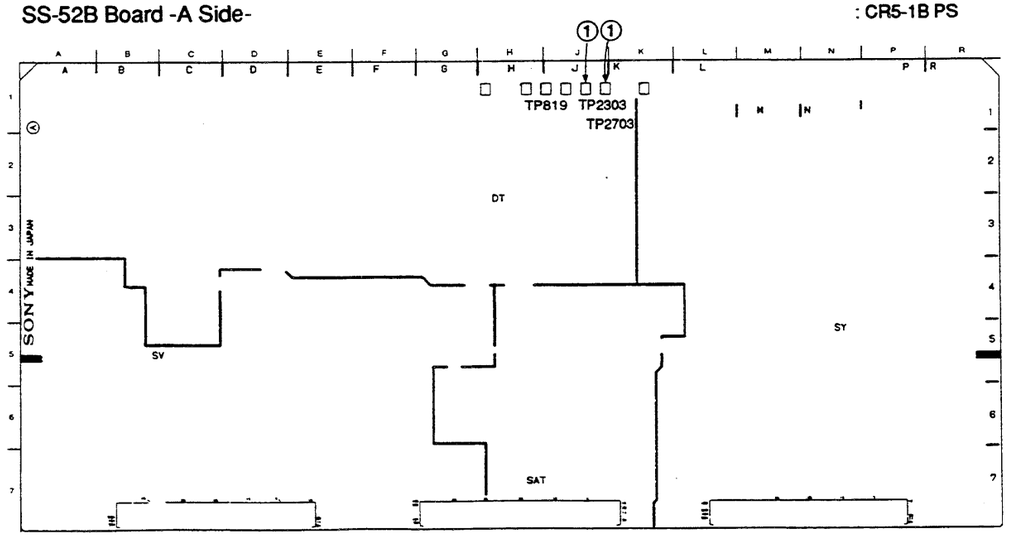
ZR5-1P

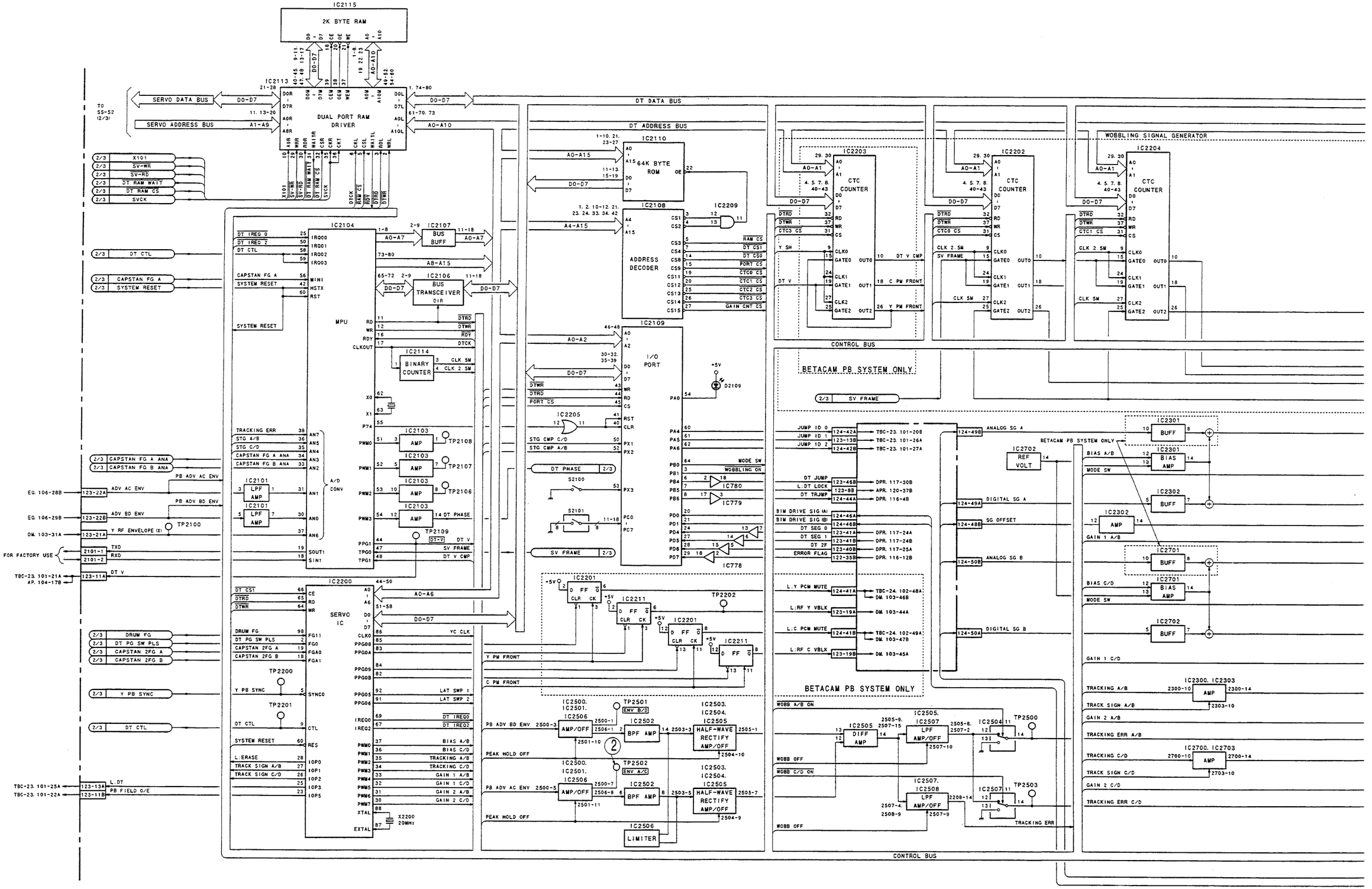
① TP2703(J-1) STILL mode
TP2303(J-1) STILL mode
TP819(J-1)(TRIG)



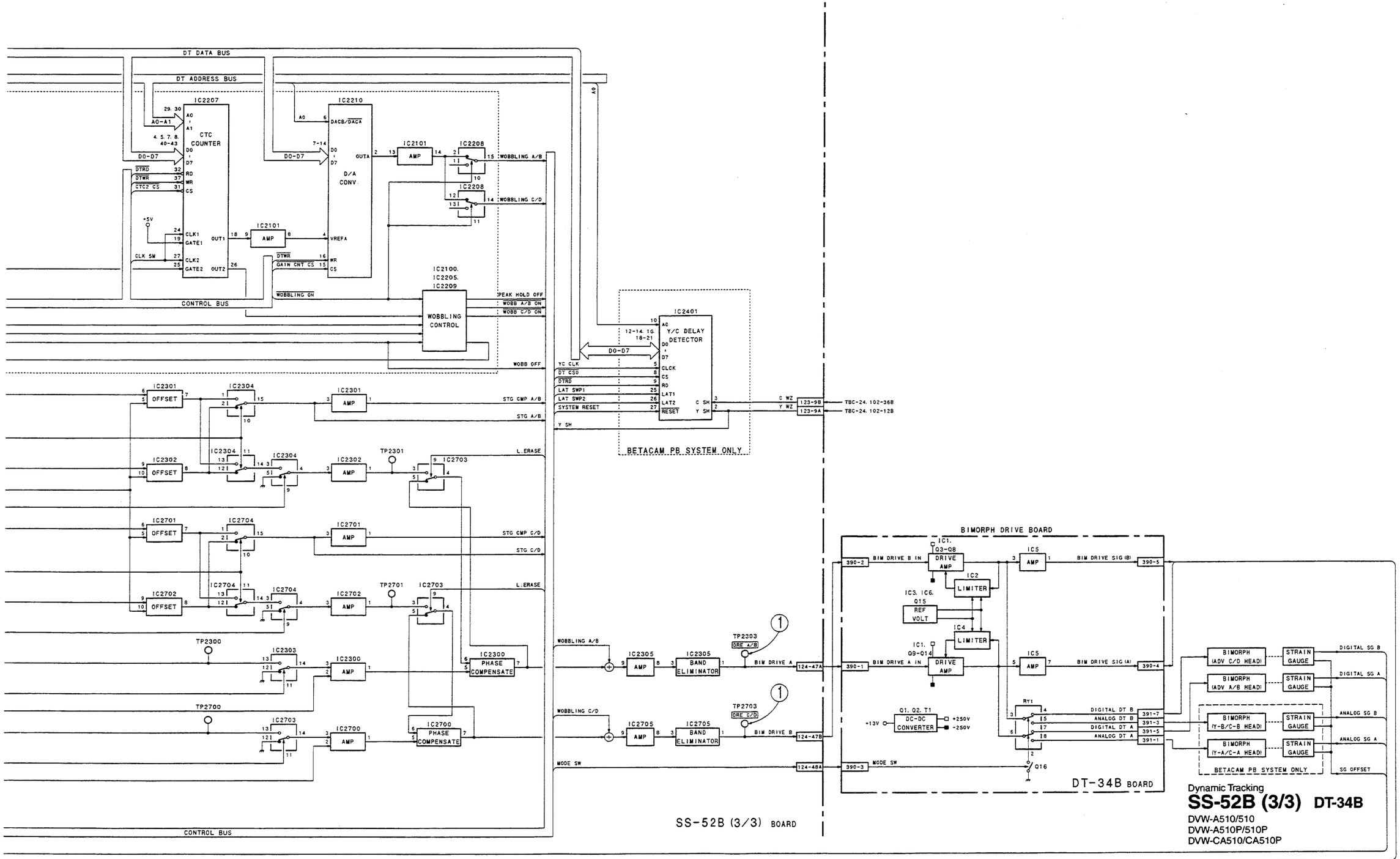
Measurement Condition
MODE : STILL mode
TAPE : ZR5-1P
: CR5-1B PS

SS-52B Board -A Side-





DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P



Dynamic Tracking

SS-52B (3/3) DT-34B

DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

[CIRCUIT DESCRIPTION OF DR-200 BOARD]

DR-200 board is a servo driver board that drives the mechanical devices of each mechanical block under the control from a servo control block (on SS-52B board (2/3)), receives various sensor and FG signals, and feeds them back to the servo control block. DR-200 board also mounts the REC/PB amplifier of a CTL signal.

The configuration of DR-200 board is summarized as described below.

- Four-bit MPU (IC3) that exchanges data and commands with the servo CPU on SS-52B board (2/3) by serial communication.
- Four switching drivers that drive the motors (drum, capstan, and supply and take-up reel motors) in the tape transport system.
- Three two-way switch drivers that drive the motors (loading, position, and cassette compartment up/down motors) in the loading system.
- Five drive amplifiers that drive the solenoids (pinch, supply and take-up reel brake, and cleaning solenoids) and CC lamp.
- Wave shaping amplifiers of each FG pulse (drum, capstan, supply and take-up reel, and loading FGs).
- Detection amplifiers of tape tensions (supply and take-up tensions).
- Detection amplifier of tape ends (tape top and end).
- CTL signal REC/PB amplifier.

A complementary explanation is given for the contents of the above description.

(1) Servo driver MPU

The serial data from the servo CPU on SS-52B board is converted into parallel data by this MPU (IC3) and sent to each block on DR-200 board. This data is partially used to drive the solenoids via drive amplifiers. The signal that is fed back from each sensor is sent to this MPU as parallel data, converted into serial data, and sent to the servo CPU on SS-52B board.

Two EEPROMs (IC10 and IC25) save the servo- and DT-related adjustment data under the same contents and back up it mutually.

(2) Tape transport system motor drive

The drum motor, capstan motor, supply reel motor, and take-up reel motor that constitute the tape transport system require a high-precision control. Therefore, motor drivers for these motors receive the control signals that are sent from SS-52B board by PWM signals and perform the analog drive control by switching drivers.

That is, the chopper type switching regulator (drive voltage generator circuit) that uses a PWM power controller IC converts the voltage of +18 V supplied from the power supply block into the voltage proportional to the control signal from SS-52B board to control the motor speed.

Take the case of the drum motor driver so as to describe the theory of the switching regulator. The "DRUM PWM" control signal from SS-52B board is sent to a low-pass filter (IC39) to produce a DC signal and compared with the voltage that is fed back from the output side of the regulator in the input stage of a PWM power controller (IC700). As the result, a PWM pulse whose pulse width varies depending on the difference voltage (error voltage) is output from IC700. This pulse drives the gate of a switching FET (Q106) via IC8. When Q106 is OFF, the current flows continuously through a flywheel diode (D102) into the inductor to charge the capacitor, by the current energy holding effect of inductor. The balanced output voltage value varies with the modulation ratio of a PWM pulse and the capacity of an output current. However, the modulation ratio of the PWM pulse is controlled so that the output voltage becomes a control target value by feeding an output voltage back to IC700.

The basic operation of the switching regulator is as described above. Since the drum motor is a three-phase brushless motor, a three-phase switching circuit that supplies a current to each winding according to the three-phase control signal (output signal of Hall device amplifier) from the drum is provided after the switching regulator.

The capstan motor incorporates a three-phase switching circuit. The rotating direction of the capstan motor is directly switched by the "CAPSTAN MOTOR DIR" signal that is sent from SS-52B board via DR-200 board. Therefore, the capstan motor operates by only sending a drive voltage from DR-200 board.

The switching regulator uses an output current detection voltage for a fed back voltage and functions as a current control type regulator.

The reel motor driver is a dual switching regulator in which switching regulators are connected to both terminals of a DC motor. This reel motor driver feeds back the detection voltage of an output current occurring due to the voltage difference at both terminals to control each output voltage.

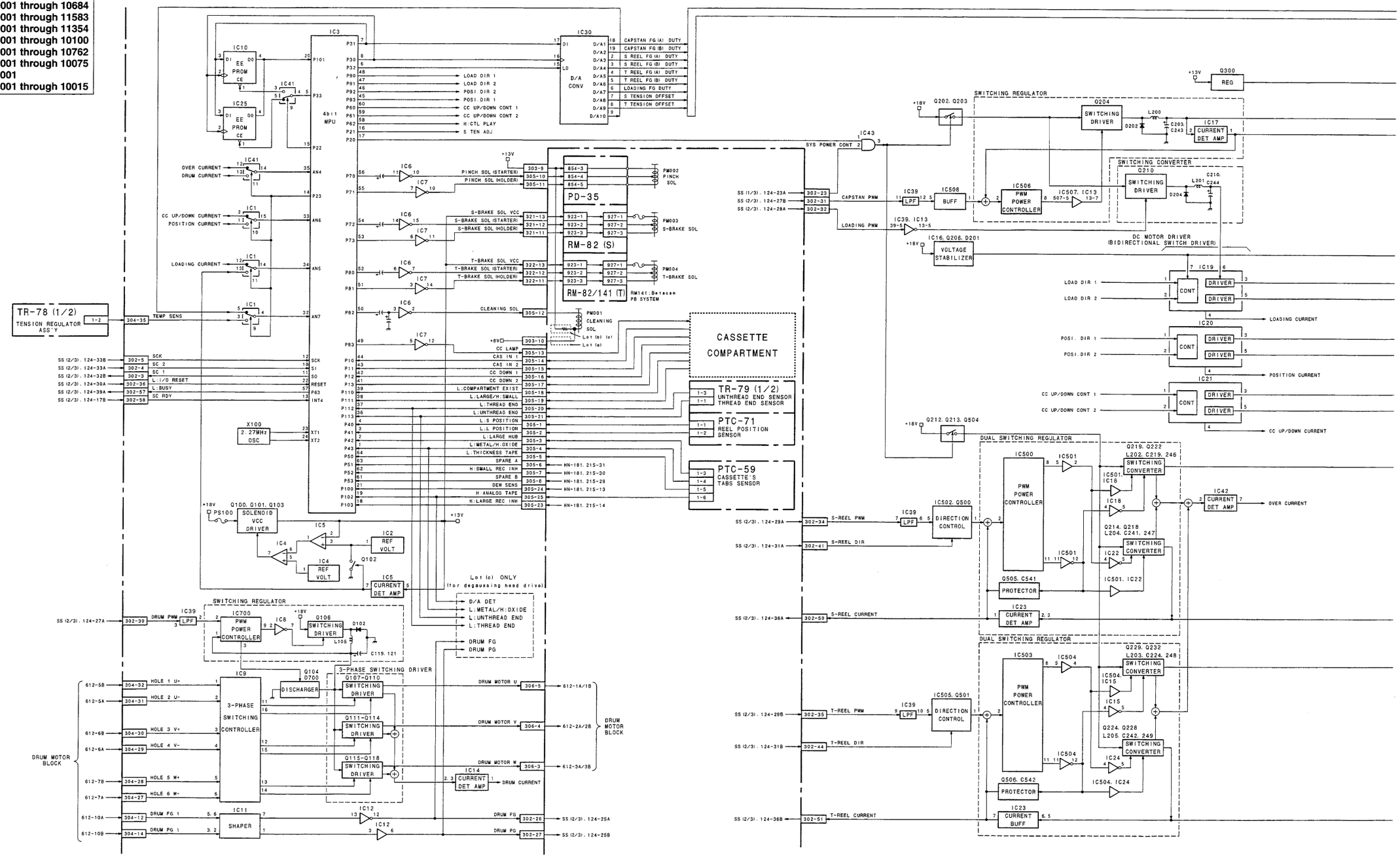
The PWM power controller outputs an in-phase PWM pulse from pins 8 and 11, fluctuates the voltages at both terminals in the opposite directon according to the duty cycle ratio of the PWM pulse, and drives the motor differentially. In each switching converter that constitutes this regulator, a switching FET that makes a complementary pair with a drive switching FET is used instead of the flywheel diode.

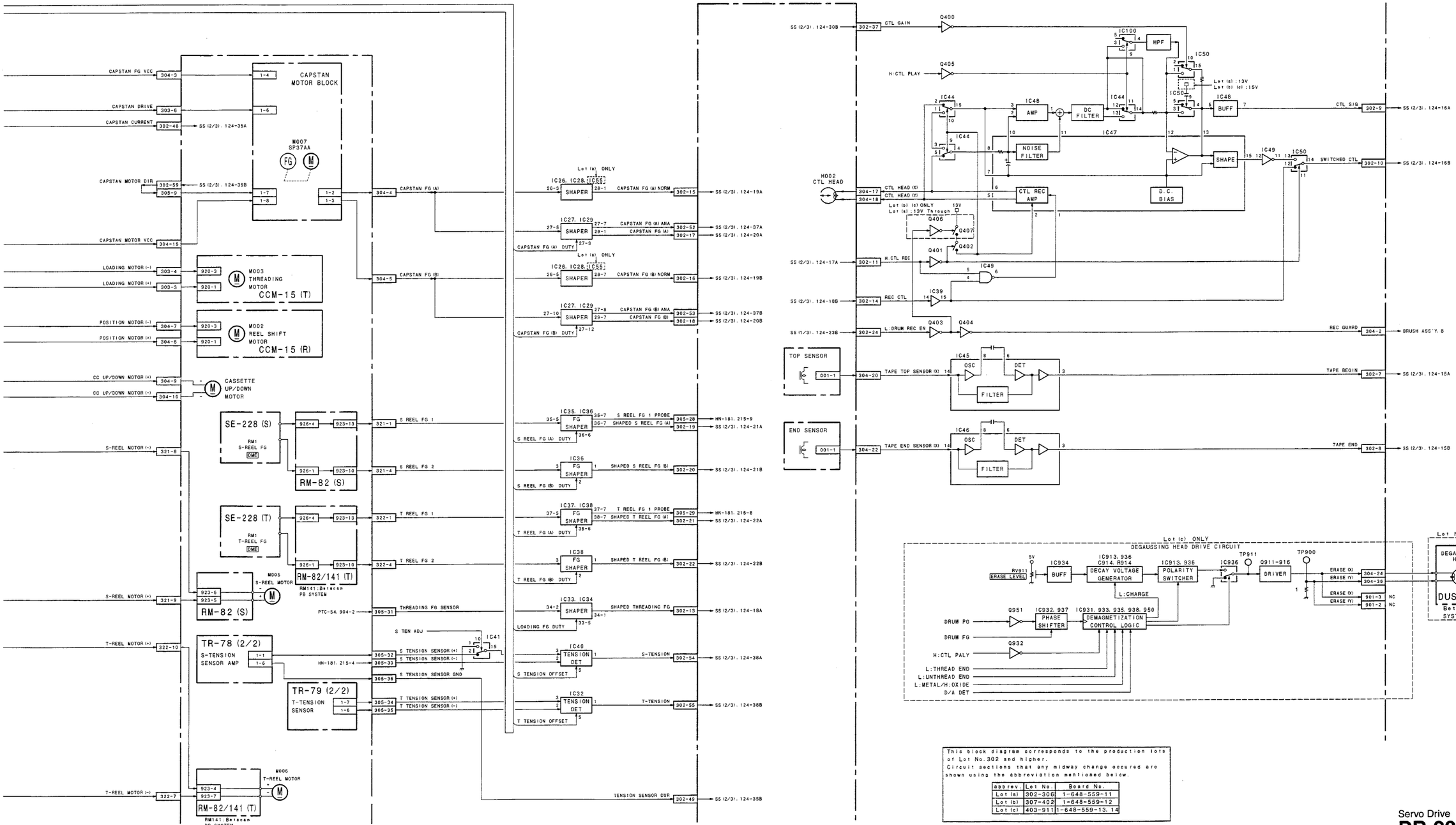
(3) Loading system motor driver

For the motors in the loarding system, there are a loarding motor (threading motor), position motor (reel shift motor), and cassette compatment motor (up/down motor). These motor are DC motors and are driven by two-way switch driver ICs. This IC can select four states (forward rotation, reverse rotation, short-brake, and open) by two control lines.

The switching converter controlled by the "LOADING PWM" pulse from SS-52B board is used in the driver power source for the loading motor, so can also control the rotation torque of the loarding motor.

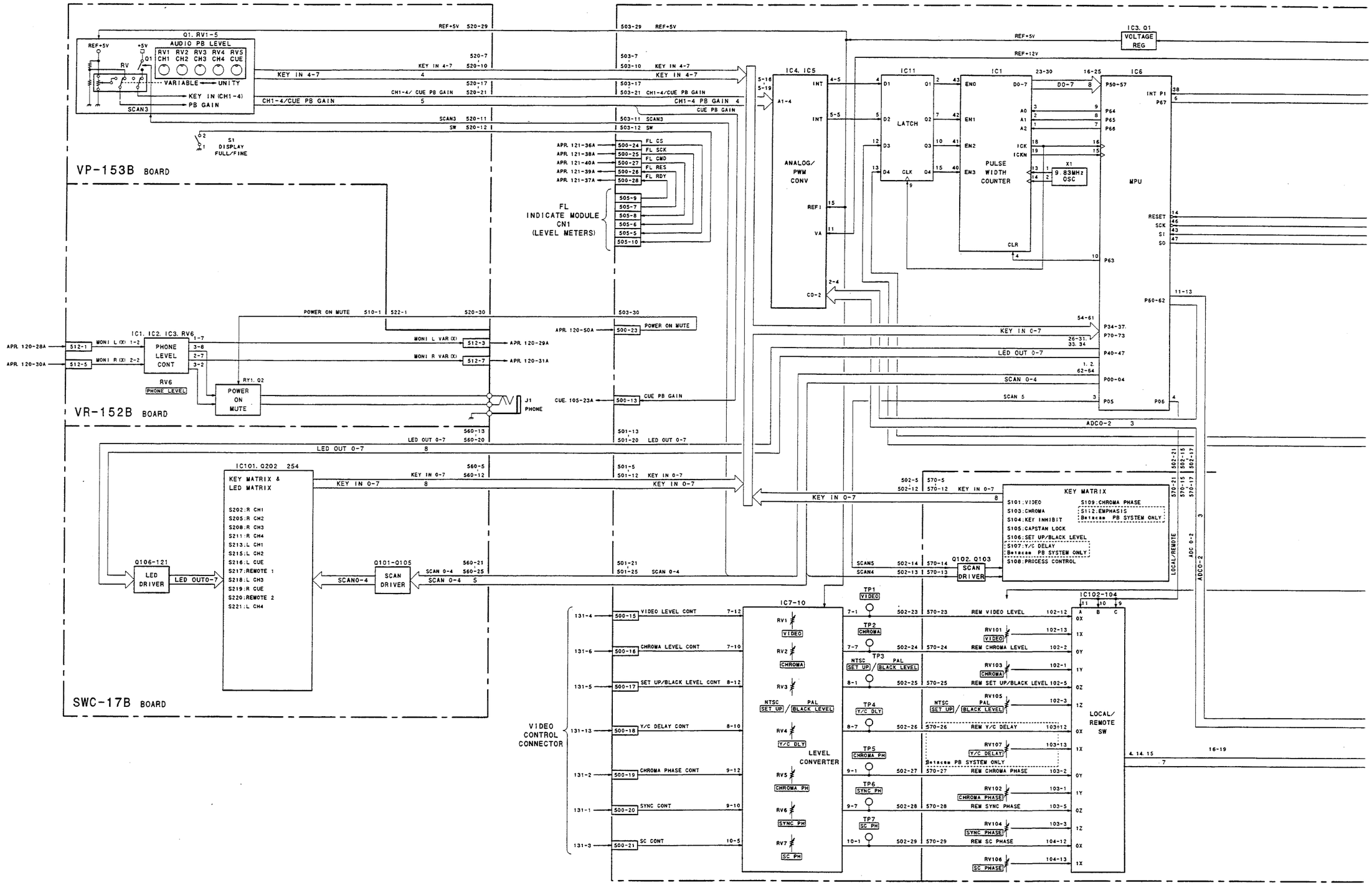
DVW-A500P (EK):	S/N 10001 through 21137
DVW-A500P (UC):	S/N 10001 through 10308
DVW-A500 (J):	S/N 10001 through 12788
DVW-A500 (UC):	S/N 10001 through 18302
DVW-500P (EK):	S/N 10001 through 16515
DVW-500P (UC):	S/N 10001 through 10210
DVW-500 (J):	S/N 10001 through 10363
DVW-500 (UC):	S/N 10001 through 13179
DVW-A510P (EK):	S/N 10001 through 14220
DVW-A510 (J):	S/N 10001 through 10684
DVW-A510 (UC):	S/N 10001 through 11583
DVW-510P (EK):	S/N 10001 through 11354
DVW-510 (J):	S/N 10001 through 10100
DVW-510 (UC):	S/N 10001 through 10762
DVW-CA510P (EK):	S/N 10001 through 10075
DVW-CA510 (J):	S/N 10001
DVW-CA510 (UC):	S/N 10001 through 10015

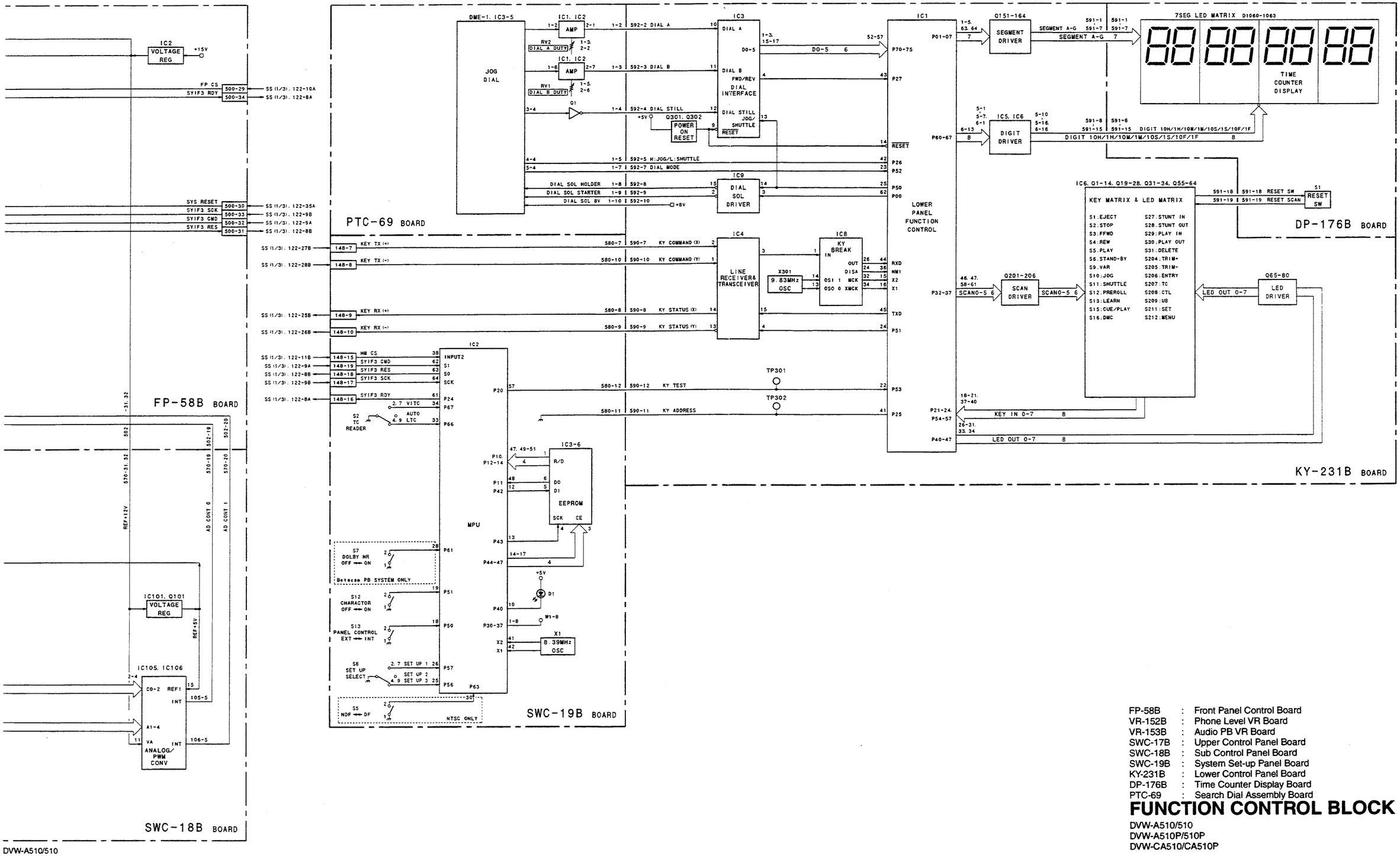




DVW-A500/500
DVW-A500P/500P
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

Servo Drive
DR-200
DVW-A500/500
DVW-A500P/500P
DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

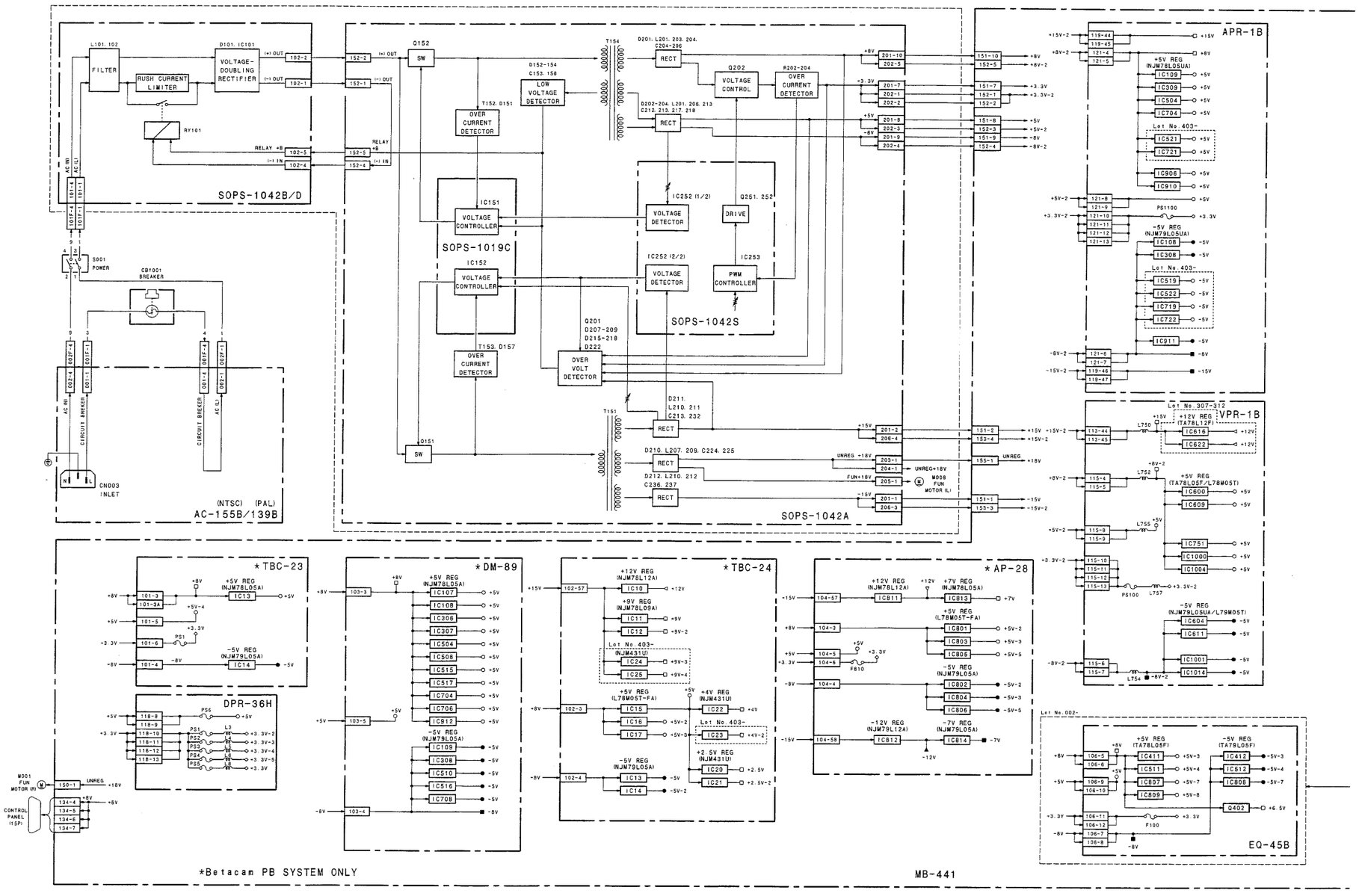

VP-153B BOARD
VR-152B BOARD
SWC-17B BOARD
Q1. RV1-5
AUDIO PB LEVEL
RV1 CH1 RV2 CH2 RV3 CH3 RV4 CH4 RV5 CUE
REF+5V
+5V
Q1
RV
VARIABLE UNITY
KEY IN (CH1-4)
PB GAIN
SCAN3
S1
DISPLAY FULL/FINE
REF+5V 520-29
503-29 REF+5V
KEY IN 4-7 520-10
503-10 KEY IN 4-7
520-17
503-17
CH1-4/ CUE PB GAIN 520-21
503-21 CH1-4/CUE PB GAIN
CH1-4/CUE PB GAIN 5
CH1-4 PB GAIN 4
CUE PB GAIN
SCAN3 520-11
503-11 SCAN3
SW 520-12
503-12 SW
APR. 121-36A 500-24 FL CS
APR. 121-38A 500-25 FL SCK
APR. 121-40A 500-27 FL CMD
APR. 121-39A 500-26 FL RES
APR. 121-37A 500-28 FL RDY
FL INDICATE MODULE CN1 (LEVEL METERS)
505-9
505-7
505-8
505-6
505-5
505-10
IC4. IC5
ANALOG/ PWM CONV
INT
REF1
VA
CO-2
A1-4
IC11
LATCH
D1 D2 D3 D4 CLK
Q1 Q2 Q3 Q4
IC1
PULSE WIDTH COUNTER
END EN1 EN2 EN3
DO-7
ICK ICKN
CLR
X1
9.83MHz OSC
IC3. Q1
VOLTAGE REG
REF+12V
IC6
MPU
P50-57
INT P1
P67
P64 P65 P66
RESET SCK SI SO
P63
P60-62
P34-37. P70-73
P40-47
P00-04
P05 P06
KEY IN 0-7
LED OUT 0-7
SCAN 0-4
SCAN 5
ADC0-2
POWER ON MUTE 510-1 522-1 520-30
503-30
APR. 120-50A 500-23 POWER ON MUTE
IC1. IC2. IC3. RV6
PHONE LEVEL CONT
APR. 120-28A 512-1 MONI L (X) 1-2
APR. 120-30A 512-5 MONI R (X) 2-2
1-7 3-8 2-7 3-2
RV6 PHONE LEVEL
MONI L VAR (X) 512-3 APR. 120-29A
MONI R VAR (X) 512-7 APR. 120-31A
RY1. Q2
POWER ON MUTE
J1 PHONE
CUE. 105-23A 500-13 CUE PB GAIN
560-13
LED OUT 0-7 560-20
501-13
501-20 LED OUT 0-7
IC101. Q202 254
KEY MATRIX & LED MATRIX
S202:R CH1
S205:R CH2
S208:R CH3
S211:R CH4
S213:L CH1
S215:L CH2
S216:L CUE
S217:REMOTE 1
S218:L CH3
S219:R CUE
S220:REMOTE 2
S221:L CH4
KEY IN 0-7 560-5 560-12
501-5 501-12 KEY IN 0-7
Q106-121
LED DRIVER
LED OUT0-7
Q101-Q105
SCAN DRIVER
SCAN0-4
SCAN 0-4 560-21 560-25
501-21 501-25 SCAN 0-4
502-5 570-5
502-12 570-12 KEY IN 0-7
KEY MATRIX
S101:VIDEO
S103:CHROMA
S104:KEY INHIBIT
S105:CAPSTAN LOCK
S106:SET UP/BLACK LEVEL
S107:Y/C DELAY
Between PB SYSTEM ONLY
S108:PROCESS CONTROL
S109:CHROMA PHASE
S112:EMPHASIS
Between PB SYSTEM ONLY
Q102. Q103
SCAN DRIVER
SCAN5 502-14 570-14
SCAN4 502-13 570-13
LOCAL/REMOTE
ADC0-2
IC102-104
LOCAL/ REMOTE SW
A B C
0X 1X 0Y 1Y 0Z 1Z 0X 1X 0Y 1Y 0Z 1Z 0X 1X
VIDEO CONTROL CONNECTOR
131-4 500-15 VIDEO LEVEL CONT 7-12
131-6 500-16 CHROMA LEVEL CONT 7-10
131-5 500-17 SET UP/BLACK LEVEL CONT 8-12
131-13 500-18 Y/C DELAY CONT 8-10
131-2 500-19 CHROMA PHASE CONT 9-12
131-1 500-20 SYNC CONT 9-10
131-3 500-21 SC CONT 10-5
IC7-10
LEVEL CONVERTER
RV1 VIDEO
RV2 CHROMA
RV3 NTSC SET UP / PAL BLACK LEVEL
RV4 Y/C DLY
RV5 CHROMA PH
RV6 SYNC PH
RV7 SC PH
TP1 VIDEO 7-1 502-23 570-23 REM VIDEO LEVEL 102-12
TP2 CHROMA 7-7 502-24 570-24 REM CHROMA LEVEL 102-2
TP3 NTSC SET UP / PAL BLACK LEVEL 8-1 502-25 570-25 REM SET UP/BLACK LEVEL 102-5
TP4 Y/C DLY 8-7 502-26 570-26 REM Y/C DELAY 103-12
TP5 CHROMA PH 9-1 502-27 570-27 REM CHROMA PHASE 103-2
TP6 SYNC PH 9-7 502-28 570-28 REM SYNC PHASE 103-5
TP7 SC PH 10-1 502-29 570-29 REM SC PHASE 104-12
RV101 VIDEO 102-13
RV103 CHROMA 102-1
RV105 NTSC SET UP / PAL BLACK LEVEL 102-3
RV107 Y/C DELAY 103-13
Between PB SYSTEM ONLY
RV102 CHROMA PHASE 103-1
RV104 SYNC PHASE 103-3
RV106 SC PHASE 104-13

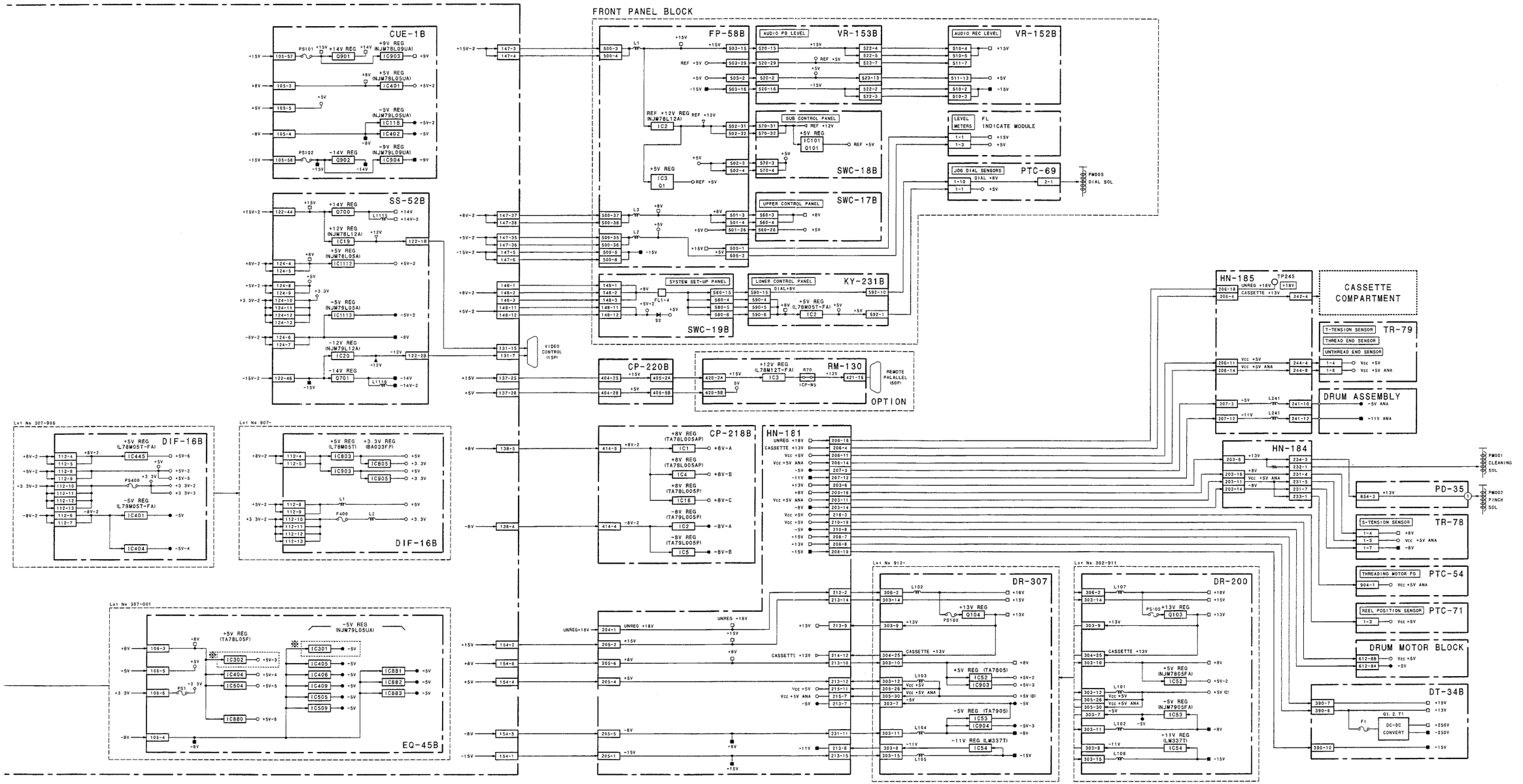


FP-58B : Front Panel Control Board
VR-152B : Phone Level VR Board
VR-153B : Audio PB VR Board
SWC-17B : Upper Control Panel Board
SWC-18B : Sub Control Panel Board
SWC-19B : System Set-up Panel Board
KY-231B : Lower Control Panel Board
DP-176B : Time Counter Display Board
PTC-69 : Search Dial Assembly Board

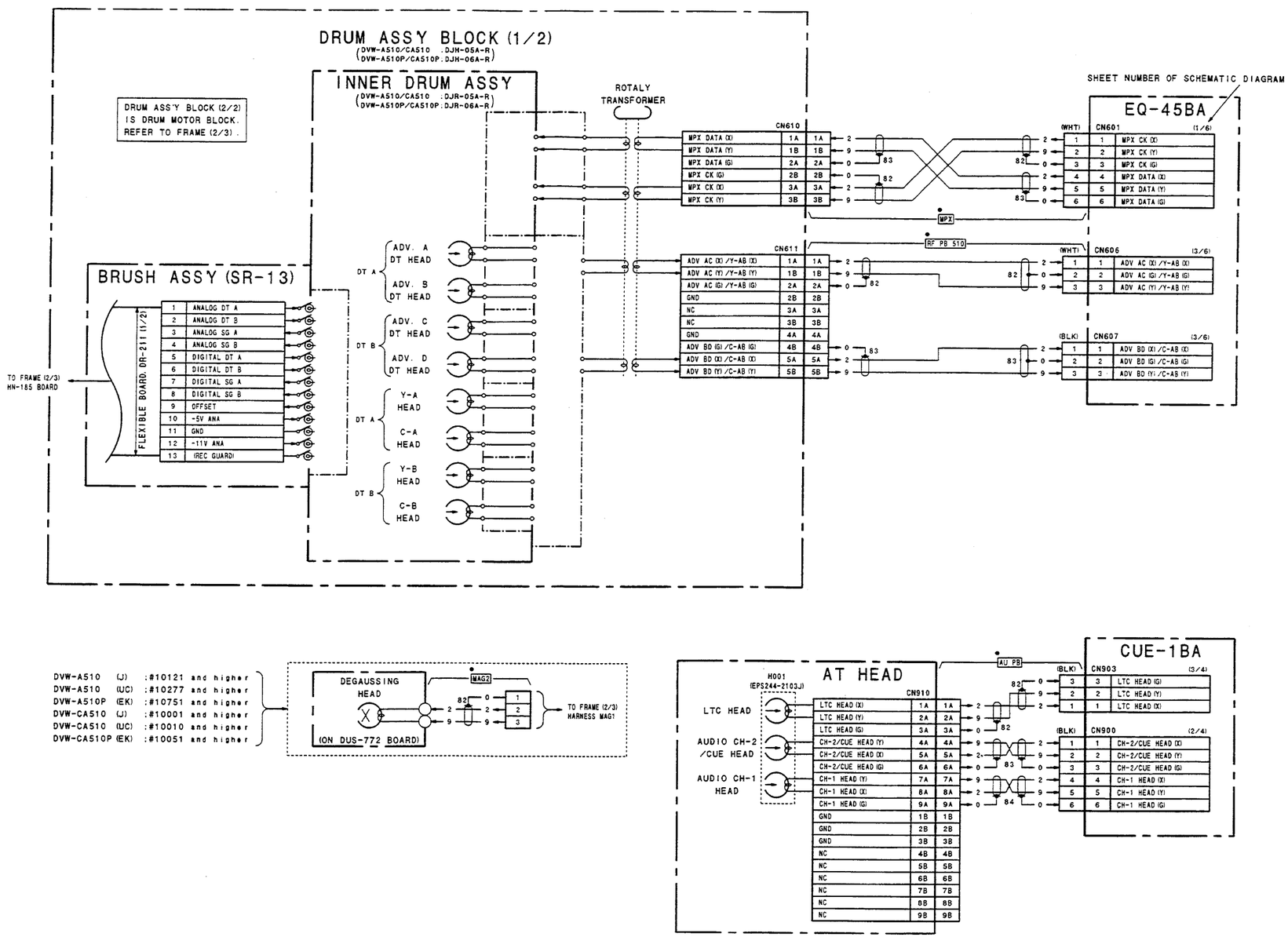
FUNCTION CONTROL BLOCK

DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P


SOPS-1042B/D
AC-155B/139B
(NTSC) (PAL)
SOPS-1019C
SOPS-1042S
SOPS-1042A
APR-1B
VPR-1B
EQ-45B
MB-441
*TBC-23
*DM-89
*TBC-24
*AP-28
DPR-36H
*Betacam PB SYSTEM ONLY
FILTER
RUSH CURRENT LIMITER
VOLTAGE-DOUBLING RECTIFIER
SW
LOW VOLTAGE DETECTOR
OVER CURRENT DETECTOR
VOLTAGE CONTROL
OVER CURRENT DETECTOR
RECT
VOLTAGE CONTROLLER
VOLTAGE DETECTOR
DRIVE
PWM CONTROLLER
OVER VOLT DETECTOR
POWER
BREAKER
CIRCUIT BREAKER
CN003 INLET
FUN MOTOR (M)
CONTROL PANEL (15P)
UNREG
+5V REG (NJM78L05UA)
-5V REG (NJM79L05UA/L79M05T)
+12V REG (TA78L12F)
+5V REG (TA78L05F/L78M05T)
-5V REG (TA79L05F)
+12V REG (NJM78L12A)
+9V REG (NJM78L09A)
+7V REG (NJM78L05A)
+5V REG (L78M05T-FA)
-12V REG (NJM79L12A)
-7V REG (NJM79L05A)
+4V REG (NJM431U)
+2.5V REG (NJM431U)
Lot No.403-
Lot No.307-312
Lot No.002-


FRONT PANEL BLOCK
CUE-1B
SS-52B
FP-58B
VR-153B
VR-152B
SWC-18B
SWC-17B
SWC-19B
KY-231B
PTC-69
CP-220B
RM-130
OPTION
CP-218B
HN-181
HN-185
HN-184
CASSETTE COMPARTMENT
TR-79
DRUM ASSEMBLY
PD-35
TR-78
PTC-54
PTC-71
DRUM MOTOR BLOCK
DT-34B
DR-307
DR-200
DIF-16B
DIF-16B
EQ-45B
Lot No 307-906
Lot No 907-
Lot No 307-001
Lot No 912-
Lot No 302-911

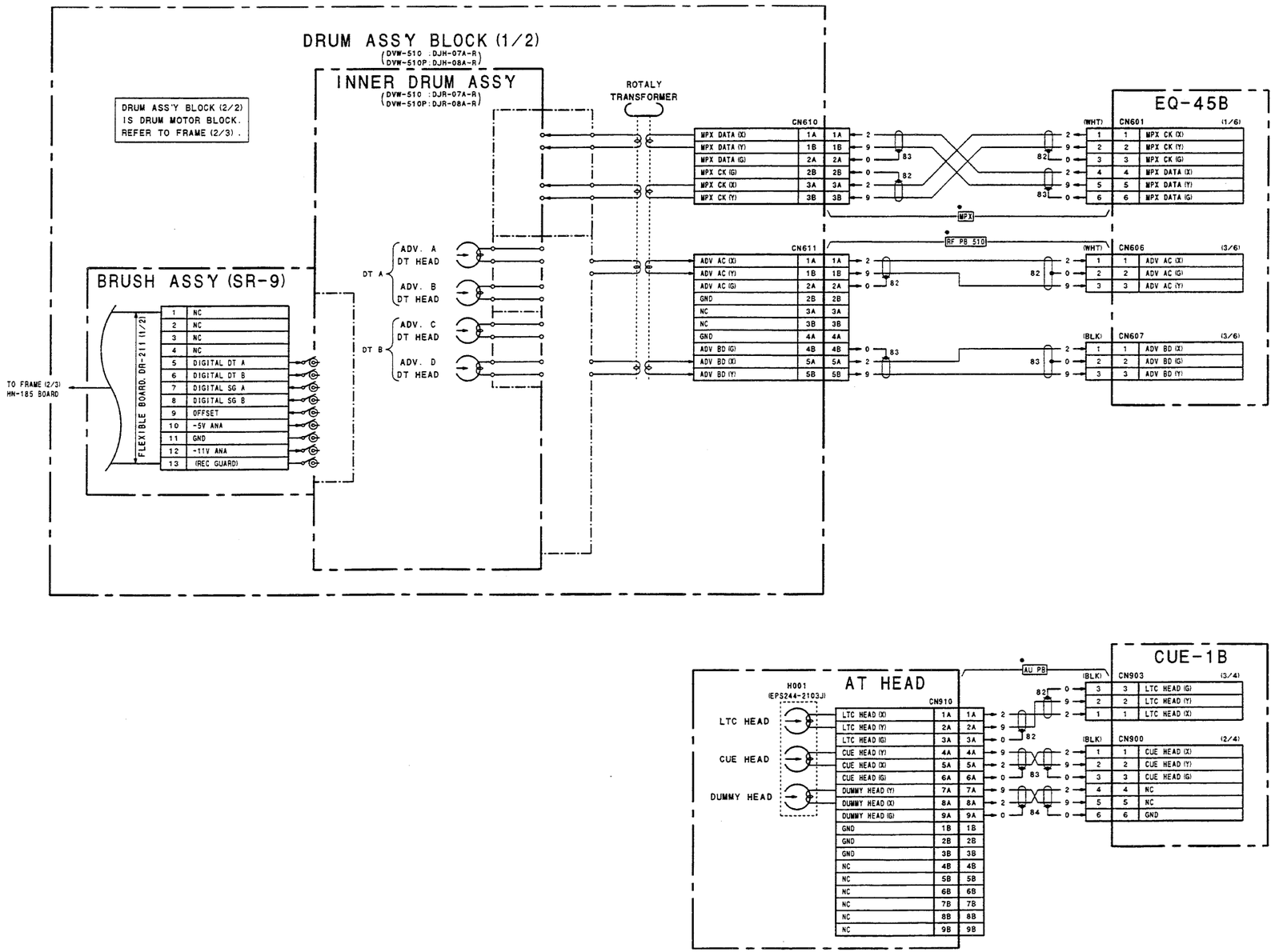
3-3. FRAME



Drum/Heads (Except CTL Head)

FRAME WIRING (1/3)

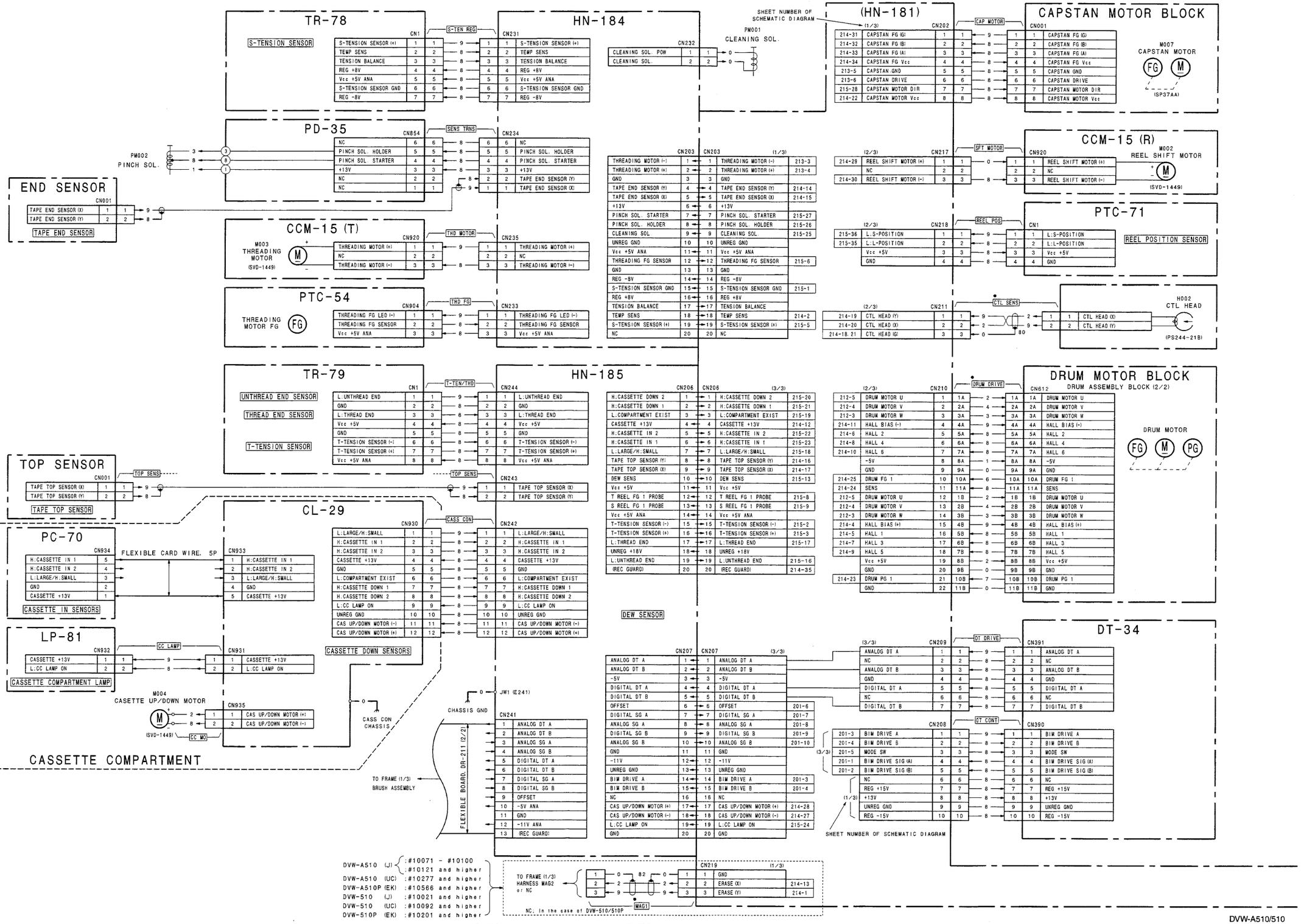
DVW-A510/A510P
DVW-CA510/CA510P

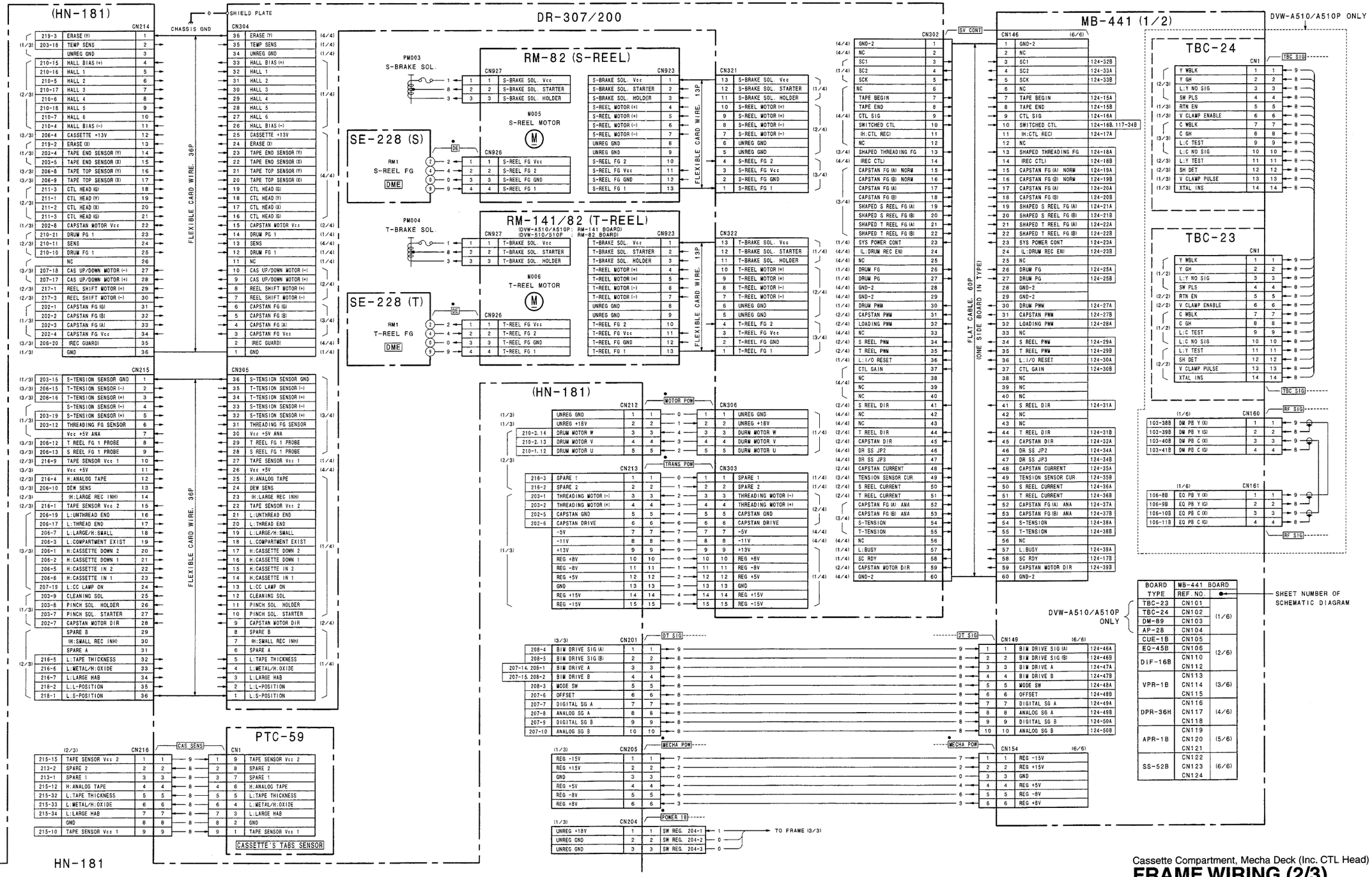


Drum/Heads (Except CTL Head)

FRAME WIRING (1/3)

DVW-510/510P


TR-78
S-TENSION SENSOR
CN1
S-TENSION SENSOR (+) 1
TEMP SENS 2
TENSION BALANCE 3
REG +8V 4
Vcc +5V ANA 5
S-TENSION SENSOR GND 6
REG -8V 7
S-TEN REG
CN231
HN-184
CN232
CLEANING SOL. POW 1
CLEANING SOL. 2
PM001
CLEANING SOL.
SHEET NUMBER OF SCHEMATIC DIAGRAM
(HN-181)
(1/3)
CN202
CAP MOTOR
CAPSTAN MOTOR BLOCK
CN001
214-31 CAPSTAN FG (G)
214-32 CAPSTAN FG (B)
214-33 CAPSTAN FG (A)
214-34 CAPSTAN FG Vcc
213-5 CAPSTAN GND
213-6 CAPSTAN DRIVE
215-28 CAPSTAN MOTOR DIR
214-22 CAPSTAN MOTOR Vcc
M007
CAPSTAN MOTOR
FG M
(SP37AA)
PD-35
CN854
NC 6
PINCH SOL. HOLDER 5
PINCH SOL. STARTER 4
+13V 3
NC 2
NC 1
SENS TRNS
CN234
PM002
PINCH SOL.
CCM-15 (R)
CN920
(2/3)
CN217
SFT MOTOR
214-29 REEL SHIFT MOTOR (+)
NC
214-30 REEL SHIFT MOTOR (-)
M002
REEL SHIFT MOTOR
(SVD-1449)
END SENSOR
CN001
TAPE END SENSOR (X) 1
TAPE END SENSOR (Y) 2
TAPE END SENSOR
CN203
CN203
(1/3)
THREADING MOTOR (-) 1 213-3
THREADING MOTOR (+) 2 213-4
GND 3
TAPE END SENSOR (Y) 4 214-14
TAPE END SENSOR (X) 5 214-15
+13V 6
PINCH SOL. STARTER 7 215-27
PINCH SOL. HOLDER 8 215-26
CLEANING SOL. 9 215-25
UNREG GND 10
Vcc +5V ANA 11
THREADING FG SENSOR 12 215-6
GND 13
REG -8V 14
S-TENSION SENSOR GND 15 215-1
REG +8V 16
TENSION BALANCE 17
TEMP SENS 18 214-2
S-TENSION SENSOR (+) 19 215-5
NC 20
PTC-71
CN1
(2/3)
CN218
REEL POS
215-36 L:S-POSITION
215-35 L:L-POSITION
Vcc +5V
GND
L:S-POSITION
L:L-POSITION
Vcc +5V
GND
REEL POSITION SENSOR
CCM-15 (T)
M003
THREADING
MOTOR
(SVD-1449)
CN920
THREADING MOTOR (+) 1
NC 2
THREADING MOTOR (-) 3
THD MOTOR
CN235
THREADING MOTOR (+)
NC
THREADING MOTOR (-)
PTC-54
THREADING
MOTOR FG
FG
CN904
THREADING FG LED (-) 1
THREADING FG SENSOR 2
Vcc +5V ANA 3
THD FG
CN233
THREADING FG LED (-)
THREADING FG SENSOR
Vcc +5V ANA
(2/3)
CN211
CTL SENS
214-19 CTL HEAD (Y)
214-20 CTL HEAD (X)
214-18.21 CTL HEAD (G)
80
H002
CTL HEAD
CTL HEAD (X)
CTL HEAD (Y)
(PS244-21B)
TR-79
CN1
UNTHREAD END SENSOR
THREAD END SENSOR
T-TENSION SENSOR
L:UNTHREAD END 1
GND 2
L:THREAD END 3
Vcc +5V 4
GND 5
T-TENSION SENSOR (-) 6
T-TENSION SENSOR (+) 7
Vcc +5V ANA 8
T-TEN/THD
CN244
HN-185
CN206
CN206
(3/3)
H:CASSETTE DOWN 2 1 215-20
H:CASSETTE DOWN 1 2 215-21
L:COMPARTMENT EXIST 3 215-19
CASSETTE +13V 4 214-12
H:CASSETTE IN 2 5 215-22
H:CASSETTE IN 1 6 215-23
L:LARGE/H:SMALL 7 215-18
TAPE TOP SENSOR (Y) 8 214-16
TAPE TOP SENSOR (X) 9 214-17
DEW SENS 10 215-13
Vcc +5V 11
T REEL FG 1 PROBE 12 215-8
S REEL FG 1 PROBE 13 215-9
Vcc +5V ANA 14
T-TENSION SENSOR (-) 15 215-2
T-TENSION SENSOR (+) 16 215-3
L:THREAD END 17 215-17
UNREG +18V 18
L:UNTHREAD END 19 215-16
(REC GUARD) 20 214-35
(2/3)
CN210
DRUM DRIVE
DRUM MOTOR BLOCK
CN612
DRUM ASSEMBLY BLOCK (2/2)
212-5 DRUM MOTOR U
212-4 DRUM MOTOR V
212-3 DRUM MOTOR W
214-11 HALL BIAS (-)
214-6 HALL 2
214-8 HALL 4
214-10 HALL 6
-5V
GND
214-25 DRUM FG 1
214-24 SENS
212-5 DRUM MOTOR U
212-4 DRUM MOTOR V
212-3 DRUM MOTOR W
214-4 HALL BIAS (+)
214-5 HALL 1
214-7 HALL 3
214-9 HALL 5
Vcc +5V
GND
214-23 DRUM PG 1
GND
DRUM MOTOR
FG M PG
TOP SENSOR
CN001
TAPE TOP SENSOR (X) 1
TAPE TOP SENSOR (Y) 2
TAPE TOP SENSOR
TOP SENS
CN243
CL-29
CN930
CASS CON
CN242
L:LARGE/H:SMALL 1
H:CASSETTE IN 1 2
H:CASSETTE IN 2 3
CASSETTE +13V 4
GND 5
L:COMPARTMENT EXIST 6
H:CASSETTE DOWN 1 7
H:CASSETTE DOWN 2 8
L:CC LAMP ON 9
UNREG GND 10
CAS UP/DOWN MOTOR (-) 11
CAS UP/DOWN MOTOR (+) 12
CASSETTE DOWN SENSORS
PC-70
CN934
H:CASSETTE IN 1 5
H:CASSETTE IN 2 4
L:LARGE/H:SMALL 3
GND 2
CASSETTE +13V 1
CASSETTE IN SENSORS
FLEXIBLE CARD WIRE. 5P
CN933
H:CASSETTE IN 1
H:CASSETTE IN 2
L:LARGE/H:SMALL
GND
CASSETTE +13V
LP-81
CN932
CASSETTE +13V 1
L:CC LAMP ON 2
CASSETTE COMPARTMENT LAMP
CC LAMP
CN931
CASSETTE +13V
L:CC LAMP ON
M004
CASSETTE UP/DOWN MOTOR
(SVD-1449)
CC MO
CN935
CAS UP/DOWN MOTOR (+)
CAS UP/DOWN MOTOR (-)
CASS CON
CHASSIS
JW1 (E241)
CHASSIS GND
CN241
ANALOG DT A 1
ANALOG DT B 2
ANALOG SG A 3
ANALOG SG B 4
DIGITAL DT A 5
DIGITAL DT B 6
DIGITAL SG A 7
DIGITAL SG B 8
OFFSET 9
-5V ANA 10
GND 11
-11V ANA 12
(REC GUARD) 13
FLEXIBLE BOARD. DR-211 (2/2)
TO FRAME (1/3)
BRUSH ASSEMBLY
DEW SENSOR
CN207
CN207
(3/3)
ANALOG DT A 1
ANALOG DT B 2
-5V 3
DIGITAL DT A 4
DIGITAL DT B 5
OFFSET 6 201-6
DIGITAL SG A 7 201-7
ANALOG SG A 8 201-8
DIGITAL SG B 9 201-9
ANALOG SG B 10 201-10
GND 11
-11V 12
UNREG GND 13
BIM DRIVE A 14 201-3
BIM DRIVE B 15 201-4
NC 16
CAS UP/DOWN MOTOR (+) 17 214-28
CAS UP/DOWN MOTOR (-) 18 214-27
L:CC LAMP ON 19 215-24
GND 20
(3/3)
CN209
DT DRIVE
DT-34
CN391
ANALOG DT A
NC
ANALOG DT B
GND
DIGITAL DT A
NC
DIGITAL DT B
CN208
DT CONT
CN390
(3/3)
201-3 BIM DRIVE A
201-4 BIM DRIVE B
201-5 MODE SW
201-1 BIM DRIVE SIG (A)
201-2 BIM DRIVE SIG (B)
NC
REG +15V
(1/3) +13V
UNREG GND
REG -15V
SHEET NUMBER OF SCHEMATIC DIAGRAM
DVW-A510 (J) :#10071 - #10100
:#10121 and higher
DVW-A510 (UC) :#10277 and higher
DVW-A510P (EK) :#10566 and higher
DVW-510 (J) :#10021 and higher
DVW-510 (UC) :#10092 and higher
DVW-510P (EK) :#10201 and higher
TO FRAME (1/3)
HARNESS MAG2
or NC
82
MAG1
NC. In the case of DVW-510/510P
CN219
(1/3)
GND
ERASE (X) 214-13
ERASE (Y) 214-1

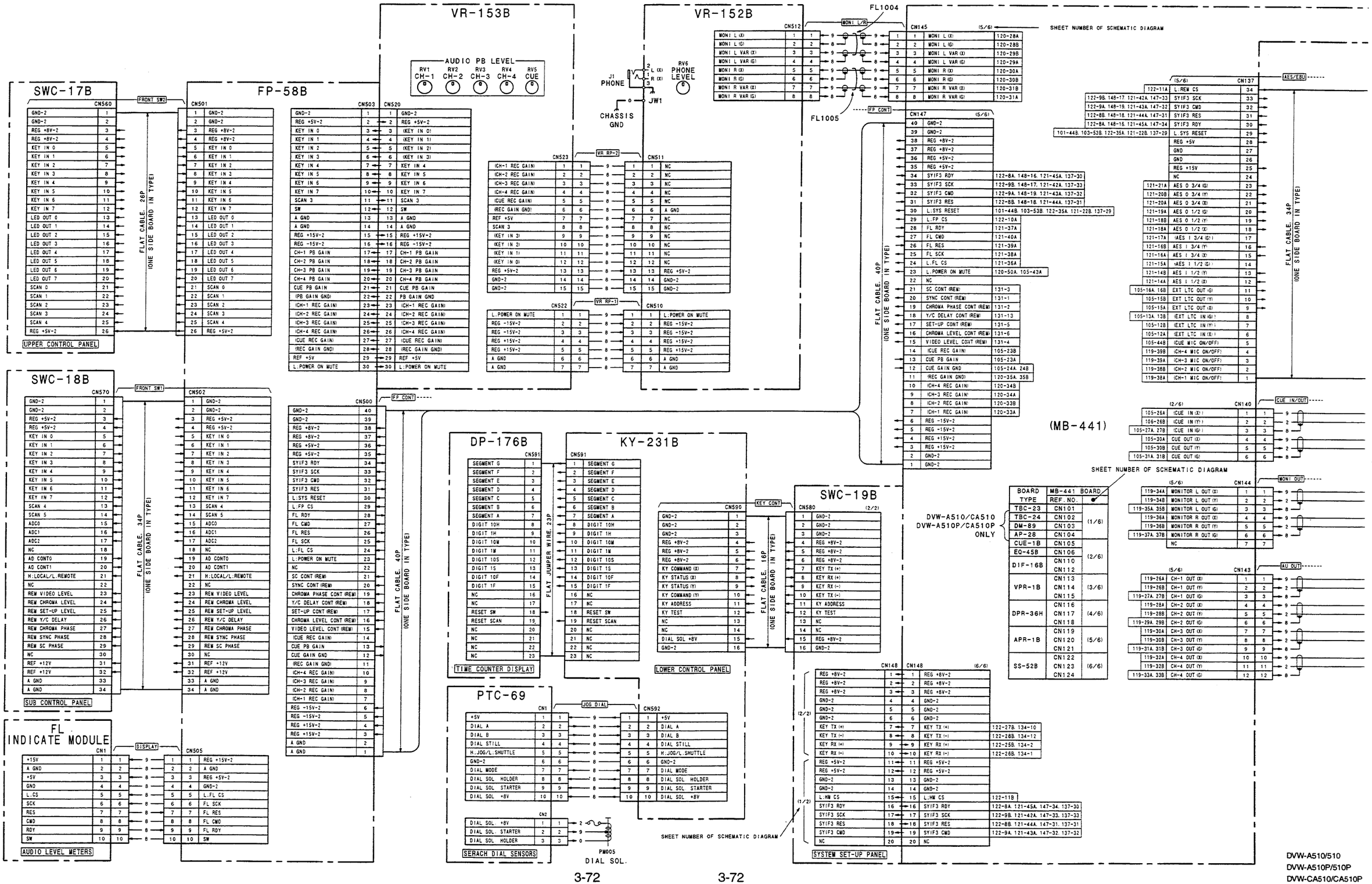


Cassette Compartment, Mecha Deck (Inc. CTL Head)

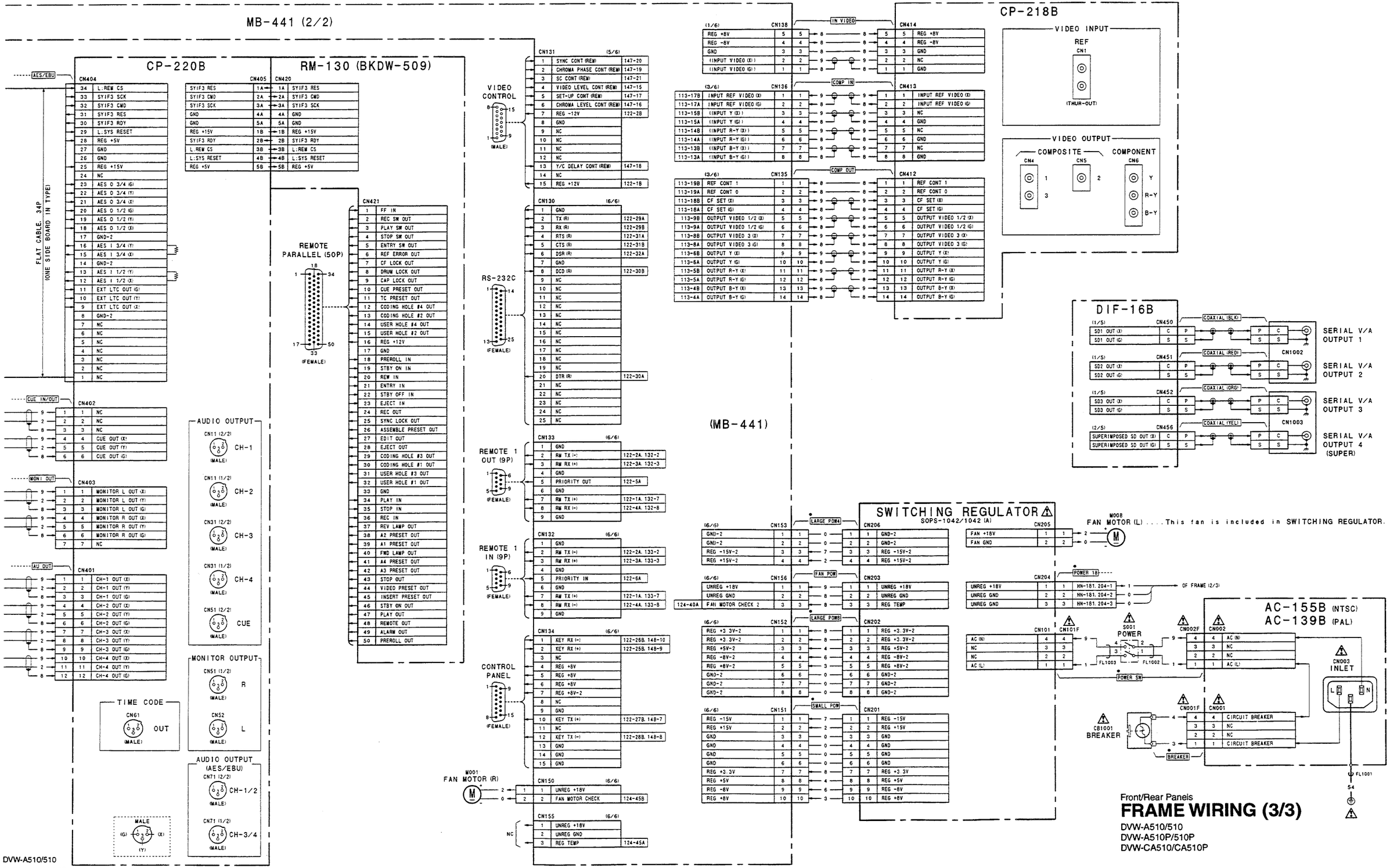
FRAME WIRING (2/3)

DVW-A510/510
DVW-A510P/510P

FL1004 and FL1005 are not equipped in the DVW-A510/510/CA510.



DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P



Front/Rear Panels

FRAME WIRING (3/3)

DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

SECTION 4
ERROR MESSAGES AND TROUBLESHOOTING

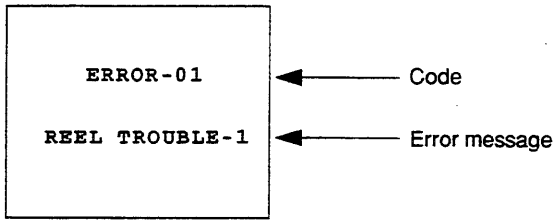
4-1. ERROR MESSAGE

This unit features self-diagnostics.
When trouble is detected, an error code is displayed immediately in the time counter display on the lower control panel, an error code and message are superimposed on the video monitor connected to the VIDEO OUTPUT COMPOSITE 3 connector and the SERIAL V/A OUTPUT 4 connector.
Furthermore, as for the interface error (error code 92, 93, 96 and 98), interface object which error occurred replaced by sub error massage on the video monitor.
(To display error code and massage on the video monitor, the CHARACTER switch on the system setup panel must be set to ON.)

Time counter display

Error code

Video monitor display



Code	Error message	Description	Detection
01	REEL TROUBLE-1	The slack of the tape is detected during threading or unthreading, and then tape protection is done.	Detected when the ratio of the FG frequency at a supply reel, take-up reel and threading motor is less than the specified value.
02	REEL TROUBLE-2	The slack or breaking of the tape is detected in search, fast forward, or rewind mode, and then tape protection is done.	Detected when the ratio of the FG frequency at a supply reel and take-up reel is less than the specified value.
03	REEL TROUBLE-3	The slack or breaking of the tape is detected in playback mode, or either of the lock of the supply or take-up reel is detected, and then tape protection is done.	Detected when the FG frequency at a supply or take-up reel is zero (0), or when the tension detected from a tension sensor is less than 15 g.
04	REEL TROUBLE-4	It is detected that the tape does not run at the speed of designation in fast forward or rewind mode, and then tape protection is done.	Depends on the comparison between the tape speed using the FG frequency at supply and take-up reels and the designated speed.
05	REEL TROUBLE-5	It is detected that the supply or take-up reel cannot stop with a cassette is not inserted, or detected that over current has been flowing to supply and take-up reels.	Detected using the FG frequency or current at supply and/or take-up reels.
06	TAPE TENSION ERROR	When excessive tension is detected, tape protection is done.	Detected when the tension detected from a tension sensor is more than 55 g.
07	CAPSTAN TROUBLE	It is detected that the tape does not run at the speed of designation in play or search mode, and tape protection is done.	Detected at the tape speed detected from the FG frequency at a capstan motor.
08	DRUM TROUBLE	It is detected that drum motor rotation is not normal, and then tape protection is done.	Detected when the drum speed obtained from the speed FG of the drum motor is less than the specified value.
09	TH/UNTH MOTOR TIME OUT	It is detected that threading or unthreading is not completed, and then tape protection is done.	Detected when threading or unthreading is not completed within ten seconds after it is started.
0A	THREADING TROUBLE	It is detected that threading cannot be done, and then tape protection is done.	Detected when the tape top sensor is acted during threading after the short FF mode is automatically entered three times.

(Continue)

(Continued)

Code	Error message	Description	Detection
10	**HUMID**	Condensation is detected.	Detected using a DEW (condensation) sensor.
11	**TAPE TOP/END SENSOR TROUBLE**	The tape top or end sensor operation is defective.	Detected when the tape top and end are detected at the same time.
12	**TAPE TOP SENSOR TROUBLE**	The tape top sensor operation is defective.	Detected when the tape top continues for more than seven seconds.
13	**TAPE END SENSOR TROUBLE**	The tape end sensor operation is defective.	Detected when the tape end continues for more than seven seconds.
14	**FAN MOTOR TROUBLE**	The operation of the fan motor is defective.	Detected according to the period of a ripple noise at the fan motor terminal.
20	**CASSETTE COMPARTMENT MOTOR LOCK**	It is detected that cassette up/down operation is not completed, and then tape protection is done.	Detected when cassette up/down operation is not completed within four seconds after it is started.
21	**REEL SHIFT MOTOR LOCK**	It is detected that driving of the L position to S position or the S position to L position in the reel table is not completed, and then tape protection operation is done.	Detect when reel table driving is not completed within four seconds after it is started.
22	**REEL POSITION SENSOR TROUBLE**	The operation of the L/S position sensor of the reel table is defective.	Detected when the L and S positions are detected at the same time.
90	**KEY BOARD INTERFACE ERROR**	The interface between the KY-231B board and SS-52B board is defective.	Detected when no interface signal is sent from the SS-52B board to the KY-231B board.
91	**1/2 VD NOT EXIST**	No 1/2 VD signal input to SS-52B board is detected.	Detected when no 1/2 VD signal input to the SS-52B board.
92	**INTERNAL INTERFACE ERROR** **sub error message** **FP** **APR** **RM** **SWC** **DPR** **VPR** **TBC** **DM**	The serial or parallele interface between below board and SS-52B board is defective. (DPR-36H board; parallele interface) FP : IC6 of FP-58B board APR : IC51 of APR-1B board RM : IC2 of RM-130 board (BKDW-509) SWC : IC2 of SWC-19B board DPR : DPR-36H board VPR : IC753 of VPR-1B board TBC : IC202 of TBC-23 board (DVW-A510P/A510 only) DM : IC906 of DM-89 board (DVW-A510P/A510 only)	Detected when no interface signal is sent from the each board to the SS-52B board three times continuously.
93	**CPU INITIALIZE ERROR** **sub error message** **DT** **main servo (SV1)** **drum servo (SV2)**	The interface between below CPU on SS-52B board and main CPU (of IC5 on SS-52B board) is defective when the POWER switch is turned ON. DT : IC2104 main servo (SV1) : IC750 drum servo (SV2) : IC700	Detected when no interface signal is sent from the each CPU to the main CPU at the POWER switch is turned ON.
94	**CPU INITIALIZE ERROR 2**	The operational defect of main CPU (of IC5 on SS-52B board) is defective when the POWER switch is turned ON. (Not display on the video monitor)	Detected when no interface signal is sent from the main CPU to the sub CPU (of IC50 on SS-52B board) at the POWER switch is turned ON.

(Continue)

(Continued)

Code	Error message	Description	Detection
96	**NV-RAM TROUBLE** **sub error message** **menu-1** **menu-2** **menu-3**	The operational defect of the NV-RAM (setup menu data) on the SWC-19B board or SS-52B board is detected. Then, reset the data in the NV-RAM to the condition at exfactory for menu-1, 2, 3, and id code.	
		menu-1 : IC13 of SS-52B board*2 menu-2 : IC13 of SS-52B board*2 menu-3 : IC13 of SS-52B board*2	Detected by the NV-RAM data's checksum.
	id code	id code : IC3, 4, 5 of SWC-19B board	Detected when the ID codes of three NV-RAMs are not equal.
	SWC-1 **SWC-2** **SWC-3** **SWC-4**	SWC-1 : IC3 of SWC-19B board SWC-2 : IC4 of SWC-19B board SWC-3 : IC5 of SWC-19B board SWC-4 : IC6 of SWC-19B board	Detected when no interface signal is sent from the each NV-RAM to IC2 on the SWC-19B board.
97	**SV NV-RAM TROUBLE**	The operational defect of the NV-RAM (servo adjustment data) on the DR-307/200 board is detected.	Detected by the NV-RAM data's checksum.
98*1	**NV-RAM TROUBLE** **sub error message** **RF ADJUST DATA LOST** **REMOTE-2 DATA RESET**	The operational defect of the NV-RAM (IC6) (RF adjustment data or REMOTE-2 setup data) on the SWC-19B board is detected. Then, reset the data in the NV-RAM to the condition at exfactory.	Detected by the NV-RAM data's checksum.

*1 ; This error code is applied to the unit in which the version numbers of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS-52B board are 1.10 or higher.

*2 ; This description is applied to the unit in which the version numbers of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS-52B board are 3.10 or higher.
For the inapplicable unit, are as follows:
menu-1 : IC3 of SWC-19B board
menu-2 : IC4 of SWC-19B board
menu-3 : IC5 of SWC-19B board

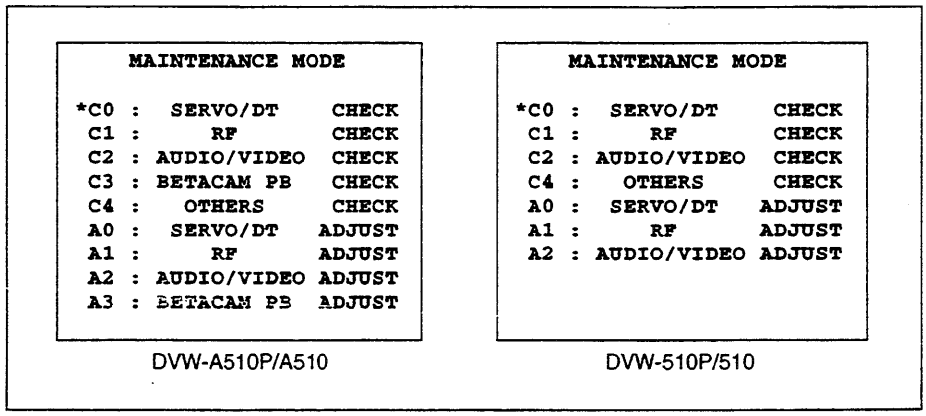
SECTION 5
MAINTENANCE MODE

5-1. OUTLINE

The DVW-A510P/510P/A510/510 has the maintenance mode required for maintenance and troubleshooting. The maintenance mode is as described below.
Each mode consists of some menus and submenus.
(For the menu tree, refer to page 5-4.)

C0: SERVO/DT CHECK
C1: RF CHECK
C2: AUDIO/VIDEO CHECK
C3: BETACAM PB CHECK (DVW-A510P/A510 only)
C4: OTHERS CHECK
A0: SERVO/DT ADJUST
A1: RF ADJUST
A2: AUDIO/VIDEO ADJUST
A3: BETACAM PB ADJUST (DVW-A510P/A510 only)

The contents of the maintenance mode are superimposed on the video monitor that is connected to the VIDEO OUTPUT COMPOSITE 3 connector and SERIAL V/A OUTPUT 4 connector.
The figure below shows an example of the screen display.



Superimposed Screen (Mode Screen when Maintenance Mode is Activated)

The buttons etc. related to the maintenance mode are as follows:

① **Time counter (Lower control panel)**
The menu number is displayed in the blinking/lighting state during menu assignment.
For the manual adjustment, data is displayed in the blinking state.
Be sure to use a video monitor because the information that can be displayed on the time counter is restricted in the maintenance mode.

② **MENU button (Lower control panel)**
In the maintenance mode, the MENU button has the same function as switch ⑨ S301 on the SS board.

③ **SET button (Lower control panel)**
In the maintenance mode, the SET button has the same function as switch ⑧ S300 on the SS board.
With DIP switch ⑩ S100-7 on the SS board set to ON (upper position), the maintenance mode is entered when this button is pressed while pressing the ④ CTL button in the setup menu mode.

④ **CTL button (Lower control panel)**
With DIP switch ⑩ S100-7 on the SS board set to ON (upper position), the maintenance mode is entered when the ③ SET button is pressed while pressing this button in the setup menu mode.

⑤ **SHUTTLE button (Lower control panel)**
When the ⑦ search dial is turned while pressing this button during manual adjustment, the adjustment data can be changed.

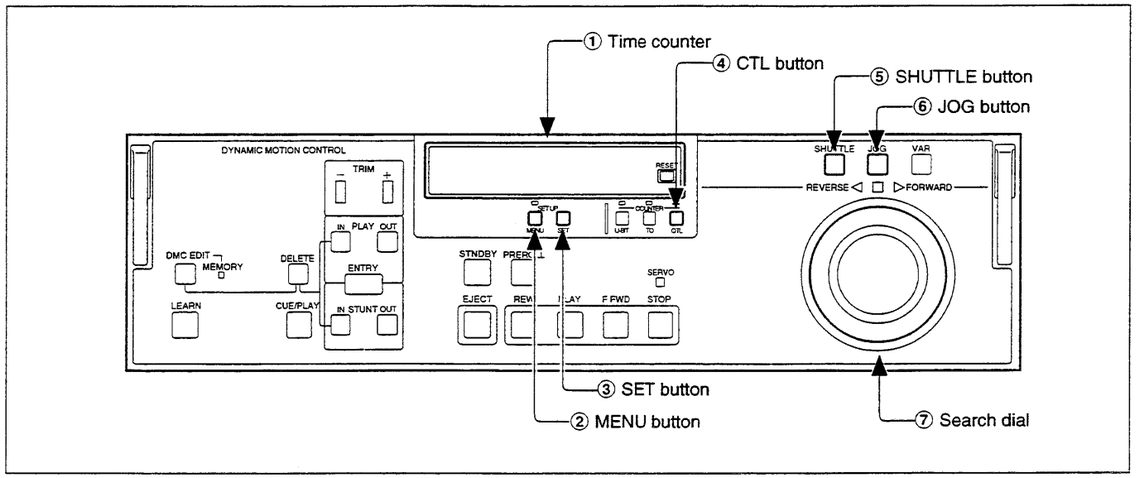
⑥ **JOG button (Lower control panel)**
The JOG lamp lights when this button is pressed once. The ⑦ search dial is then set to the JOG mode.
When the ⑦ search dial is turned while pressing this button during manual adjustment, the adjustment data can be changed.

⑦ **Search dial (Lower control panel)**
The search dial selects each menu in the JOG mode.
To change the adjustment data during manual adjustment, turn this search dial while pressing the ⑥ JOG button or ⑤ SHUTTLE button.
The SHUTTLE and JOG modes are alternately selected every time this dial is pressed. The lamp (SHUTTLE or JOG) indicating the corresponding mode then lights.

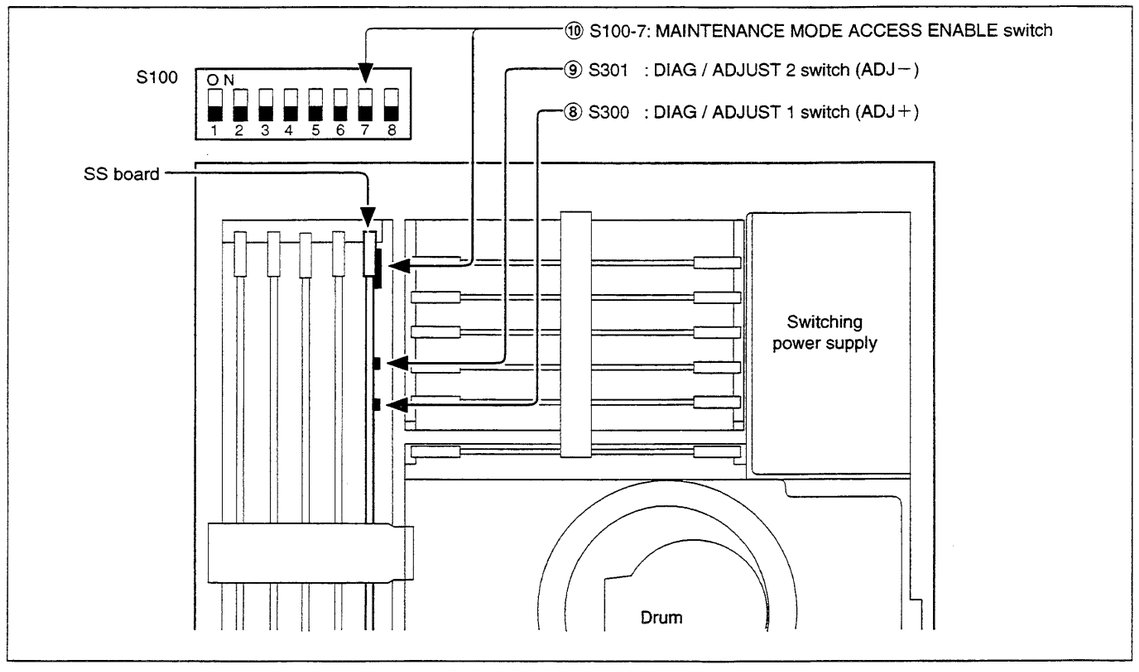
⑧ **S300 (SS board): DIAG/ADJUST 1 switch (ADJ +)**
Press this switch to activate the maintenance mode.
In the maintenance mode, press this switch to execute the menu or submenu selected by the ⑦ search dial.
In the maintenance mode, the ③ SET button is also the same in function as this switch.

⑨ **S301 (SS board): DIAG/ADJUST 2 switch (ADJ −)**
In the maintenance mode, press this switch to return to the preceding screen.
To exit the maintenance mode, press this switch when the mode screen is displayed.
In the maintenance mode, the ② MENU button is also the same in function as this switch.

⑩ **S100-7 (SS board): MAINTENANCE MODE ACCESS ENABLE switch**
To enter the maintenance mode by the button operation on the front panel, set this switch to ON (upper position) in advance.



Lower Control Panel



Switch Position on SS Board

Activating the maintenance mode

(1) Confirm that the video monitor is connected to the VIDEO OUTPUT COMPOSITE 3 connector or SERIAL V/A OUTPUT 4 connector.

(2) Press the ⑧ S300 (SS board).

(3) The mode screen in the maintenance mode is displayed on the monitor screen.

Terminating the maintenance mode

(1) Press the ② MENU button or ⑨ S301 (SS board) several times to display the mode screen.

(2) Press the ② MENU button or ⑨ S301 (SS board) again when the mode screen is displayed. The maintenance mode is then exited.

```
      MAINTENANCE MODE

*C0 :   SERVO/DT     CHECK
 C1 :      RF        CHECK
 C2 : AUDIO/VIDEO    CHECK
 C3 : BETACAM PB     CHECK
 C4 :    OTHERS      CHECK
 A0 :   SERVO/DT     ADJUST
 A1 :      RF        ADJUST
 A2 : AUDIO/VIDEO    ADJUST
 A3 : BETACAM PB     ADJUST
```

DVW-A510P/A510

```
      MAINTENANCE MODE

*C0 :   SERVO/DT     CHECK
 C1 :      RF        CHECK
 C2 : AUDIO/VIDEO    CHECK
 C4 :    OTHERS      CHECK
 A0 :   SERVO/DT     ADJUST
 A1 :      RF        ADJUST
 A2 : AUDIO/VIDEO    ADJUST
```

DVW-510P/510

Mode Screen

Activating the maintenance mode on lower control panel

When the ⑩ S100-7 (SS board) is set to ON (upper position), the maintenance mode can be activated by the operation mentioned below.

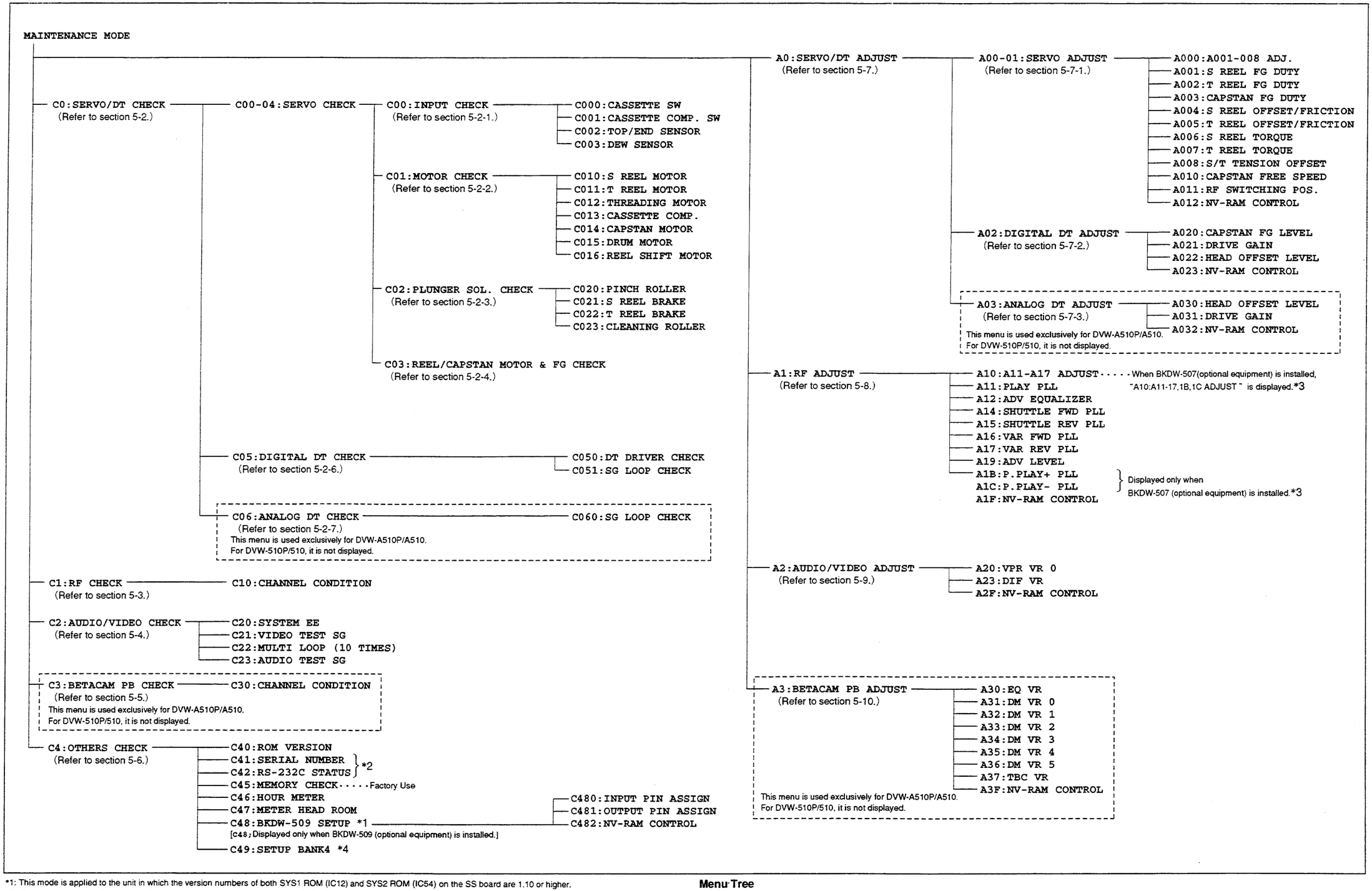
(1) Press the ② MENU button once.
(The mode then changes from operation mode to setup menu mode.)

(2) Press the ③ SET button while pressing the ④ CTL button.
(The mode then changes from setup menu mode to maintenance mode.)

(3) The mode screen in the maintenance mode is displayed on the monitor screen.

5-1. OUTLINE

5-1. OUTLINE



Menu Tree

*1: This mode is applied to the unit in which the version numbers of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS board are 1.10 or higher.
*2: These modes are applied to the unit in which the three version numbers of SYS1 ROM(IC12), SV1 ROM(IC761), and DT ROM(IC211) on the SS board are 2.00 or higher.
*3: The A1B and A1C modes are applied on the unit in which the two version numbers of SYS1 ROM(IC12) and SV1 ROM(IC761) are 2.10 or higher.
*4: This mode is applied to the unit in which the version numbers of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS board are 3.10 or higher.

5-4

5-2. SERVO/DT SYSTEM CHECK MODE

5-2. SERVO/DT SYSTEM CHECK MODE (C0: SERVO/DT CHECK)

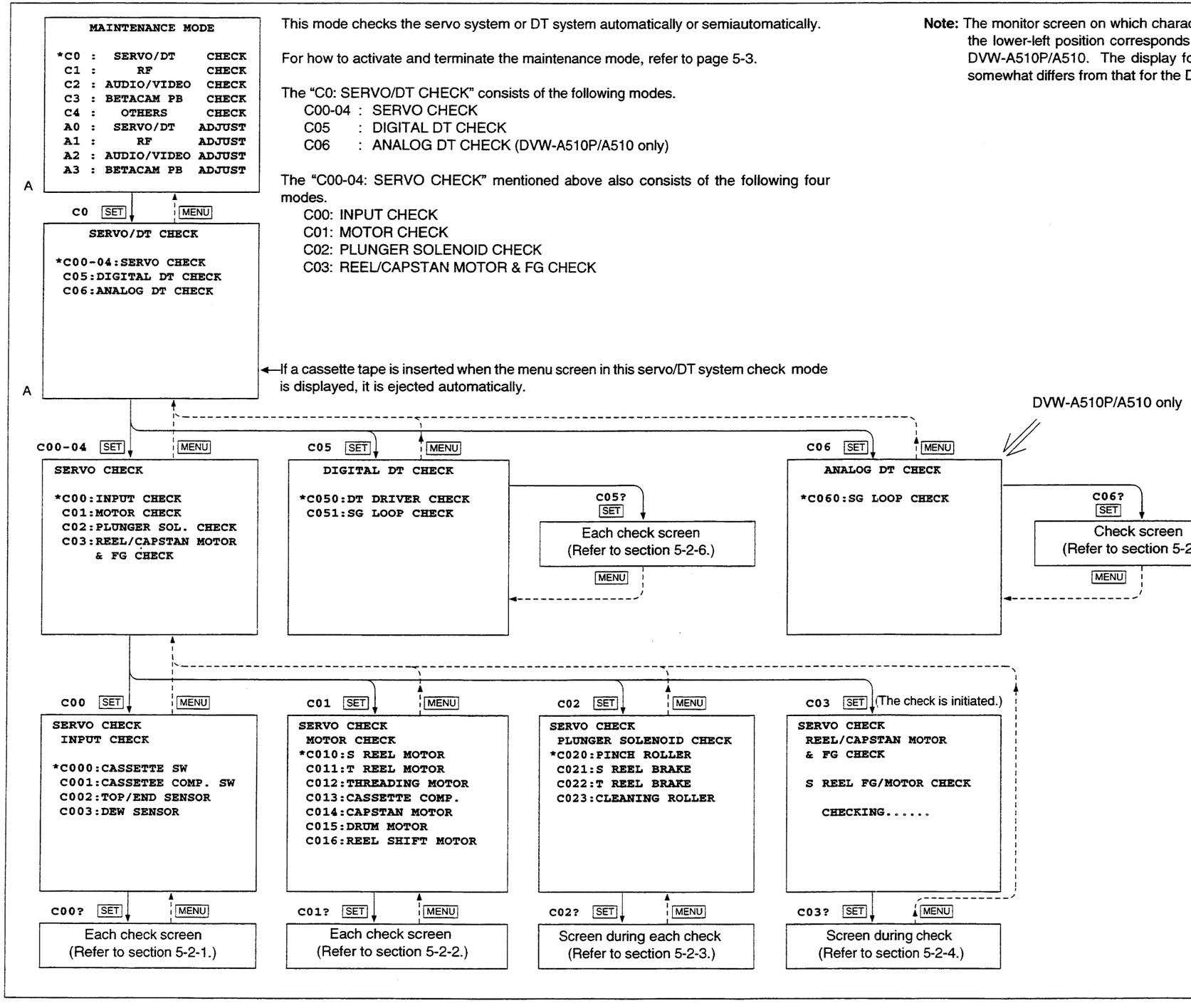
This mode checks the servo system or DT system automatically or semiautomatically.

For how to activate and terminate the maintenance mode, refer to page 5-3.

The "C0: SERVO/DT CHECK" consists of the following modes.
- C00-04 : SERVO CHECK
- C05 : DIGITAL DT CHECK
- C06 : ANALOG DT CHECK (DVW-A510P/A510 only)

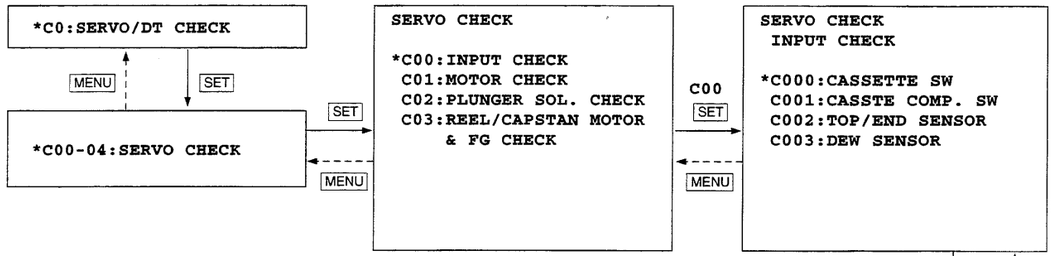
The "C00-04: SERVO CHECK" mentioned above also consists of the following four modes.
- C00: INPUT CHECK
- C01: MOTOR CHECK
- C02: PLUNGER SOLENOID CHECK
- C03: REEL/CAPSTAN MOTOR & FG CHECK

Note: The monitor screen on which character "A" is displayed in the lower-left position corresponds to the display for the DVW-A510P/A510. The display for the DVW-510P/510 somewhat differs from that for the DVW-A510P/A510.

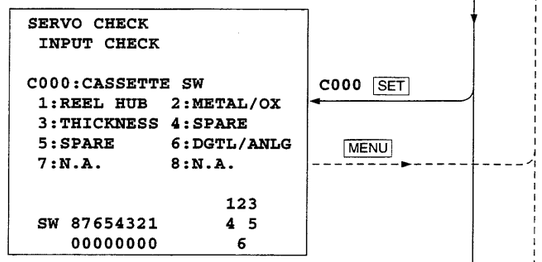


5-2-1. Servo System Check 1 (C00: INPUT CHECK)

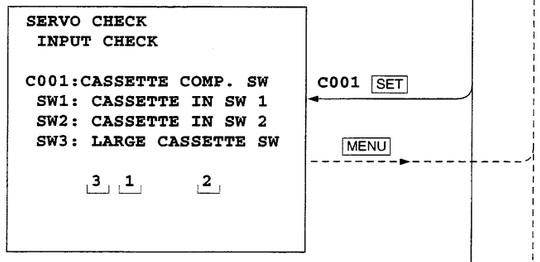
This section describes the "C00: INPUT CHECK" mode.



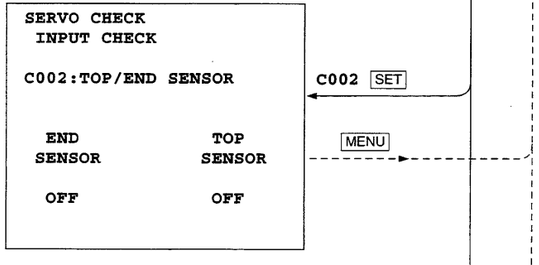
C000: CASSETTE SW
Checks the functions of the cassette tab sensors and REC inhibit sensors.
For more details, refer to page 5-6 (at right).



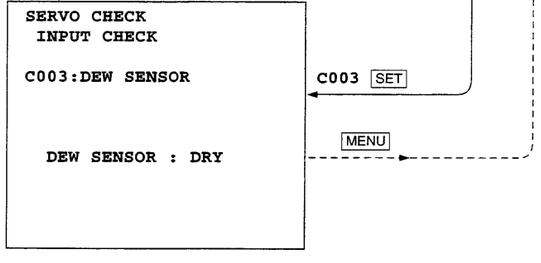
C001: CASSETTE COMP. SW
Checks the functions of the sensors in the compartment block.
For more details, refer to page 5-7.



C002: TOP/END SENSOR
Checks the functions of the tape top and end sensors.
For more details, refer to page 5-8.

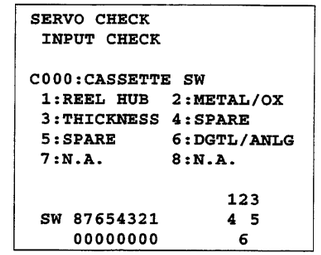


C003: DEW SENSOR
Checks the function of the DEW (dew detection) sensor.
For more details, refer to page 5-9.

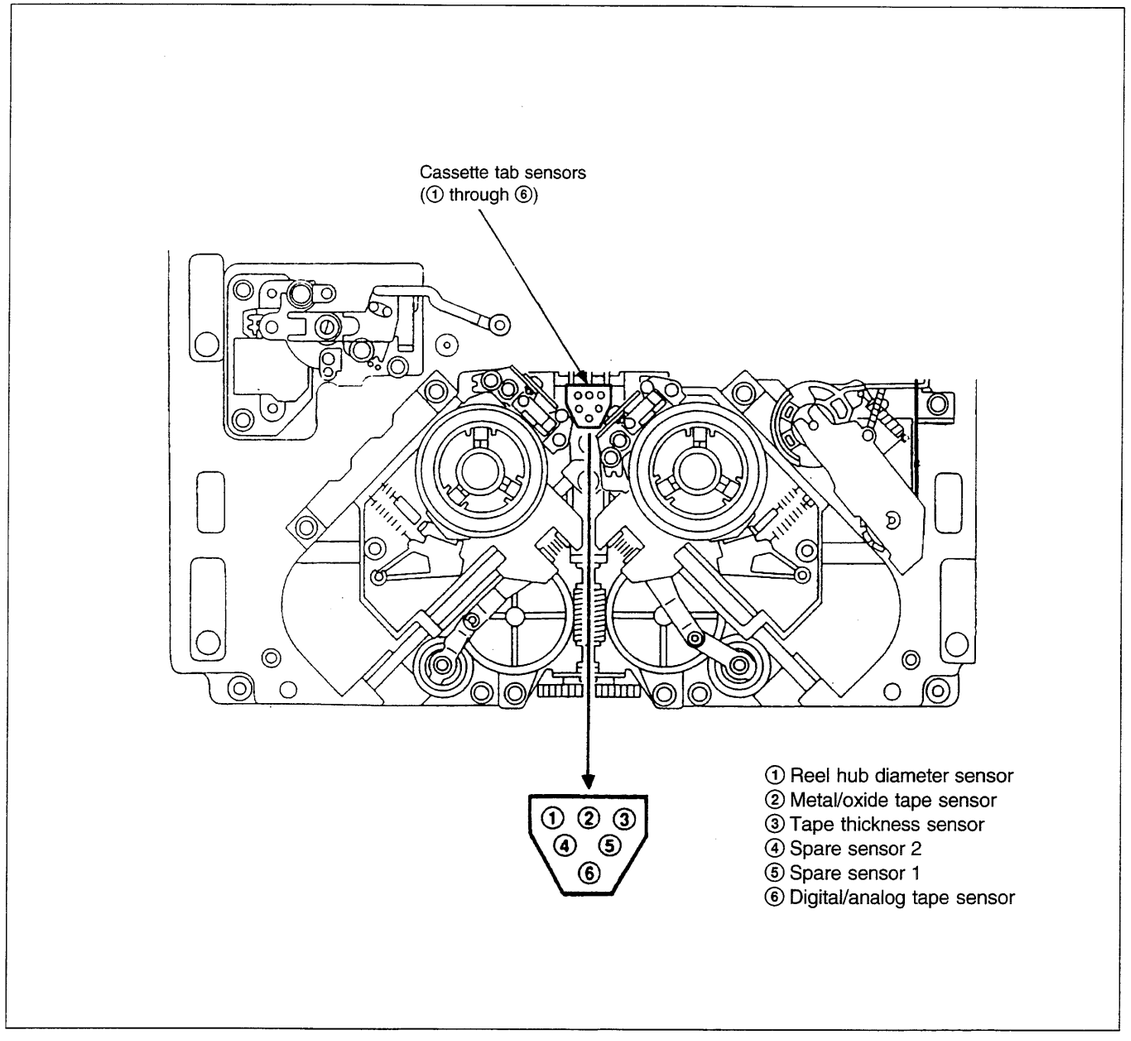


a) C000: CASSETTE SW
This mode checks the functions of the cassette tab sensors (switches).

Confirm that lowest digit "0" of the corresponding switch number on the monitor screen changes to "1" when switches/sensors ① through ⑥ in the figure below are pressed manually. Also confirm that the lowest digit returns from "1" to "0" when they are released.



In case of NG;
When "1" is not displayed in the specified position or when the display does not return from "1" to "0".
Check the corresponding sensors on the PTC-59 board.
Also check the sensor input circuit on the DR-307/200 board.



b) C001: CASSETTE COMP. SW

This mode checks the functions of the sensors (switches) in the compartment block.

Confirm that the corresponding switch number on the monitor screen changes to "■" when switches SW1 through SW3 in the figure below are pressed manually. Also confirm that "■" changes to the corresponding number when they are released.

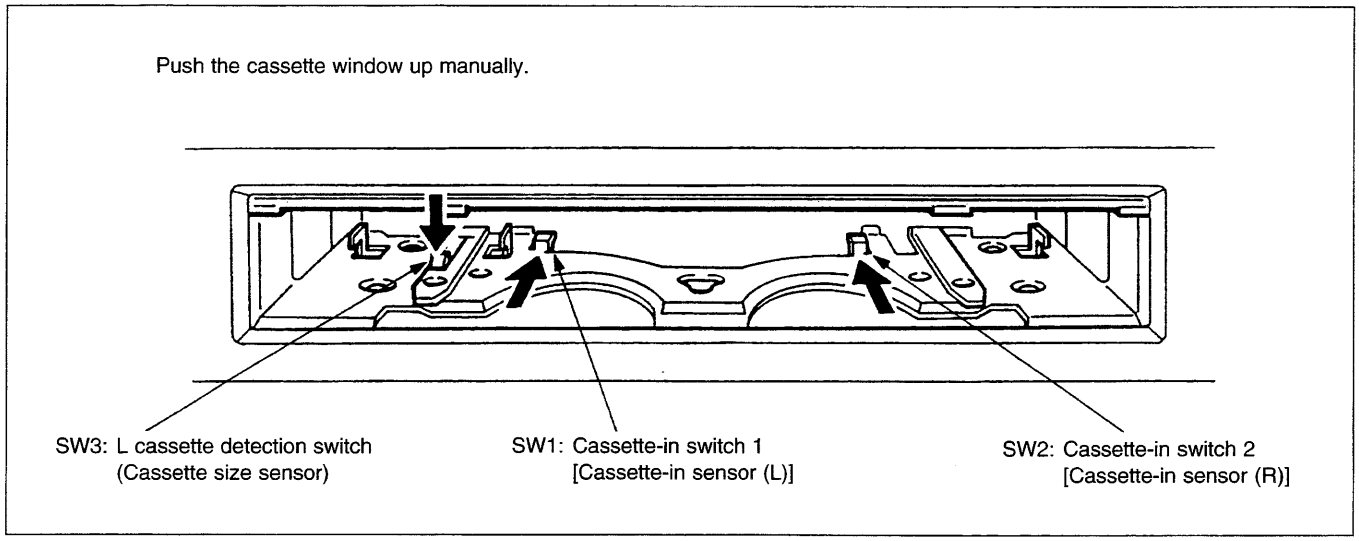
In case of NG;

When "■" is not displayed in the specified position or when the display does not return from "■" to the corresponding number.

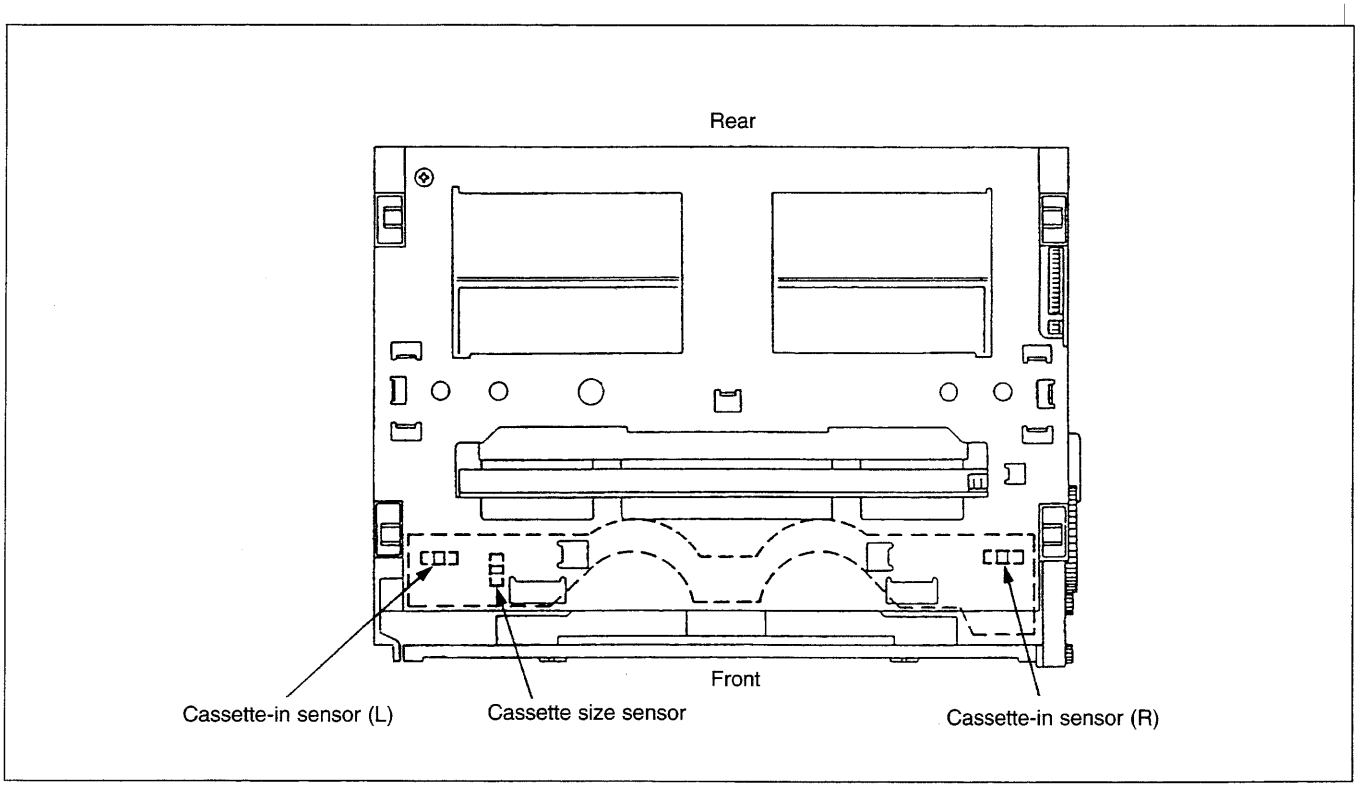
Check the corresponding sensors on the PC-70 board.

Also check the sensor input circuit on the DR-307/200 board.

```
SERVO CHECK
 INPUT CHECK

C001:CASSETTE COMP. SW
 SW1: CASSETTE IN SW 1
 SW2: CASSETTE IN SW 2
 SW3: LARGE CASSETTE SW

      3  1      2
```



Switch Position in Compartment Block



Top View of the Cassette Compartment

c) C002: TOP/END SENSOR

This mode checks the function of the tape top and end sensors.

Confirm that the "OFF" display on the monitor screen changes to "ON !" when a screwdriver is brought near sensors ① and ② in the figure below. Also confirm that the display changes from "ON !" to "OFF" when the screwdriver is released from the sensors.

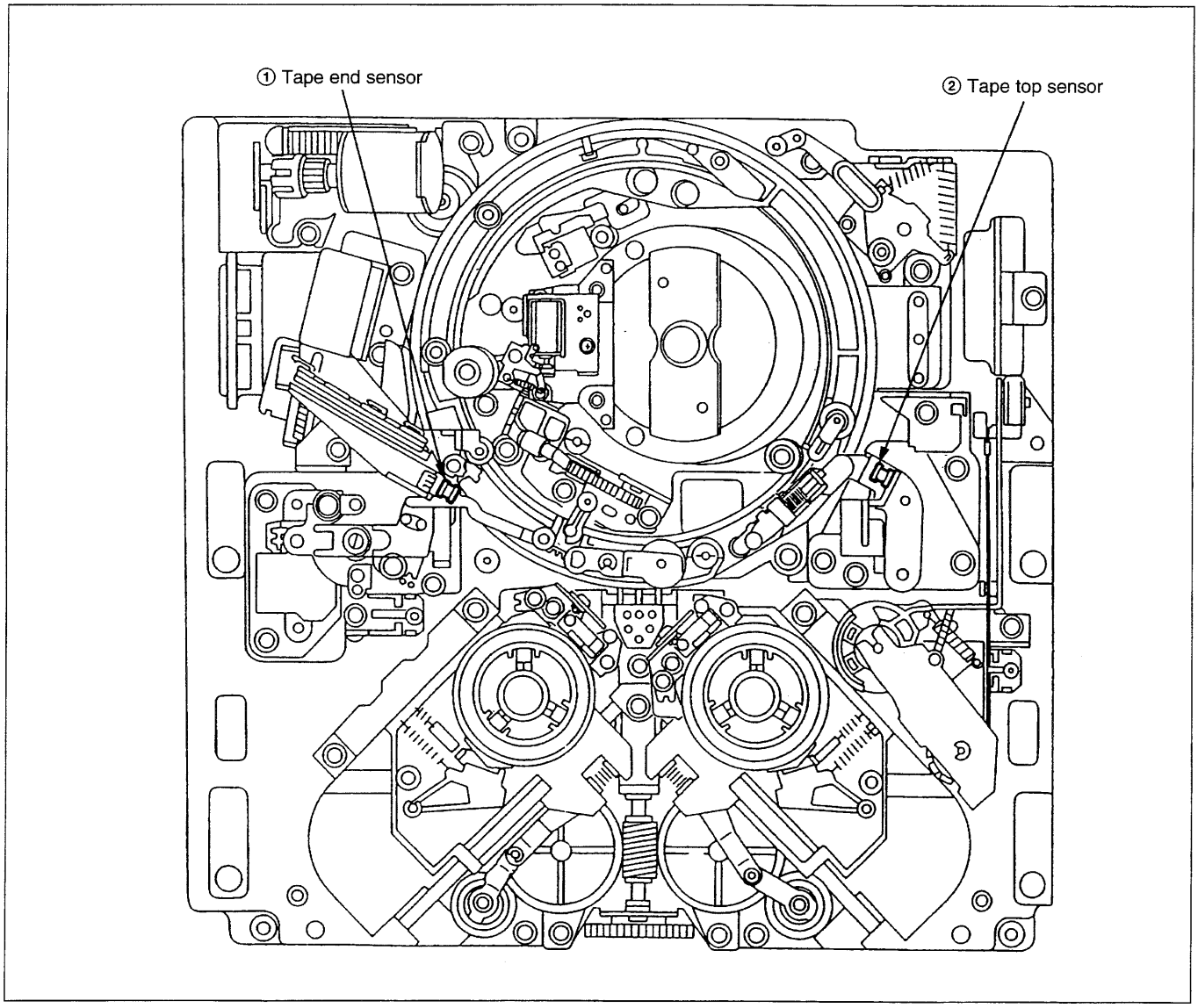
```
SERVO CHECK
 INPUT CHECK

C002:TOP/END SENSOR


  END              TOP
SENSOR           SENSOR

  OFF              OFF
```

In case of NG;

When "ON !" is not displayed in the specified position or when the display does not return from "ON !" to "OFF" .

Check only the sensors.

Also check the sensor input circuit on the DR-307/200 board.



5-2-1. Servo System Check 1

d) C003: DEW SENSOR

This mode checks the function of the DEW (dew detection) sensor.

(1) Confirm that the "DRY" display on the monitor screen changes to "WET !" when the sensor is slightly touched with a cotton swab moistened with water.

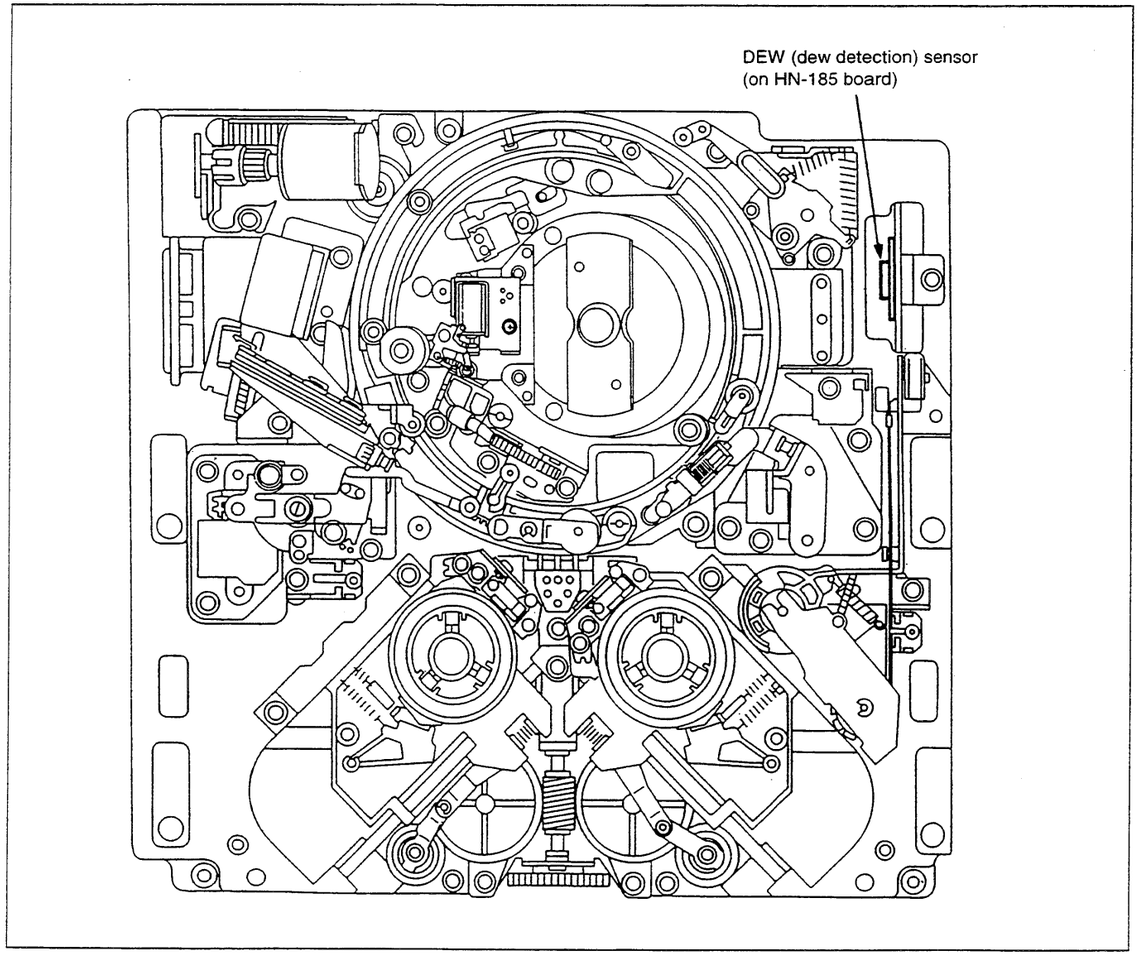
(2) Wipe the sensor with a dry cotton swab to eliminate water. Confirm that the display on the monitor screen returns from "WET !" to "DRY" when a wind is blown against the sensor using a blower to evaporate moisture.

```
SERVO CHECK
 INPUT CHECK

C003:DEW SENSOR


  DEW SENSOR : DRY
```

In case of NG;

When the display does not change from "DRY" to "WET !" even if the sensor is moistened.

Check only the sensor.

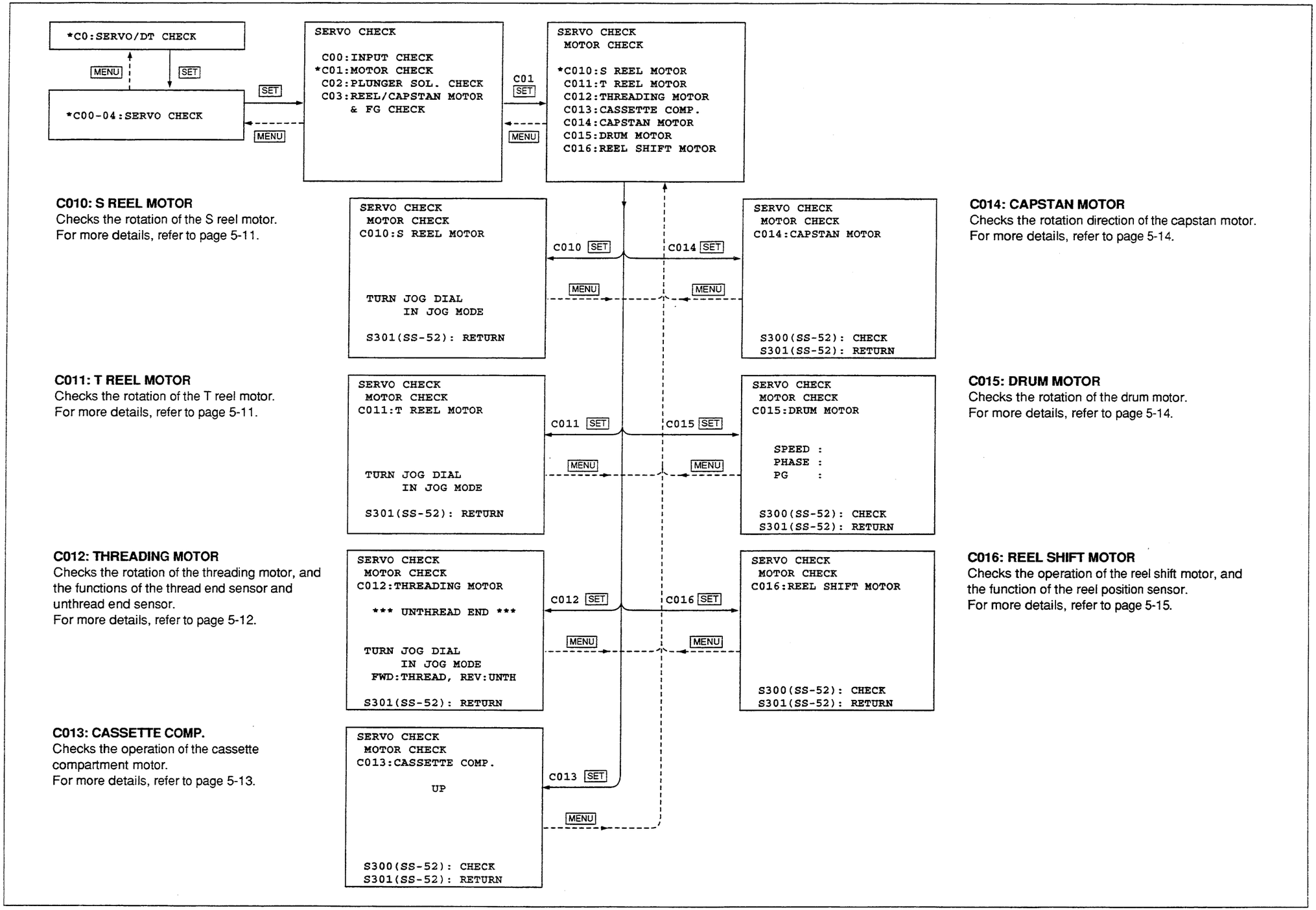


5-9

5-2-2. Servo System Check 2

5-2-2. Servo System Check 2 (C01: MOTOR CHECK)

This section describes the "C01: MOTOR CHECK" mode.



5-10

a) C010: S REEL MOTOR

This mode checks the rotation of the S reel motor.

```
SERVO CHECK
 MOTOR CHECK
C010:S REEL MOTOR



 TURN JOG DIAL
      IN JOG MODE

 S301(SS-52): RETURN
```

Turn the S reel motor using a search dial (JOG mode).

Dial	Rotation direction of the S reel motor
FWD	FORWARD (↻)
REV	REVERSE (↺)

Confirm that the S reel motor rotates in the direction specified by the dial after the S brake solenoid is turned on and after the S reel brake is released.

In case of NG;

When the ON operation sound of the S brake solenoid is not generated or when the S reel motor does not rotate in the direction specified by the dial.

Check the S reel motor driver circuit (DR-307/200 board).

b) C011: T REEL MOTOR

This mode checks the rotation of the T reel motor.

```
SERVO CHECK
 MOTOR CHECK
C011:T REEL MOTOR



 TURN JOG DIAL
      IN JOG MODE

 S301(SS-52): RETURN
```

Turn the T reel motor using a search dial (JOG mode).

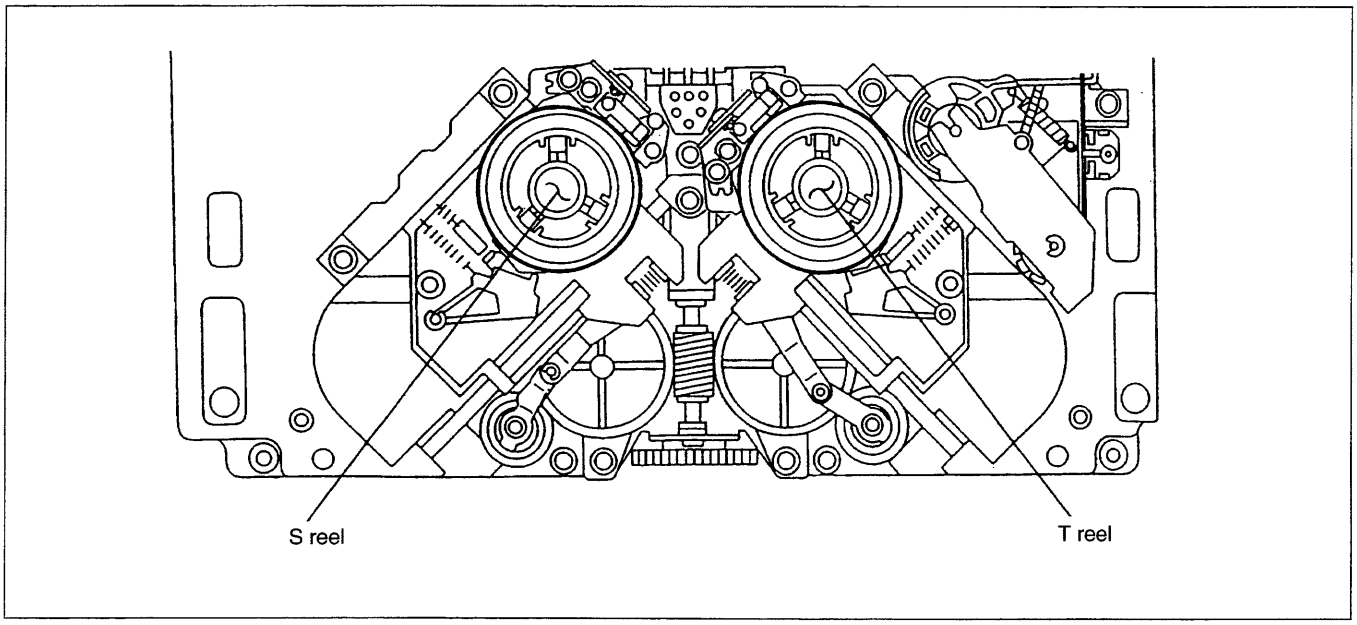
Dial	Rotation direction of the T reel motor
FWD	FORWARD (↻)
REV	REVERSE (↺)

Confirm that the T reel motor rotates in the direction specified by the dial after the T brake solenoid is turned on and after the T reel brake is released.

In case of NG;

When the ON operation sound of the T brake solenoid is not generated or when the T reel motor does not rotate in the direction specified by the dial.

Check the T reel motor driver circuit (DR-307/200 board).



c) C012: THREADING MOTOR

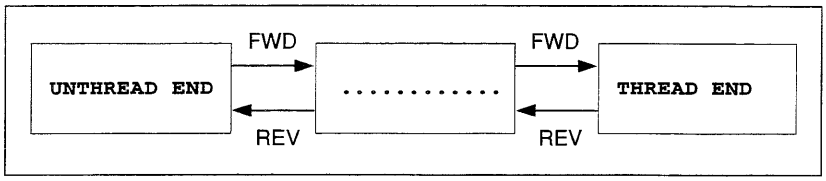
This mode checks the rotation of the threading motor, and the functions of the thread end sensor and unthread end sensor.

```
SERVO CHECK
 MOTOR CHECK
C012:THREADING MOTOR

  *** UNTHREAD END ***


 TURN JOG DIAL
      IN JOG MODE
  FWD:THREAD, REV:UNTH

 S301(SS-52): RETURN
```

Turn the threading motor using a search dial (JOG mode). As a result, the thread ring moves as shown in the table below.

Dial	Movement of the threading ring
FWD	Threading
REV	Unthreading

Confirm that the display on the monitor screen changes as shown below.



Threading Motor Check

In case of NG;

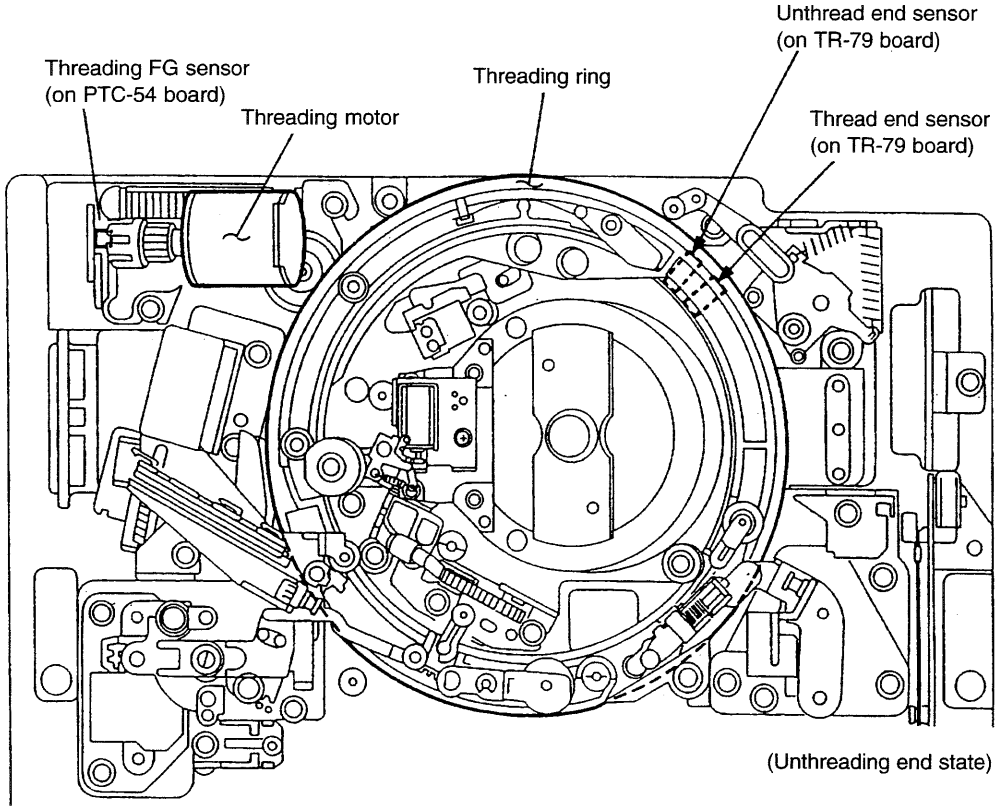
When the threading motor does not rotate.

Check the threading motor and the FG sensor on the PTC-54 board.

Also check the threading motor driver circuit (DR-307/200 board) and the threading FG amplifier circuit (DR-307/200 board).

When the display remains "....." with the unit set to the thread end/unthread end state.

Check the thread end sensor and unthread end sensor on the TR-79 board.



d) C013: CASSETTE COMP.

This mode checks the operation of the cassette compartment motor, and the function of the cassette down sensor.

```
SERVO CHECK
 MOTOR CHECK
C013:CASSETTE COMP.

          UP




 S300(SS-52): CHECK
 S301(SS-52): RETURN
```

(1) Press the SET button (or switch S300 on the SS board).
Confirm that the compartment block goes down. At that time, confirm that the display on the monitor screen changes as shown below.

UP → HORIZ. → VERT. → DOWN

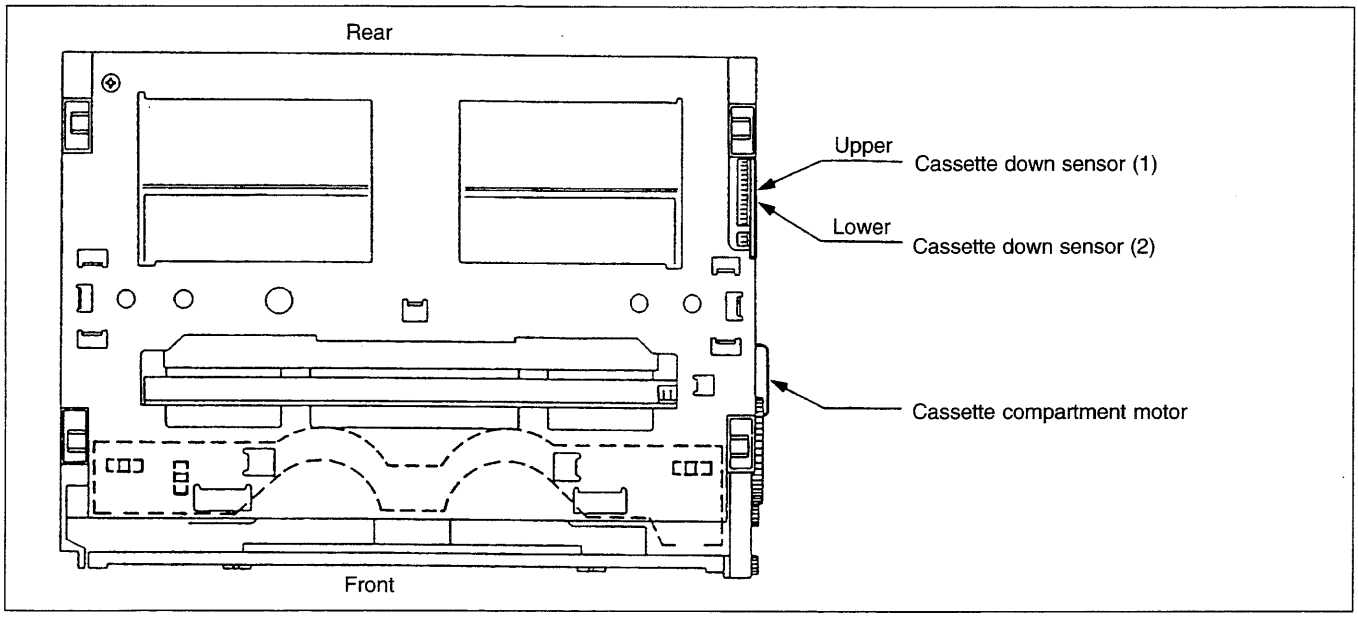
(2) Press the SET button (or switch S300 on the SS board) again.
Confirm that the compartment block goes up. At that time, confirm that the display on the monitor screen changes as shown below.

DOWN → VERT. → HORIZ. → UP

In case of NG;

When the cassette compartment motor does not rotate.
Check the cassette compartment motor.
Also check the cassette compartment motor driver circuit (DR-307/200 board).

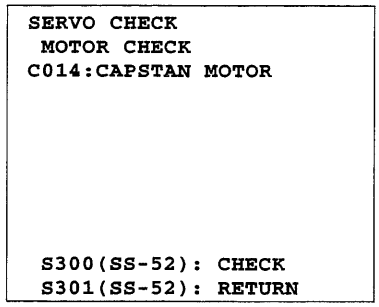
When the compartment block goes up and down normally, but the display does not change.
Check the cassette down sensor.
Also check the sensor input circuit on the DR-307/200 board.



Top View of the Cassette Compartment

e) C014: CAPSTAN MOTOR

This mode checks the rotation direction of the capstan motor.



(1) Press the SET button (or switch S300 on the SS board).
Confirm that the capstan motor rotates in the forward direction (↻) and that the "FORWARD .... OK" display appears on the monitor screen.

(2) Press the SET button (or switch S300 on the SS board) again.
Confirm that the capstan motor rotates in the reverse direction (↺) and that the "REVERSE .... OK" display appears on the monitor screen.

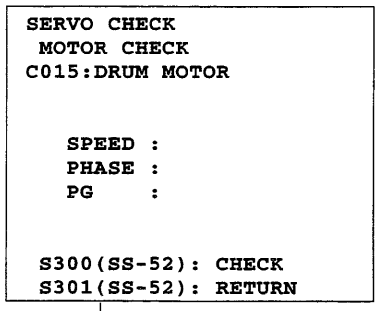
In case of NG;

When the capstan motor does not rotate.
Check the capstan motor.
Also check capstan motor driver circuit (DR-307/200 board).

When the capstan motor rotates normally, but the "OK" display does not appear on the monitor screen.
Check the capstan motor.
Also check the capstan FG amplifier input circuit (DR-307/200 board).

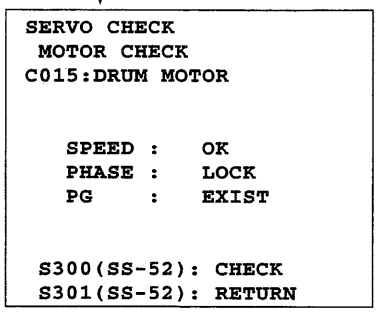
f) C015: DRUM MOTOR

This mode checks the rotation of the drum motor.



(1) Press the SET button (or switch S300 on the SS board) to initiate this check.
The display on the monitor screen at that time is as shown below.
SPEED : NG
PHASE : UNLOCK
PG : NO EXIST

SET or S300



Check completed (OK)

(2) Confirm that the display on the monitor screen changes as shown at right after a little while.

In case of NG;

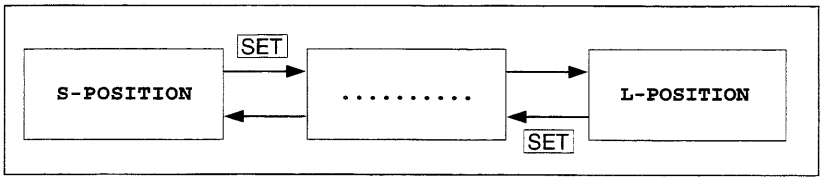
When the display on the monitor screen does not change.
Check the drum motor driver circuit (DR-307/200 board), the drum FG amplifier circuit (DR-307/200 board), and the drum PG amplifier circuit (DR-307/200 board).

g) C016: REEL SHIFT MOTOR

This mode checks the operation of the reel shift motor, and the function of the reel position sensor.

```
SERVO CHECK
 MOTOR CHECK
C016:REEL SHIFT MOTOR


       S-POSITION



 S300(SS-52): CHECK
 S301(SS-52): RETURN
```

Confirm that the reel table moves from the S position to the L position (from the L position to the S position) when the SET button (or switch S300 on the SS board) is pressed. Also confirm that the display on the monitor screen changes as shown below.



In case of NG;

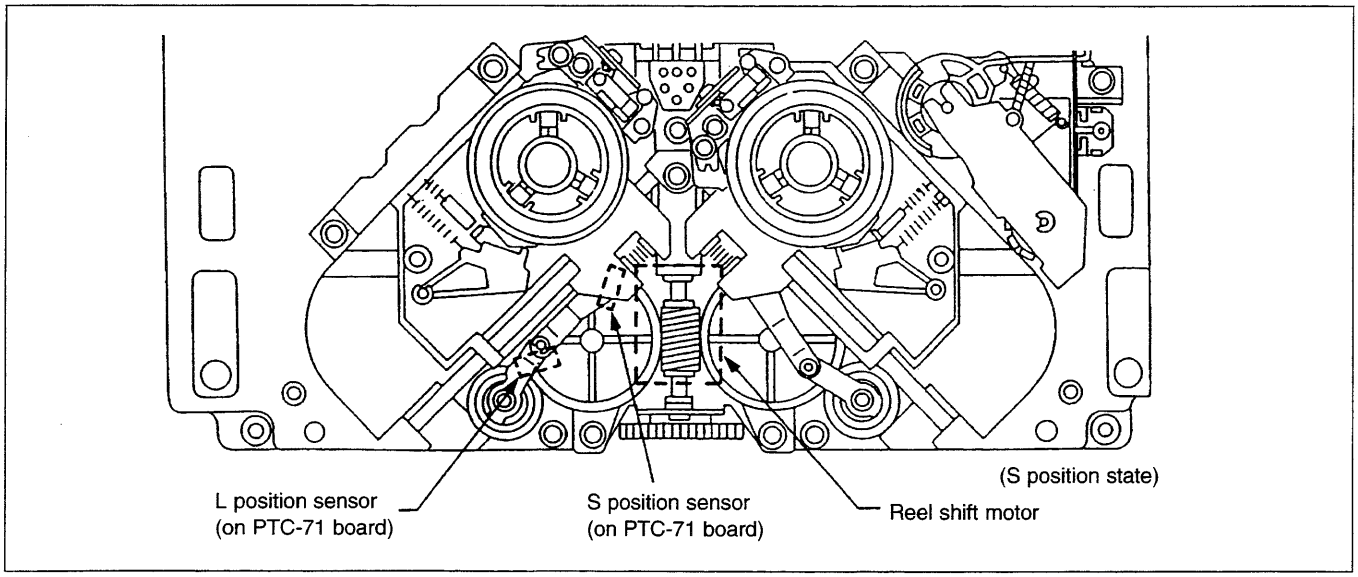
When the reel shift motor does not rotate.

Check the reel shift motor.

Also check the reel shift motor driver circuit (DR-307/200 board).

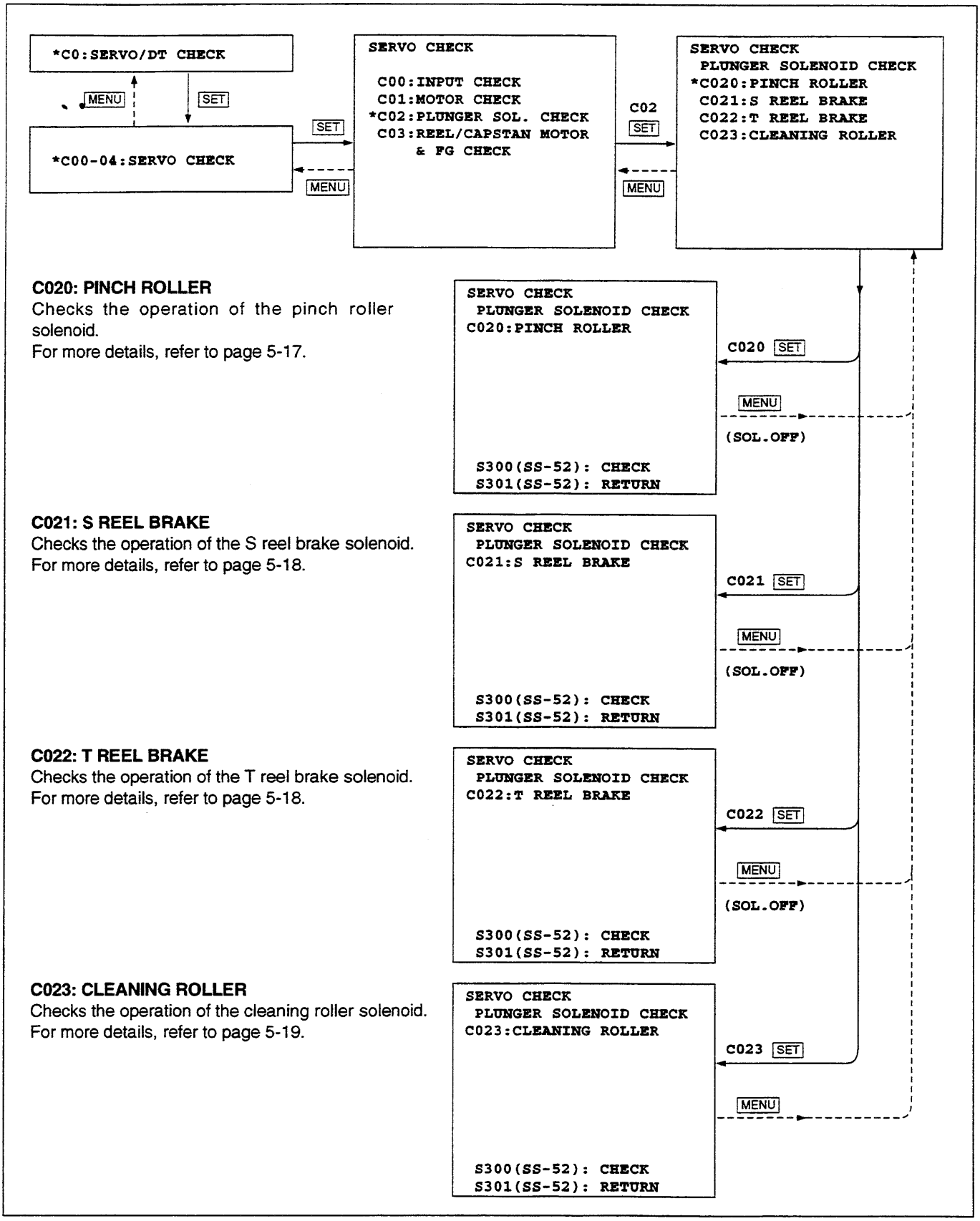
When the display remains "....." with the reel table moved to the L position or S position.

Check the L position/S position sensor (PTC-71 board).



5-2-3. Servo System Check 3 (C02: PLUNGER SOLENOID CHECK)

This section describes the "C02: PLUNGER SOLENOID CHECK" mode.



a) C020: PINCH ROLLER

This mode checks the operation of the pinch roller solenoid.

```
SERVO CHECK
 PLUNGER SOLENOID CHECK
C020:PINCH ROLLER




 S300(SS-52): CHECK
 S301(SS-52): RETURN
```

(1) Press the SET button (or switch S300 on the SS board).
Confirm by the generation of a sound that the pinch solenoid is turned on.

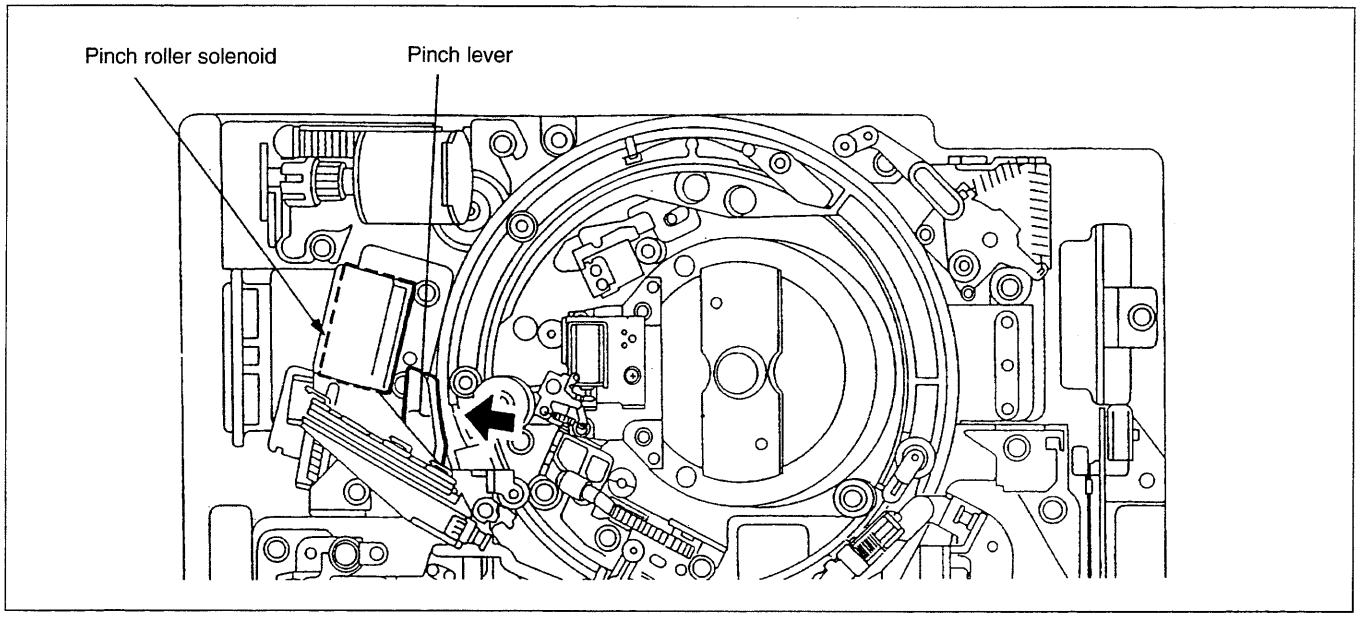
(2) Press the MENU button (or switch S301 on the SS board).
The drive voltage of the pinch solenoid is then turned off.
The monitor screen returns to the submenu.

(3) Push the pinch lever slightly in the direction of the pinch solenoid with fingers.
The core of the pinch solenoid then returns to the former position.

In case of NG;

When the sound indicating that the pinch solenoid is turned on is not generated or when the monitor screen does not change.

Check the pinch solenoid.
Also check the solenoid driver circuit on the DR-307/200 board.



b) C021: S REEL BRAKE

This mode checks the operation of the S reel brake solenoid.

```
SERVO CHECK
 PLUNGER SOLENOID CHECK
C021:S REEL BRAKE




 S300(SS-52): CHECK
 S301(SS-52): RETURN
```

(1) Press the SET button (or switch S300 on the SS board).
Confirm by the generation of a sound that the S reel brake solenoid is turned on.

(2) Press the MENU button (or switch S301 on the SS board).
The core of the S reel brake solenoid then returns to the former position.
The monitor screen returns to the submenu.

In case of NG;

When the sound indicating that the S reel brake solenoid is turned on is not generated or when the monitor screen does not change.
Check the S reel brake solenoid.
Also check the solenoid driver circuit on the DR-307/200 board.

c) C022: T REEL BRAKE

This mode checks the operation of the T reel brake solenoid.

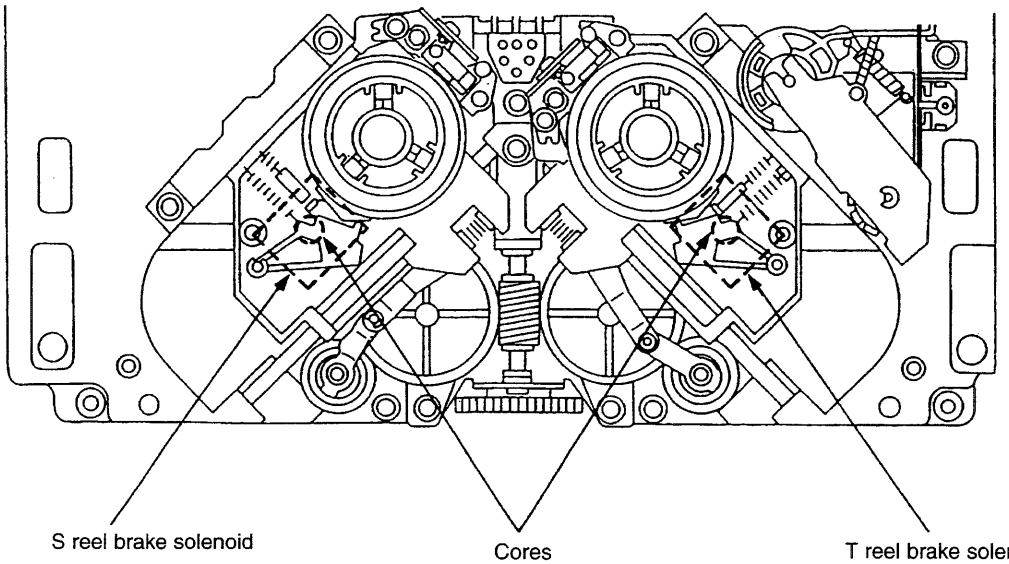
```
SERVO CHECK
 PLUNGER SOLENOID CHECK
C022:T REEL BRAKE




 S300(SS-52): CHECK
 S301(SS-52): RETURN
```

(1) Press the SET button (or switch S300 on the SS board).
Confirm by the generation of a sound that the T reel brake solenoid is turned on.

(2) Press the MENU button (or switch S301 on the SS board).
The core of the T reel brake solenoid then returns to the former position.
The monitor screen returns to the submenu.

In case of NG;

When the sound indicating that the T reel brake solenoid is turned on is not generated or when the monitor screen does not change.
Check the T reel brake solenoid.
Also check the solenoide driver circuit on the DR-307/200 board.



d) C023: CLEANING ROLLER

This mode checks the operation of the cleaning roller solenoid.

```
SERVO CHECK
 PLUNGER SOLENOID CHECK
C023:CLEANING ROLLER




 S300(SS-52): CHECK
 S301(SS-52): RETURN
```

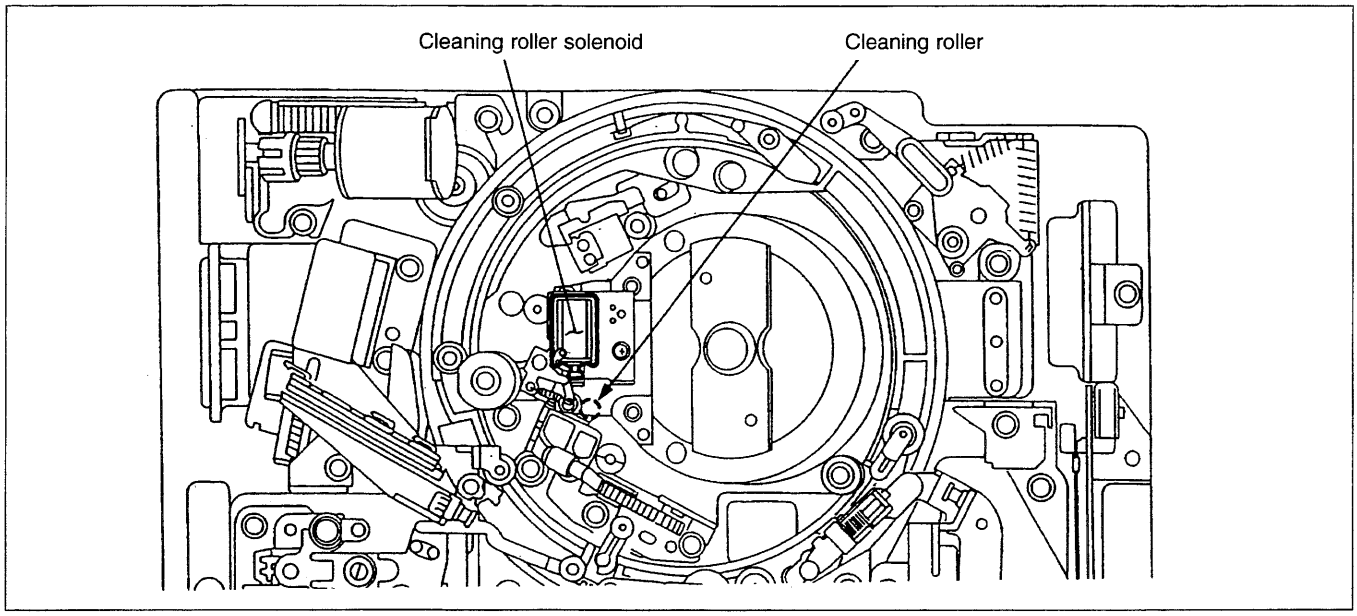
(1) Press the SET button (or switch S300 on the SS board).
Confirm that the cleaning roller solenoid is activated, the cleaning roller touches the drum, and it is immediately released from the drum.

(2) Press the MENU button (or switch S301 on the SS board).
The monitor screen returns to the submenu.

Note: The cleaning roller solenoid is burned when it continuosly remains on. If the cleaning roller solenoid is not released from the drum, turn the power of this unit off as soon as possible.

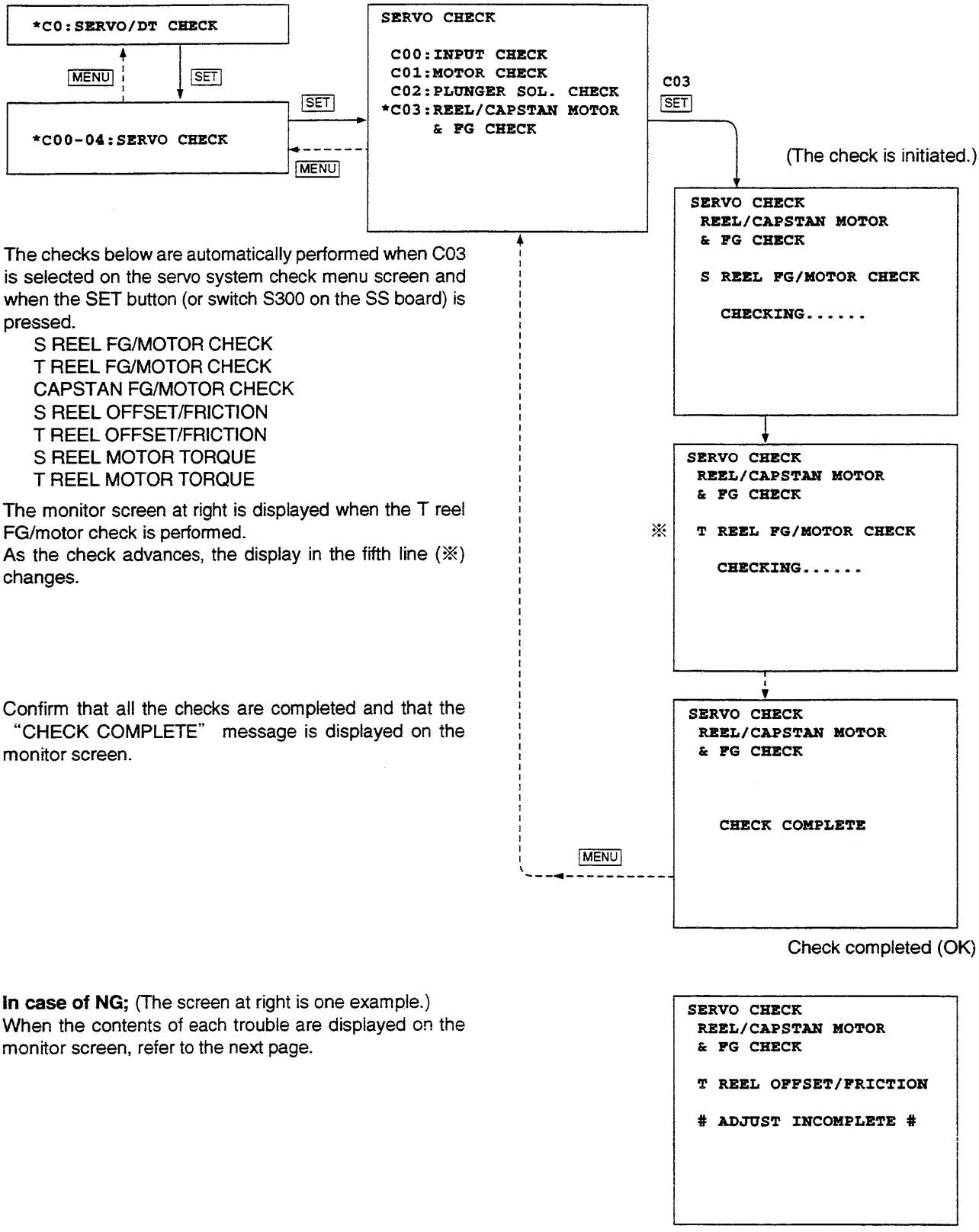
In case of NG;

When the cleaning roller dose not touch the drum or it is not release from the drum.
Check the cleaning roller solenoid.
Also check the solenoid driver circuit on the DR-307/200 board.



5-2-4. Servo System Check 4 (C03: REEL/CAPSTAN MOTOR & FG CHECK)

This section describes the "C03: REEL/CAPSTAN MOTOR & FG CHECK" mode.



The checks below are automatically performed when C03 is selected on the servo system check menu screen and when the SET button (or switch S300 on the SS board) is pressed.

- S REEL FG/MOTOR CHECK
- T REEL FG/MOTOR CHECK
- CAPSTAN FG/MOTOR CHECK
- S REEL OFFSET/FRICTION
- T REEL OFFSET/FRICTION
- S REEL MOTOR TORQUE
- T REEL MOTOR TORQUE

The monitor screen at right is displayed when the T reel FG/motor check is performed.
As the check advances, the display in the fifth line (※) changes.

Confirm that all the checks are completed and that the "CHECK COMPLETE" message is displayed on the monitor screen.

In case of NG; (The screen at right is one example.)
When the contents of each trouble are displayed on the monitor screen, refer to the next page.

a) S REEL FG/MOTOR CHECK
Checks the duty cycle of the S reel FG.

In case of NG;
Check the S reel motor (C010: S REEL MOTOR).
If no abnormality is found, adjust the duty cycle of the S reel FG (A001: S REEL FG DUTY).

b) T REEL FG/MOTOR CHECK
Checks the duty cycle of the T reel FG.

In case of NG;
Check the T reel motor (C011: T REEL MOTOR).
If no abnormality is found, adjust the duty cycle of the T reel FG (A002: T REEL FG DUTY).

c) CAPSTAN FG/MOTOR CHECK
Checks the duty cycle of the capstan FG.

In case of NG;
Check the capstan motor (C014: CAPSTAN MOTOR).
If no abnormality is found, adjust the duty cycle of the capstan FG (A003: CAPSTAN FG DUTY).

d) S REEL OFFSET/FRICTION
Checks the offset and friction levels of the S reel.

In case of NG;
Check the S reel motor (C010: S REEL MOTOR).
If no abnormality is found, adjust the offset and friction of the S reel (A004: S REEL OFFSET/FRIC).

e) T REEL OFFSET/FRICTION
Checks the offset and friction levels of the T reel.

In case of NG;
Check the T reel motor (C011: T REEL MOTOR).
If no abnormality is found, adjust the offset and friction of the T reel (A005: T REEL OFFSET/FRIC).

f) S REEL MOTOR TORQUE
Checks the torque of the S reel.

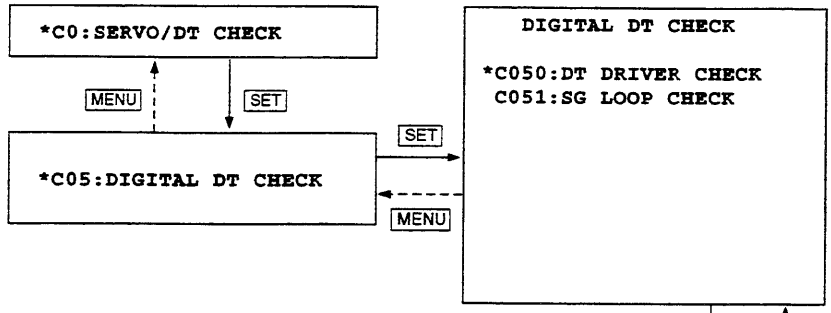
In case of NG;
Check the S reel motor (C010: S REEL MOTOR).
If no abnormality is found, adjust the torque of the S reel (A006: S REEL TORQUE).

g) T REEL MOTOR TORQUE
Checks the torque of the T reel.

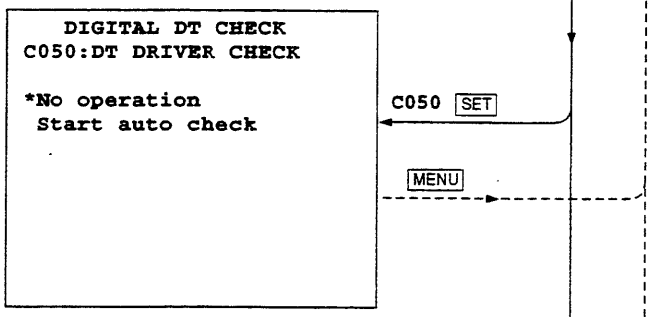
In case of NG;
Check the T reel motor (C011: T REEL MOTOR).
If no abnormality is found, adjust the torque of the T reel (A007: T REEL TORQUE).

5-2-6. Digital DT System Check (C05: DIGITAL DT CHECK)

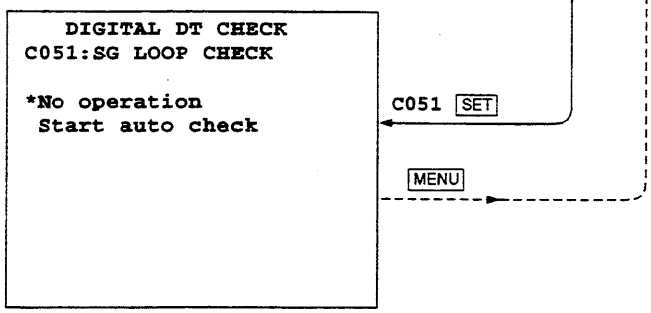
This section describes the "C05: DIGITAL DT CHECK" mode.



C050: DT DRIVER CHECK
Checks the bimorph drive control circuit by the loopback in a bimorph drive amplifier.
For more details, refer to page 5-24.



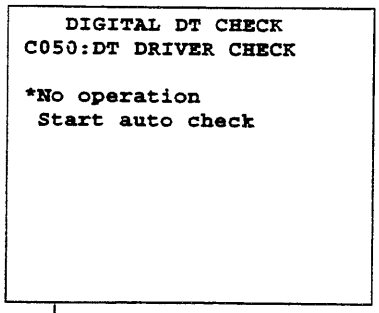
C051: SG LOOP CHECK
Checks the feedback loop of the strain gauge.
For more details, refer to page 5-25.



a) C050: DT DRIVER CHECK

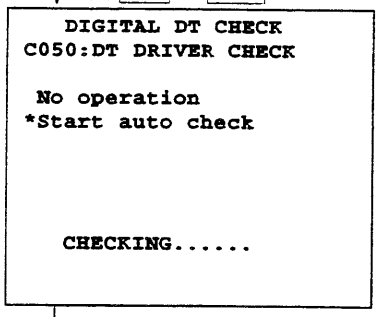
This mode checks the bimorph drive control circuit (on the SS board) by the loopback in a bimorph drive amplifier (on the DT-34B board).

(1) Set the "*" mark to "Start auto check" using a search dial (JOG mode).



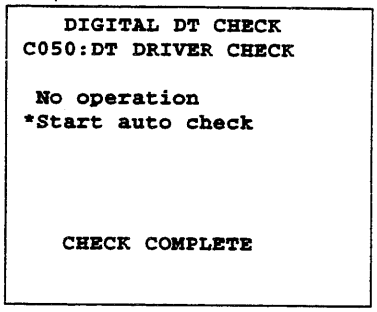
(1) DIAL
(2) SET or S300

(2) When the SET button (or switch S300 on the SS board) is pressed after the "Push SET button" message is displayed, this check is initiated.



During check

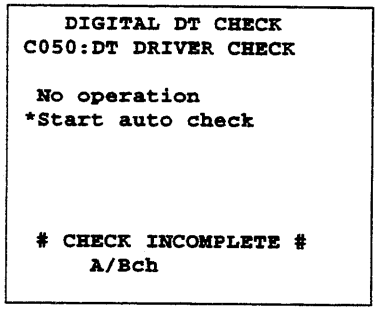
(3) Confirm that the check is completed and that the "CHECK COMPLETE" message is displayed on the monitor screen.



Check completed (OK)

In case of NG; (The screen at right is one example.)
When the "CHECK COMPLETE" message is not displayed on the monitor screen.

Check bimorph drive amplifier (DT-34B board) and slip ring.
Also check the bimorph drive control circuit (SS board).

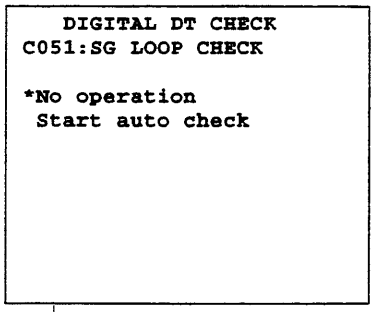


Check completed (NG)

b) C051: SG LOOP CHECK

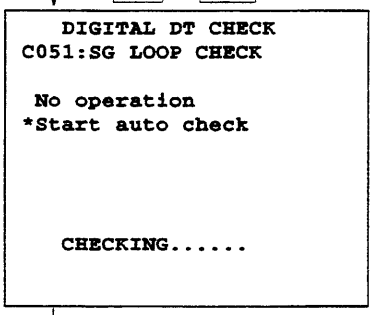
This mode checks the feedback loop of the strain gauge.

(1) Set the "*" mark to "Start auto check" using a search dial (JOG mode).



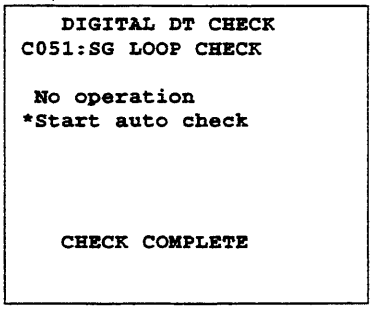
(1) DIAL
(2) SET or S300

(2) When the SET button (or switch S300 on the SS board) is pressed after the "Push SET button" message is displayed, this check is initiated.



During check

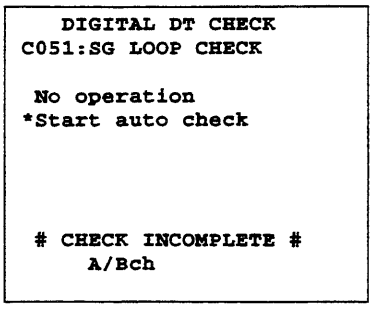
(3) Confirm that the check is completed and that the "CHECK COMPLETE" message is displayed on the monitor screen.



Check completed (OK)

In case of NG; (The screen at right is one example.)
When the "CHECK COMPLETE" message is not displayed on the monitor screen.

Execute the DT driver check (C050: DT DRIVER CHECK).
If no abnormality is found in this case, check the advance head/strain gauge of the inner drum or its signal transmission system (slip ring etc.).

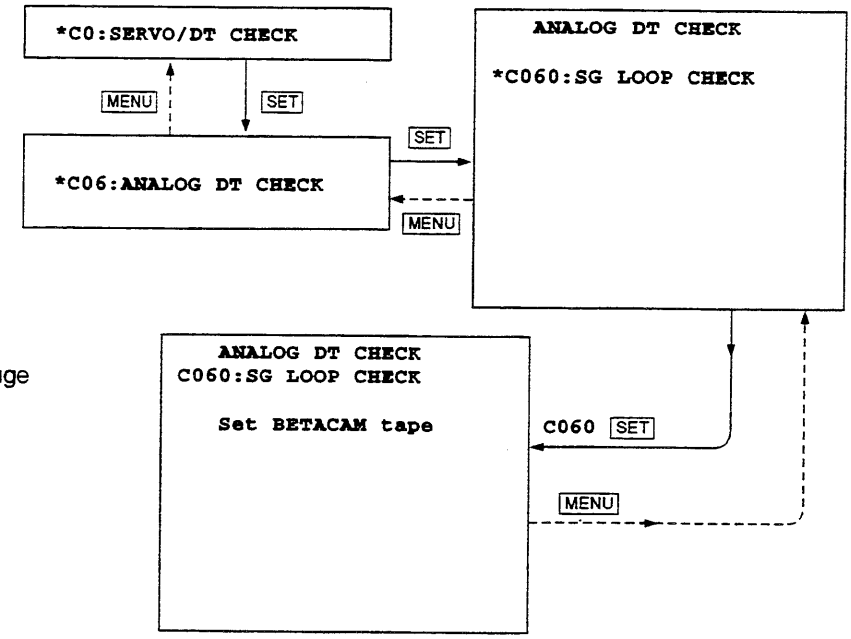


Check completed (NG)

5-2-7. Analog DT System Check (For DVW-A510P/A510) (C06: ANALOG DT CHECK)

This section describes the "C06: ANALOG DT CHECK" mode.

Exclusive mode for the DVW-A510P/A510

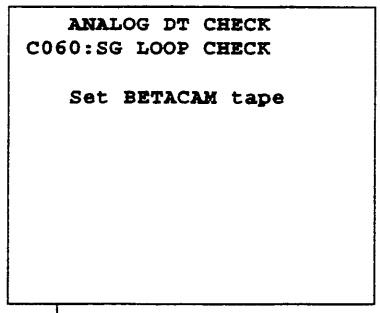


C060: SG LOOP CHECK
Checks the feedback loop of the strain gauge for Betacam playback.
For more details, refer to next page.

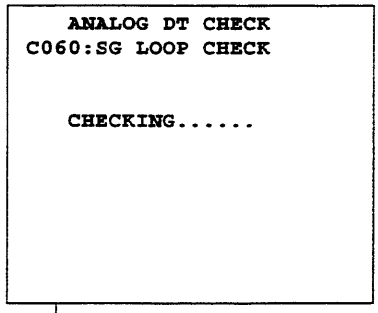
a) C060: SG LOOP CHECK

This mode checks the feedback loop of the strain gauge for Betacam playback.

When a Betacam cassette tape is inserted into this unit, this check is initiated automatically.
(To put the unit into the Betacam PB mode, the Betacam cassette tape is inserted irrespective of its contents.)



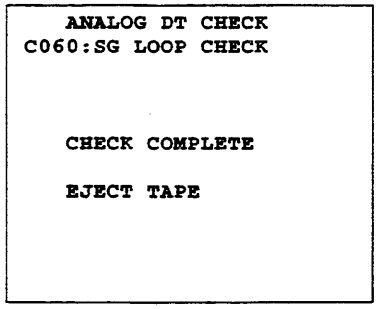
Insert a Betacam cassette tape



During check

Confirm that the check is completed and that the "CHECK COMPLETE" message is displayed on the monitor screen.

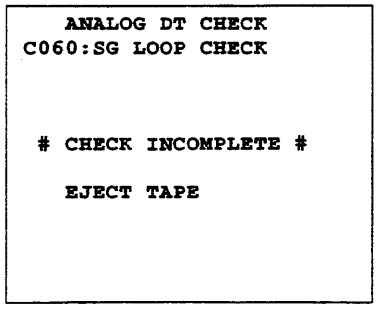
Press the MENU button (or switch S301 on the SS board) two times to return to the servo/DT system check mode menu. The cassette tape is ejected automatically.



Check completed (OK)

In case of NG; (The screen at right is one example.)
When the "CHECK COMPLETE" message is not displayed on the monitor screen.

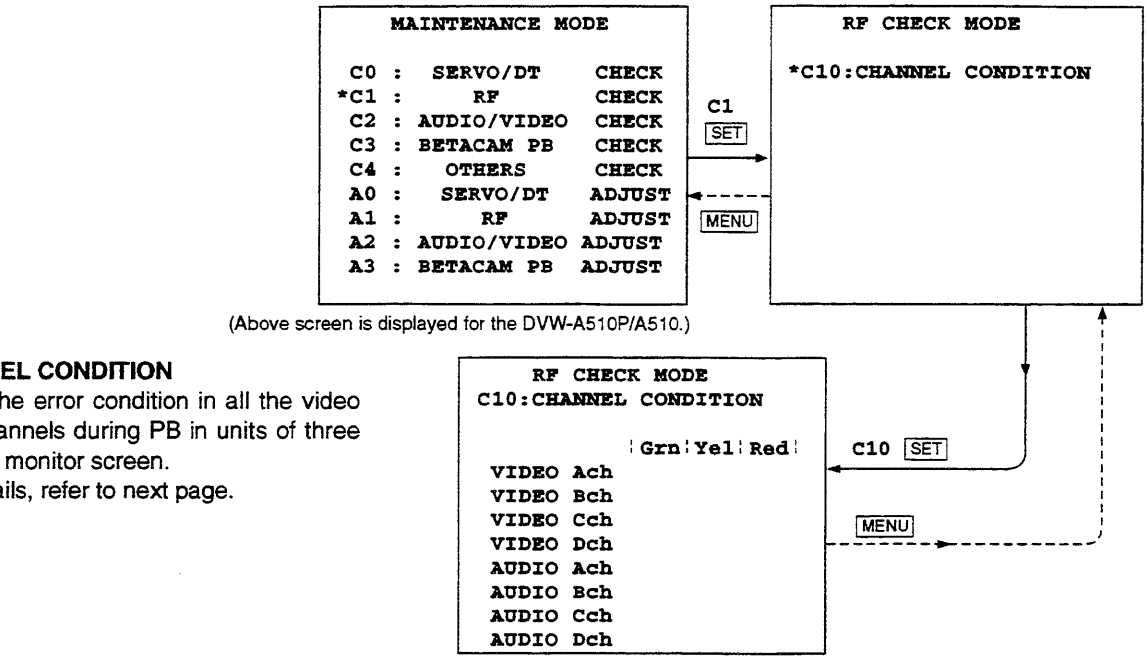
Execute the strain gauge loop check (C051: SG LOOP CHECK) in the digital DT system.
If no abnormality is found, check the Betacam PB bimorph head/strain gauge of the inner drum or its signal transmission system (slip ring etc.).



Check completed (NG)

5-3. RF SYSTEM CHECK MODE (C1: RF CHECK)

This mode can check the RF system.
For how to activate and terminate the maintenance mode, refer to page 5-3.



(Above screen is displayed for the DVW-A510P/A510.)

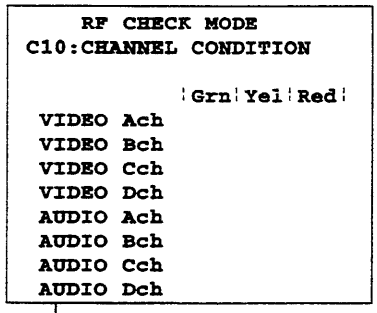
C10: CHANNEL CONDITION
Can display the error condition in all the video and audio channels during PB in units of three stages on the monitor screen.
For more details, refer to next page.

a) C10: CHANNEL CONDITION

This mode can display the error condition in all the video and audio channels during PB in units of three stages on the monitor screen.

The channel condition indicator on the upper control panel indicates the error condition in the worst channel among all the video and audio channels.

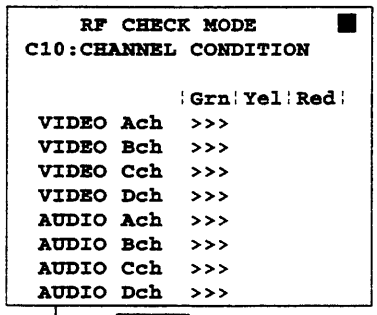
(1) Press the SET button (or switch S300 on the SS board) on the screen at right. At that time, the unit temporarily exits the maintenance mode. This enables the normal operation.
(Prompt "■" is displayed in the upper right position of the superimposed screen, and the time counter is put into the normal state.)



(1) SET or S300
(2) Playback

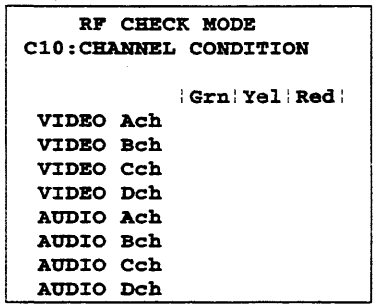
(2) Insert the cassette tape recorded by the digital Betacam and play back it in PLAY mode. The ">>>" display then appears on the monitor screen.

Confirm that the ">>>" display appears in the Grn position in all the channels.

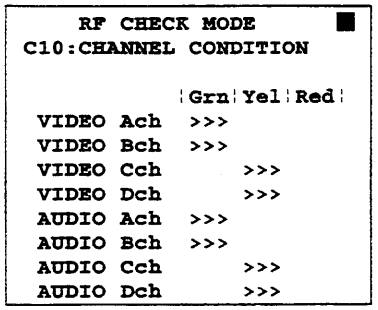


(3) EJECT
MENU or S301

(3) To terminate the operation, stop the tape running and eject the cassette tape. (The ">>>" display disappears.)
Press the MENU button (or switch S301 on the SS board) to return to the maintenance mode.
(The "■" display disappears on the monitor screen, and the time counter displays menu number C10.)



When the ">>>" display appears in positions other than "Grn", clean the drum (rotary heads).



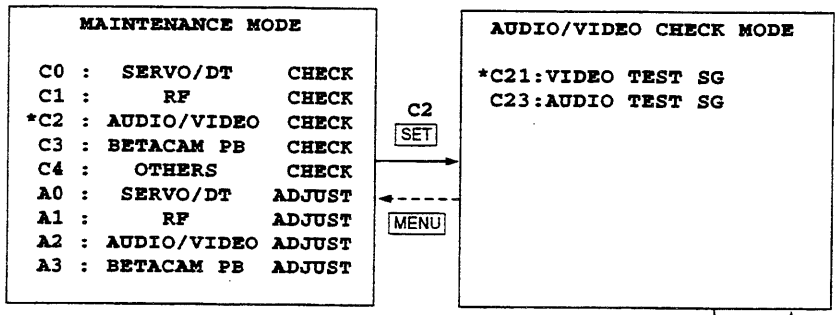
(a) Cleaning by the cleaning tape (Refer to Section 1-11-1.)
* Cleaning time is five seconds.
(b) Cleaning by the cleaning cloth (Refer to Section 1-11-2.)
If the channel condition is not improved after performing the step (a) and (b), there is a possibility to improve the situation by use of cleaning tape repeatedly.
It should be less than 4 times of 5 seconds cleaning in total.
If the channel condition is not improved in the way mentioned above, the possible causes below are considered.

Playback tape fault:
- The tape is damaged.
- The recording state is bad.

Main unit faults:
- Tape running system adjustment defect/part installation defect
- RF system adjustment defect
- DT system adjustment defect
- Worn head
- Harness defect
- Brush/Slip ring defect
- Circuit defect

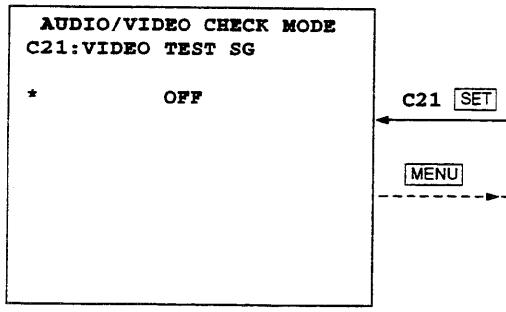
5-4. AUDIO/VIDEO SYSTEM CHECK MODE (C2: AUDIO/VIDEO CHECK)

This mode sets the audio/video signal generator operations during maintenance mode execution.
For how to activate and terminate the maintenance mode, refer to page 5-3.

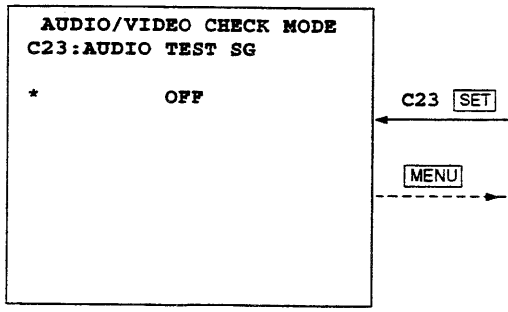


(Above screen is displayed for the DVW-A510P/A510.)

C21: VIDEO TEST SG
Selects the operation of the internal video test signal generator in the maintenance mode.
For more details, refer to the next page.



C23: AUDIO TEST SG
Selects the operation of the internal audio test signal generator in the maintenance mode.
For more details, refer to the next page.



a) C21: VIDEO TEST SG

This mode selects the operation of the internal video test signal generator in the maintenance mode.

OFF: Stops the operation of the video test signal generator.

Except OFF (mentioned below):
Outputs a selected signal from the video test signal generator.

100% color bars
75% color bars
75% reverse color bars
Bowtie
Pulse and bar
Multi burst
H sweep
5-step
Ramp
Shallow ramp
Red signal
50% flat
100% flat
Black burst
Pathological check code
Line 330 (625)----------DVW-A510P/510P only
NTC7 (NTSC)---------- DVW-A510/510 only

Selection method

To display the desire setting, turn the search dial while pressing and holding the JOG (or SHUTTLE) button. The test signal specified in this case is continuously output from a video test signal generator until the maintenance mode is terminated or until this setting is changed.

b) C23: AUDIO TEST SG

This mode selects the operation of the internal audio test signal generator in the maintenance mode.

OFF: Stops the operation of the audio test signal generator.

Except OFF (mentioned below):
Outputs the selected signal from the audio test signal generator.

SILENCE
1 kHz sine 0 VU
1 kHz sine burst/1-field
1 kHz sine burst/2-field
1 kHz sine burst/5-field
1 kHz sine burst/8-field
1 kHz sine burst (10)
4 kHz sine burst (40)
SAW(sawtooth) wave

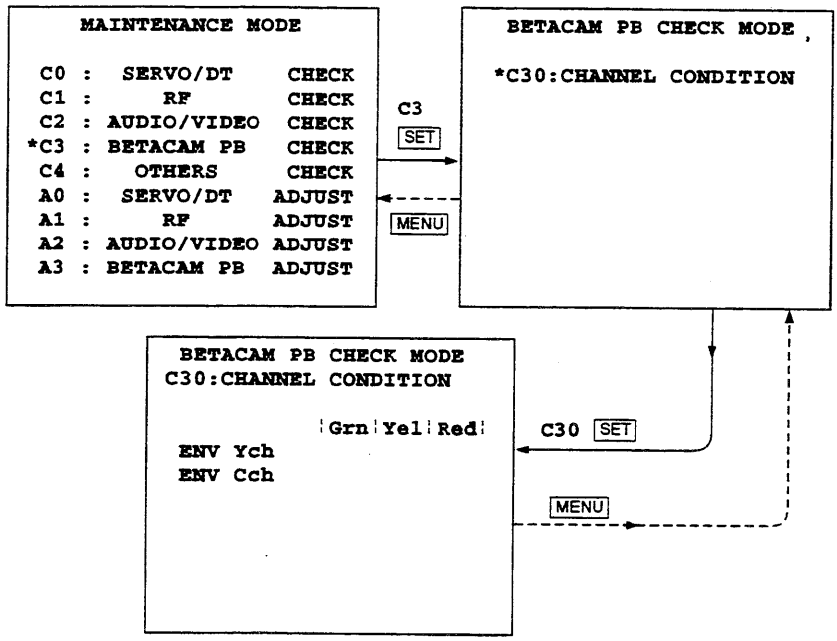
Selection method

To display the desire setting, turn the search dial while pressing and holding the JOG (or SHUTTLE) button. The test signal specified in this case is continuously output from the audio test signal generator until the maintenance mode is terminated or until this setting is changed.

5-5. BETACAM PB SYSTEM CHECK MODE (For DVW-A510P/A510) (C3: BETACAM PB CHECK)

This mode can check the Betacam PB system.
For how to activate and terminate the maintenance mode, refer to page 5-3.

Exclusive mode for the DVW-A510P/A510



C30: CHANNEL CONDITION
Can display the error condition in Betacam PB video channels (Y and C) in units of three stages on the monitor screen.
For more details, refer to next page.

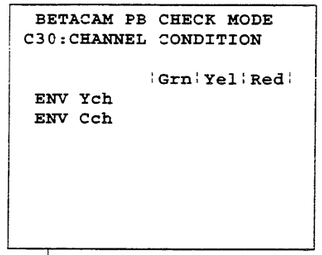
5-5. BETACAM PB SYSTEM CHECK MODE (For DVW-A510P/A510)

a) C30: CHANNEL CONDITION

This mode can display the error condition in Betacam PB video channels (Y and C) in units of three stages on the monitor screen.

The channel condition indicator on the upper control panel indicates the bad channel state of the error condition.

(1) Press the SET button (or switch S300 on the SS board) on the screen at right. At that time, the unit temporarily exits the maintenance mode. This enables the normal operation.
(Prompt "■" is displayed in the upper right position of the superimposed screen, and the time counter is put into the normal state.)

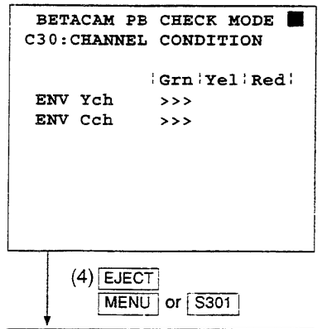


(1) SET or S300
(2) Insert a Betacam tape
(3) PLAY

(2) Insert the recorded Betacam cassette tape.

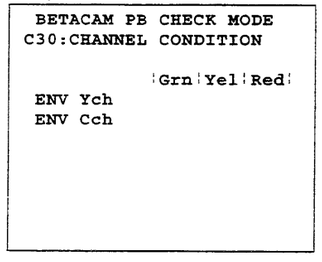
(3) Press the PLAY button.
The ">>>" display then appears on the monitor screen.

Confirm that the ">>>" display appears in the "Grn" position in both channels.

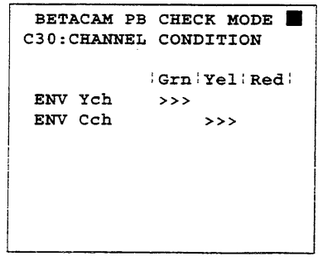


(4) EJECT
MENU or S301

(4) To terminate the operation, stop the tape running and eject the cassette tape.
(The ">>>" display disappears.)
Press the MENU button (or switch S301 on the SS board) to return to the maintenance mode.
(The "■" display disappears on the monitor screen, and the time counter displays menu number C30.)



When the ">>>" display appears in positions other than "Grn", clean the drum (rotary heads).
(a) Cleaning by the cleaning tape (Refer to Section 1-11-1.)
* Cleaning time is five seconds.
(b) Cleaning by the cleaning cloth (Refer to Section 1-11-2.)
If the channel condition is not improved after performing the step (a) and (b), there is a possibility to improve the situation by use of cleaning tape repeatedly.
It should be less than 4 times of 5 seconds cleaning in total.
If the channel condition is not improved in the way mentioned above, the possible causes below are considered.



Playback tape fault:
- The tape is damaged.
- The recording state is bad.

Main unit faults:
- Tape running system adjustment defect/part installation defect
- RF system adjustment defect
- DT system adjustment defect
- Worn head
- Harness defect
- Brush/Slip ring defect
- Circuit defect

5-33

5-6. OTHERS CHECK MODE

5-6. OTHERS CHECK MODE (C4: OTHERS CHECK)

This section describes the "C4: OTHERS CHECK" mode.
For how to activate and terminate the maintenance mode, refer to page 5-3.

```
MAINTENANCE MODE

 C0 :   SERVO/DT     CHECK
 C1 :      RF        CHECK
 C2 : AUDIO/VIDEO    CHECK
 C3 : BETACAM PB     CHECK
*C4 :   OTHERS       CHECK
 A0 :   SERVO/DT     ADJUST
 A1 :      RF        ADJUST
 A2 : AUDIO/VIDEO    ADJUST
 A3 : BETACAM PB     ADJUST
```

C4 [SET]

[MENU]

```
OTHERS CHECK MODE

*C40:ROM VERSION
 C41:SERIAL NUMBER
 C42:RS-232C STATUS
 C45:MEMORY CHECK
 C46:HOUR METER
 C47:METER HEAD ROOM
 C48:BKDW-509 SETUP
 C49:SETUP BANK4
```

(Above screen is displayed for the DVW-A510P/A510.)

The C41 and C42 modes are applied on the unit in which the three version numbers of SYS1 ROM(IC12), SV1 ROM(IC761), and DT ROM(IC211) on the SS board are 2.00 or higher.

The C48:BKDW-509 SETUP menu is applied on the unit in which the version No. of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS board are 1.10 or higher. And this menu is not displayed when the BKDW-509 is not installed.

The C49:SETUP BANK4 mode is applied on the unit in which the version No. of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS board are 3.10 or higher.

C40: ROM VERSION

Displays the ROM version that exists in this unit.
Also displays the installed option.
For more details, refer to page 5-35.

The screen at right is displayed when optional BKDW-507 and BKDW-509 are installed in the DVW-A510P. The version value is one example.

```
OTHERS CHECK MODE
C40:ROM VERSION
        DVW-A510P
   (with BKDW-507,509)
SYS1 V1.00    SYS2 V1.00
SV1  V1.00    SV2  V1  .00
DT   V1.00    DR   V1.00
APR  V1.00    VPR  V1.00
FP   V1.00    FL   V1.00
KY   V1.00    SWC  V1.00
DM   V1.00    TBC  V1.00
RM   V1.00
```

C40 [SET]

[MENU]

C48/C49

C41: SERIAL NUMBER

[ISR use]

Displays/sets the serial number. This is setting requisite for the ISR.
For more details, refer to page 5-35.

The number in the right figure is one example.

```
OTHERS CHECK MODE
C41:SERIAL NUMBER

        10001
```

C41 [SET]

[MENU]

C42: RS-232C STATUS

[ISR use]

Displays the RS-232C port status, and sets the baud rate and flow control requisite for the ISR.
For more details, refer to page 5-36.

The status in the right figure is one example.

```
OTHERS CHECK MODE
C42:RS-232C STATUS

*BAUD RATE          19.2K
 FLOW CONTROL        H/W
  ISR  [              ]
  ID [DigiBeta-1      ]
 PE 00   FE 00    OE 00
 TXD(2)0000  RXD(3)0000
 RTS(4)  ON  CTS(5)  ON
 DSR(6)  ON  DCD(8)  ON
 DTR(20) ON
```

C42 [SET]

[MENU]

ISR; Interactive Status Reporting system

The ISR system can perform the operation monitoring and self-diagnosis check of each broadcast equipment by using the personal computer installed the ISR application software Sony BZI-500/501.

```
OTHERS CHECK MODE
C45:MEMORY CHECK
*0000 : 24 07 00 F0
 0004 : 24 07 00 F0
 0008 : 24 07 00 F0
 000C : 24 07 00 F0
 0010 : 24 07 00 F0
 0014 : 24 07 00 F0
 0018 : 24 07 00 F0
 001C : 24 07 00 F0
 0020 : 24 07 00 F0
 0024 : 24 07 00 F0
```

C45 [SET]

[MENU]

C45: MEMORY CHECK

[Factory use]

Displays the data in the RAM that exists in this unit.
For more details, refer to page 5-36.

The data value in the figure at left is one example.

```
OTHERS CHECK MODE
C46:HOUR METER

*DRUM HOURS          234
 TAPE HOURS          123
 THREAD COUNTER     1234
```

C46 [SET]

[MENU]

C46: HOUR METER

Can display and reset the resetable hours meter and thread counter of this unit.
For more details, refer to page 5-36.

The data value in the figure at left is one example.

```
OTHERS CHECK MODE
C47:METER HEAD ROOM

*         20dB
```

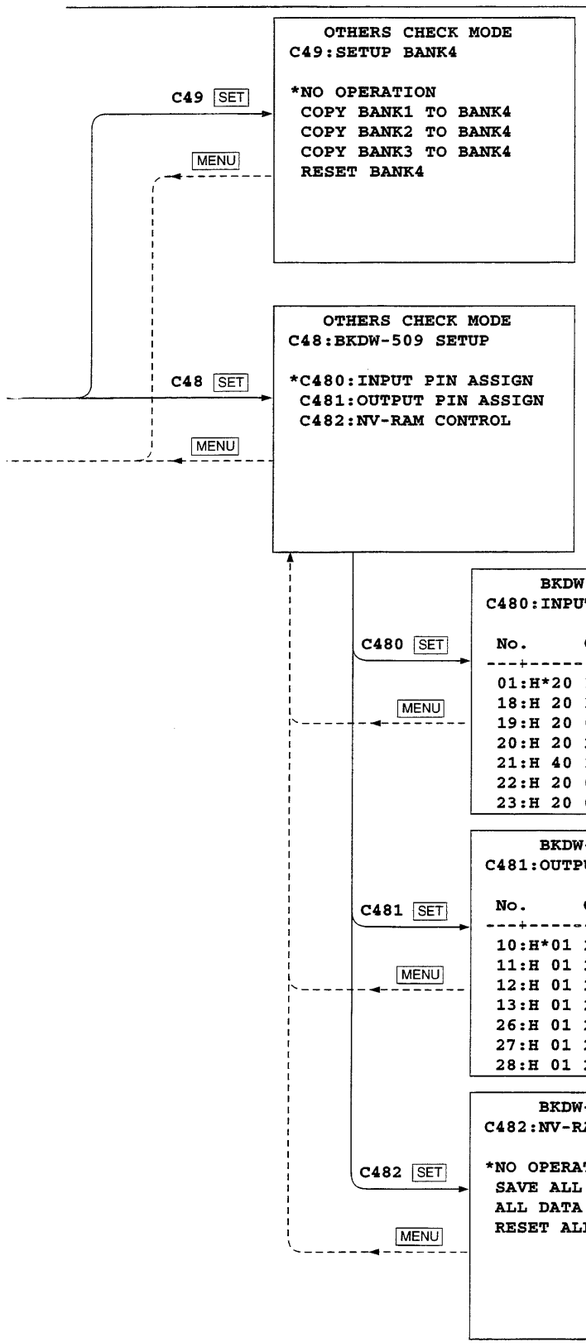
C47 [SET]

[MENU]

C47: METER HEAD ROOM

Sets the head room of the audio level meter.
For more details, refer to page 5-36.

5-34



C49:SETUP BANK4
Copies the data of the setup menu BANK-1, 2, or 3 to BANK-4.
For more details, refer to page 5-40.

C48:BKDW-509 SETUP
Menu for the BKDW-509 (optional equipment).
Changes/resets the BKDW-509 setup data (input/output pins function of the parallel interface).
Also displays the logic level of the input/output pins.
For more details, refer to page 5-37.

C480: INPUT PIN ASSIGN
Changes the setup data (input pins function).
Also displays the logic level of the input pins.
The data value and the logic level in the figure at left is one example.

C481: OUTPUT PIN ASSIGN
Changes the setup data (output pins function).
Also displays the logic level of the output pins.
The data value and the logic level in the figure at left is one example.

C482: NV-RAM CONTROL
Saves the BKDW-509 setup data in an NV-RAM, returns it to the previous state without saving, or resets it to the factory data.

a) C40: ROM VERSION

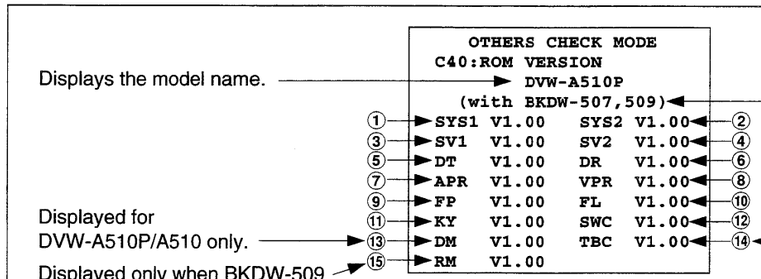
This mode displays the version of the ROM (including the ROM in a microprocessor) that exists in this unit. It also displays the installed option (BKDW-).

The screen at right is displayed when both an audio program play board (BKDW-507) and parallel (50-pin) interface board (BKDW-509) are installed in the DVW-A510P.

The display description is shown below.

```
OTHERS CHECK MODE
C40:ROM VERSION
        DVW-A510P
  (with BKDW-507,509)
SYS1 V1.00   SYS2 V1.00
SV1  V1.00   SV2  V1.00
DT   V1.00   DR   V1.00
APR  V1.00   VPR  V1.00
FP   V1.00   FL   V1.00
KY   V1.00   SWC  V1.00
DM   V1.00   TBC  V1.00
RM   V1.00
```

This version value is one example.



① SYS1 : IC12 on SS-52B board
② SYS2 : IC54 on SS-52B board
③ SV1 : IC761 on SS-52B board
④ SV2 : IC700 (microprocessor) on SS-52B board
⑤ DT : IC211 on SS-52B board
⑥ DR : IC106 (microprocessor) on DR-307 board/
IC3 (microprocessor) on DR-200 board
⑦ APR : IC51 (microprocessor) on APR-1B board
⑧ VPR : IC753 (microprocessor) on VPR-1B board
⑨ FP : IC6 (microprocessor) on FP-58B board
⑩ FL : IC (microprocessor) in FL indicator module (audio level meters)
⑪ KY : IC1 (microprocessor) on KY-231B board
⑫ SWC : IC2 (microprocessor) on SWC-19B board
⑬ DM : IC906 (microprocessor) on DM-89 board
Displayed for DVW-A510P/A510 only.
⑭ TBC : IC202 (microprocessor) on TBC-23 board
Displayed for DVW-A510P/A510 only.
⑮ RM : IC2 (microprocessor) on RM-130 board
Displayed when optional BKDW-509 is installed.

b) C41: SERIAL NUMBER

ISR use

Displays/sets the serial number. This is setting requisite for the ISR.
Setting performs at each digit. (Blinking a digit can change.)
Displays "-----" when the serial number is not set.

Setting

(1) Trun the search dial(JOG mode) to blinking digit.
(2) Trun the search dial while pressing the JOG button to display the desire number.
(3) For other digits to be set, repeat steps (1) and (2).
(4) Press the SET button (or switch S300 on the SS board). Setting is then completed.

```
OTHERS CHECK MODE
C41:SERIAL NUMBER

10001
```

Above screen is one example.

c) C42: RS-232C STATUS

ISR use

Displays the RS-232C port status, and sets the baud rate and flow control requisite for the ISR.

Setting (Baud rate or Flow control)
(1) Align "*" mark with the item to be set using the search dial(JOG mode).
(2) To display the desire setting, trun the search dial while pressing the JOG button.
(3) Press the SET button (or switch S300 on the SS board). Setting is then completed.

The display description is shown below.

```
   OTHERS CHECK MODE
C42:RS-232C STATUS

*BAUD RATE          19.2K
 FLOW CONTROL         H/W
  ISR  [               ]
  ID [DigiBeta-1       ]
 PE 00   FE 00    OE 00
 TXD(2)0000  RXD(3)0000
 RTS(4)  ON  CTS(5)  ON
 DSR(6)  ON  DCD(8)  ON
 DTR(20) ON
```

Above screen is one example.

① Selects the buad rate from the followings.
1200, 2400, 4800, 9600, 19.2K (bps)

② Selects/changes the flow control of transmitting side from the followings.
H/W ; Hardware control
XOFF ; XON/XOFF control
H/W,XOFF ; Both the hardware and XON/XOFF

③ Protcol state indication

```
ISR x[yyyy..........]
```

- Displays last correctly recieving command (Displays former recieving command till ACK transmitting is completed.)
- Displays the protcol status of the unit.
  - A ; on ACK transmission
  - N ; on NAK transmission
  - T ; on ATN (OPC or QRESP) transmission
  - W ; waiting for ACK
  - X ; XOFF received, waiting for XON

```
   OTHERS CHECK MODE
C42:RS-232C STATUS

*BAUD RATE          19.2K  <- ①
 FLOW CONTROL         H/W  <- ②
  ISR  [               ]  <- ③
  ID [DigiBeta-1       ]  <- ④
 PE 00   FE 00    OE 00  <- ⑤
 TXD(2)0000  RXD(3)0000
 RTS(4)  ON  CTS(5)  ON   <- ⑥
 DSR(6)  ON  DCD(8)  ON
 DTR(20) ON
```

④ Device ID is desplayed a name that sets by DEVID command of ISR protocol. Even if the power is turned off, this device ID is kept till it changes by DEVID command.

⑤ Displays the number of the parity error (PE), framing error (FE), and overrun error (OE) of receiving data.

⑥ The number with ( ) indicates the pin number of RS-232C connector.
The four figures (hexadecimal) at TXD or RXD indicates the number of correctly transmitting or recieving data (byte).
Other items indicates the pin state with ON(> +3 V) or OFF(< –3 V).
When RS-232C port connects with computer &c., normally turns all ON.
When not connected, the state of input pins (CTS, DSR, DCD) are undefined.

d) C45: MEMORY CHECK

This mode displays the data in the ROM that exists in this unit (in hexadecimals).

Move the "*" mark upward or downward using a search dial (JOG mode).
The address and data display areas are then scrolled.

Factory use

```
   OTHERS CHECK MODE
C45:MEMORY CHECK
*0000 : 24 07 00 F0
 0004 : 24 07 00 F0
 0008 : 24 07 00 F0
 000C : 24 07 00 F0
 0010 : 24 07 00 F0
 0014 : 24 07 00 F0
 0018 : 24 07 00 F0
 001C : 24 07 00 F0
 0020 : 24 07 00 F0
 0024 : 24 07 00 F0
```

This data value is one example.

e) C46: HOUR METER

This mode can display and reset the resetable hours meter and thread counter of this unit.

Display description
DRUM HOURS : Drum rotation time
TAPE HOURS : Tape running time
THREAD COUNTER : Number of threading times

Resetting
(1) Align the "*" mark with the item to be reset using a search dial (JOG mode).
(2) Turn the search dial in the reverse direction while pressing the JOG (or SHUTTLE) button. The display value then becomes zero ("0").
To return the display value to the former value after that, turn the search dial in the forward direction.
(3) For other items to be reset, repeat steps (1) and (2).
(4) Press the SET button (or switch S300 on the SS board). Resetting is then completed.

```
   OTHERS CHECK MODE
C46:HOUR METER

*DRUM HOURS          234
 TAPE HOURS          123
 THREAD COUNTER     1234
```

This value is one example.

f) C47: METER HEAD ROOM

This mode selects the head room of the audio level meter from the following.
20 dB, 18 dB, 16 dB, 15 dB*1, 14 dB, 12 dB, 9 dB*1-----DVW-A510P/510P only
20 dB, 18 dB, 16 dB, 14 dB, 12 dB----------DVW-A510/510 only

Selection method
(1) To display the desire setting, turn the search dial while pressing the JOG (or SHUTTLE) button.
(2) Press the SET button (or switch S300 or the SS board). Setting is then completed.

*1; These head rooms are added to the unit in which the APR microprocessor (IC753 on the APR board) version is 1.04 or higher, and FL microprocessor (in audio level meter) version is 1.01.

```
   OTHERS CHECK MODE
C47:METER HEAD ROOM

*          20dB
```

g) C48 : BKDW-509 SETUP

This menu changes/resets the BKDW-509 setup data (input/output pins function of the parallel interface). Also displays the logic level of the input/output pins.
This menu is not displayed when the BKDW-509 is not installed.

The C480 mode changes the setup data of the input pins function, and displays the logic level of it.
The C481 mode changes the setup data of the output pins function, and displays the logic level of it.
The C482 mode saves the setup data in an NV-RAM, returns it to the previous state without saving, or resets it to the factory data.

The C48 menu is applied on the unit in which the version No. of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS board are 1.10 or higher.
(The BKDW-509 does not operate when the above two ROM's version No. are each less than 1.10. To operate the version-up of the two ROMs is required.)

```
   OTHERS CHECK MODE
C48:BKDW-509 SETUP

*C480:INPUT PIN ASSIGN
 C481:OUTPUT PIN ASSIGN
 C482:NV-RAM CONTROL
```

DIAL
SET or S300

(The monitor screen is displayed as an example of "C480 : INPUT PIN ASSIGN". The displayed data value and logic level are an example.)

Display Description
The pin numbers are displayed at the column of "No.".
Also the right at the pin number is displayed the logic level state (H;high, L;low).
The monitor screen is scrolled and displayed.

Operation during data changing
(1) Set "*" mark to the left of data to be adjusted using a search dial (JOG mode).

```
    BKDW-509 SETUP
C480:INPUT PIN ASSIGN

 No.      Command
---+--------------------
 01:H*20 10 00 00 00 00
 18:H 20 30 00 00 00 00
 19:H 20 05 00 00 00 00
 20:H 20 20 00 00 00 00
 21:H 40 10 00 00 00 00
 22:H 20 04 00 00 00 00
 23:H 20 0F 00 00 00 00
```

(1) DIAL

```
    BKDW-509 SETUP
C480:INPUT PIN ASSIGN

 No.      Command
---+--------------------
 01:H 20 10 00 00 00 00
 18:H 20*30 00 00 00 00
 19:H 20 05 00 00 00 00
 20:H 20 20 00 00 00 00
 21:H 40 10 00 00 00 00
 22:H 20 04 00 00 00 00
 23:H 20 0F 00 00 00 00
```

(2) JOG + DIAL

(2) Turn the search dial to change the data while pressing the JOG (or SHUTTLE) button.

FWD (↷): Increases the data value.
REV (↶): Decreases the data value.

```
    BKDW-509 SETUP
C480:INPUT PIN ASSIGN

 No.      Command
---+--------------------
 01:H 20 10 00 00 00 00
 18:H 20*50 00 00 00 00
 19:H 20 05 00 00 00 00
 20:H 20 20 00 00 00 00
 21:H 40 10 00 00 00 00
 22:H 20 04 00 00 00 00
 23:H 20 0F 00 00 00 00
```

(3) For any other data, repeat steps (1) and (2).

(4) MENU or S301

(4) After change is completed, press the MENU button (or switch S301 on the SS board) to return to the BKDW-509 SETUP menu screen.

```
*C482:NV-RAM CONTROL
```

(5) To save the adjustment data in an NV-RAM, execute the "C482: NV-RAM CONTROL" mode.

5-6. OTHERS CHECK MODE

Caution

> If to change the setup data, and/or the version-up of the ROMs, please contact to Sony's service organization.

Do not change the setup data carelessly. This causes a trouble.
If the adjustment data been changed carelessly, execute the "ALL DATA PREVIOUS" mode in C482 : NV-RAM CONTROL or turn off the power of this unit without executing the C482 : NV-RAM CONTROL.
Never execute the "SAVE ALL DATA" mode.

C482 : NV-RAM CONTROL

Caution : Once the BKDW-509 setup data is saved in an NV-RAM, it cannot return to the previous state.

(1) Using a serch dial (JOG mode), set the "*" mark as follows;
Set it to "SAVE ALL DATA" when the setup data after change is saved.
Set it to "ALL DATA PREVIOUS" when the setup data before change is returned.
Set it into "RESET ALL DATA" when the setup data resets to the factory data.

```
    BKDW-509 SETUP
C482:NV-RAM CONTROL

*NO OPERATION
 SAVE ALL DATA
 ALL DATA PREVIOUS
 RESET ALL DATA
```

(1) DIAL
(2) SET or S300

(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer.

The monitor screen at right is displayed when the setup data is saved/reseted.
The "Loading ..." message is displayed when the setup data before change is returned.

```
    BKDW-509 SETUP
C482:NV-RAM CONTROL

 Saving ...
```

During data saving

(3) After data transfer is completed, the "Complete" message is displayed on the monitor screen.
The monitor screen at right is displayed when the setup data is saved/reseted.
The "Load Complete" message is displayed when the setup data befor adjustment is returned.

```
    BKDW-509 SETUP
C482:NV-RAM CONTROL

 Save Complete
```

Data saving completed

Note : If the power of this unit is turned off without saving the BKDW-509 setup data in an NV-RAM after change is completed, the setup data returns to the previous state.

5-6. OTHERS CHECK MODE

C49: SETUP BANK4

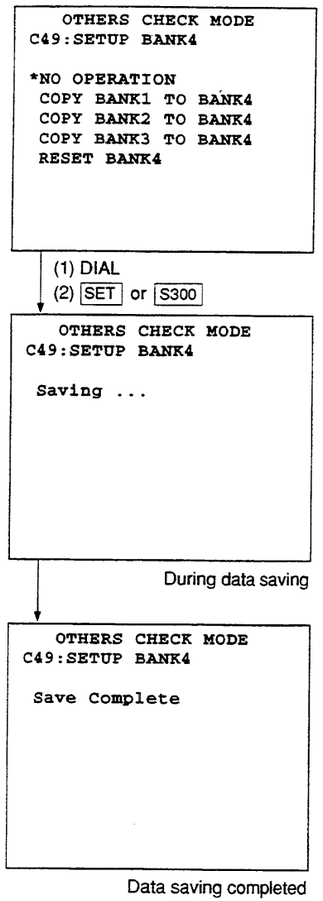
This mode copies into the setup menu BANK-4 from BANK-1, 2, or 3, or resets it to the factory data.

The C49 mode is applied on the unit in which the version No. of both SYS1 ROM (IC12) and SYS2 ROM (IC54) on the SS board are 3.10 or higher.

(1) Using a serch dial (JOG mode), set the "*" mark as follows;
Set it to "COPY BANK1 TO BANK4" when the BANK-1 data is copied into the BANK-4.
Set it to "COPY BANK2 TO BANK4" when the BANK-2 data is copied into the BANK-4.
Set it to "COPY BANK3 TO BANK4" when the BANK-3 data is copied into the BANK-4.
Set it into "RESET BANK4" when the BANK-4 data resets to the factory data.

(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer.

(3) After data transfer is completed, the "Save Complete" message is displayed on the monitor screen.



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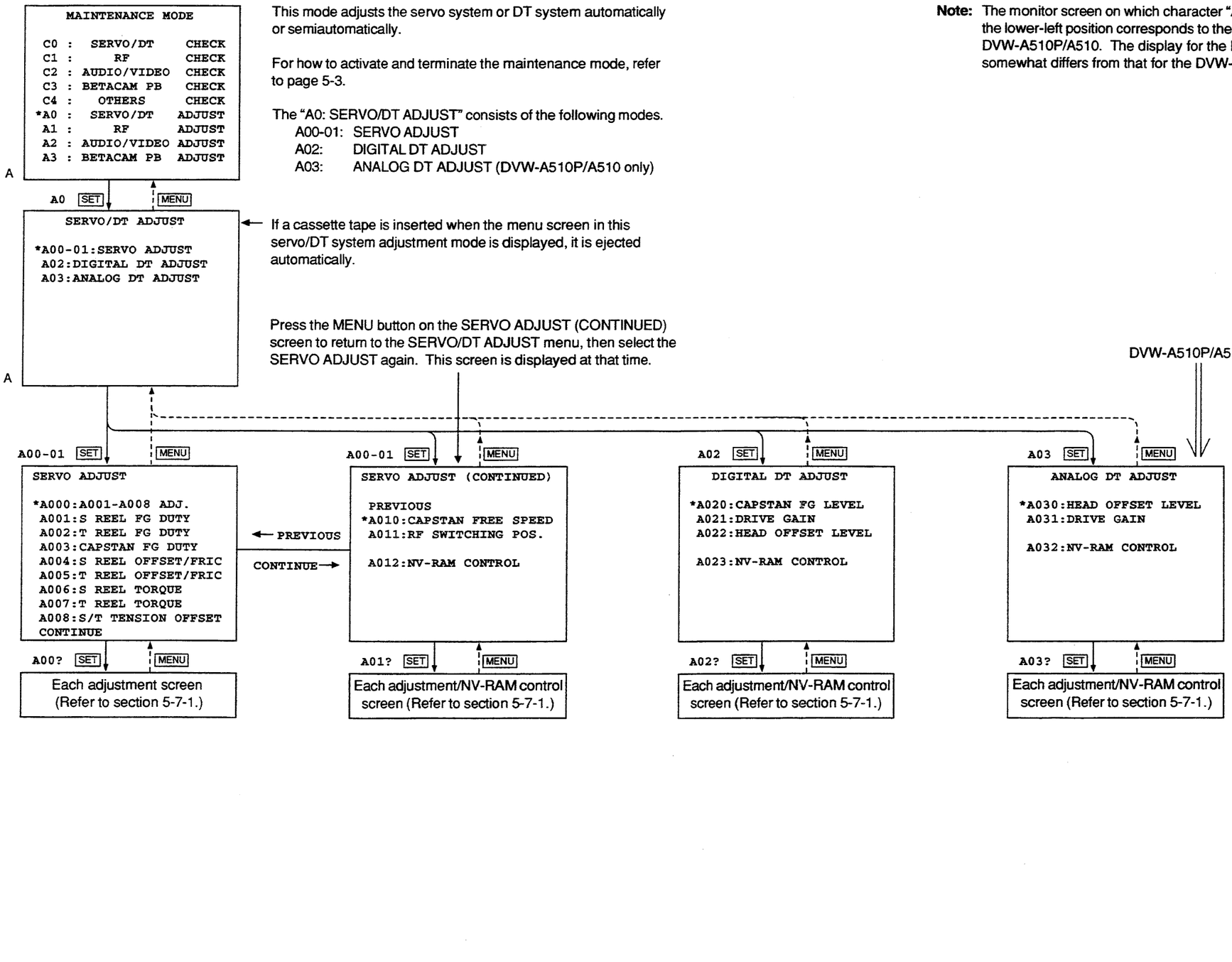
5-7. SERVO/DT SYSTEM ADJUSTMENT MODE

5-7. SERVO/DT SYSTEM ADJUSTMENT MODE (A0: SERVO/DT ADJUST)



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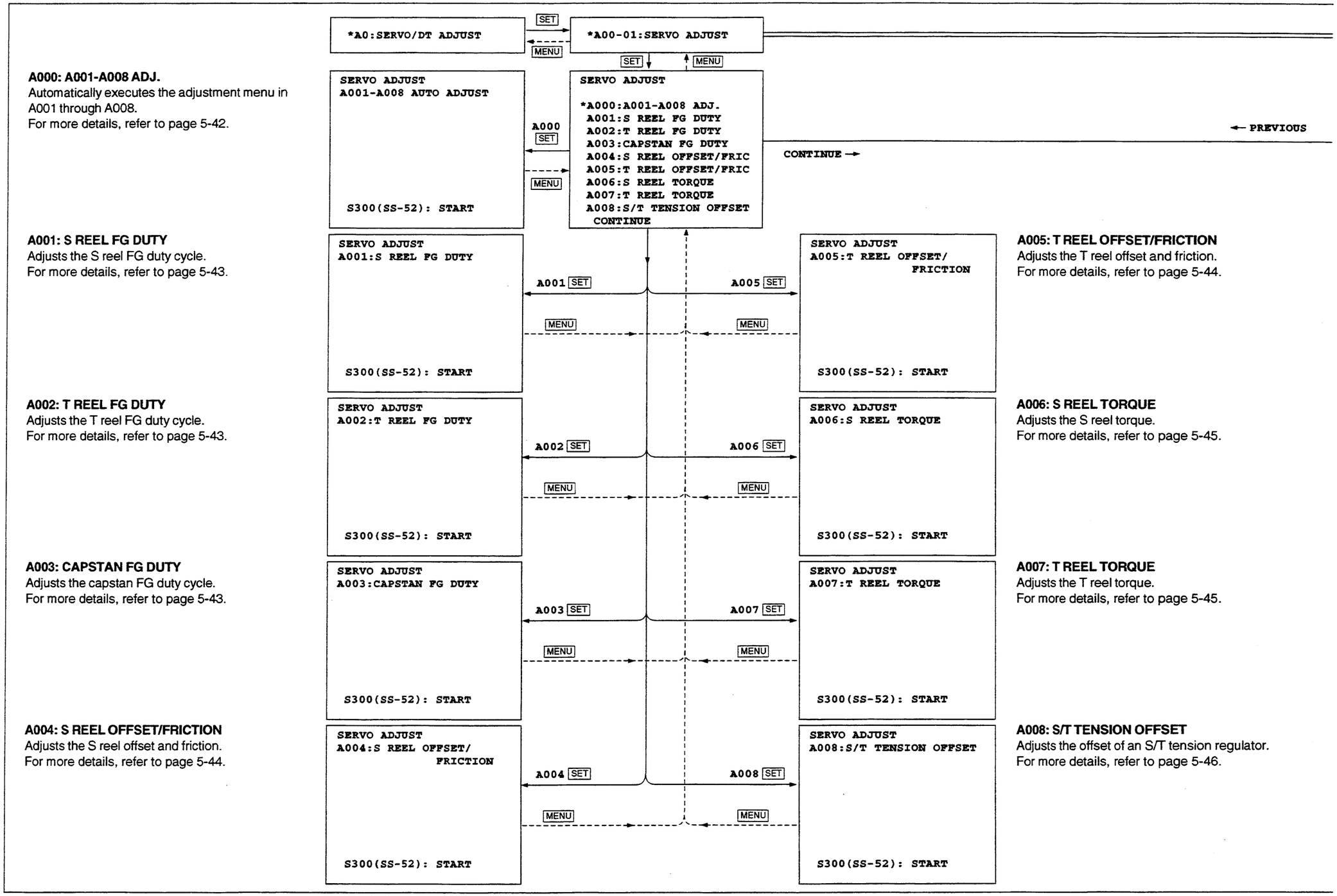
5-7-1. Servo System Adjustment Mode

5-7-1. Servo System Adjustment Mode (A00-01: SERVO ADJUST)

This section describes the "A00-01: SERVO ADJUST" mode.



A000: A001-A008 ADJ.
Automatically executes the adjustment menu in A001 through A008.
For more details, refer to page 5-42.

A001: S REEL FG DUTY
Adjusts the S reel FG duty cycle.
For more details, refer to page 5-43.

A002: T REEL FG DUTY
Adjusts the T reel FG duty cycle.
For more details, refer to page 5-43.

A003: CAPSTAN FG DUTY
Adjusts the capstan FG duty cycle.
For more details, refer to page 5-43.

A004: S REEL OFFSET/FRICTION
Adjusts the S reel offset and friction.
For more details, refer to page 5-44.

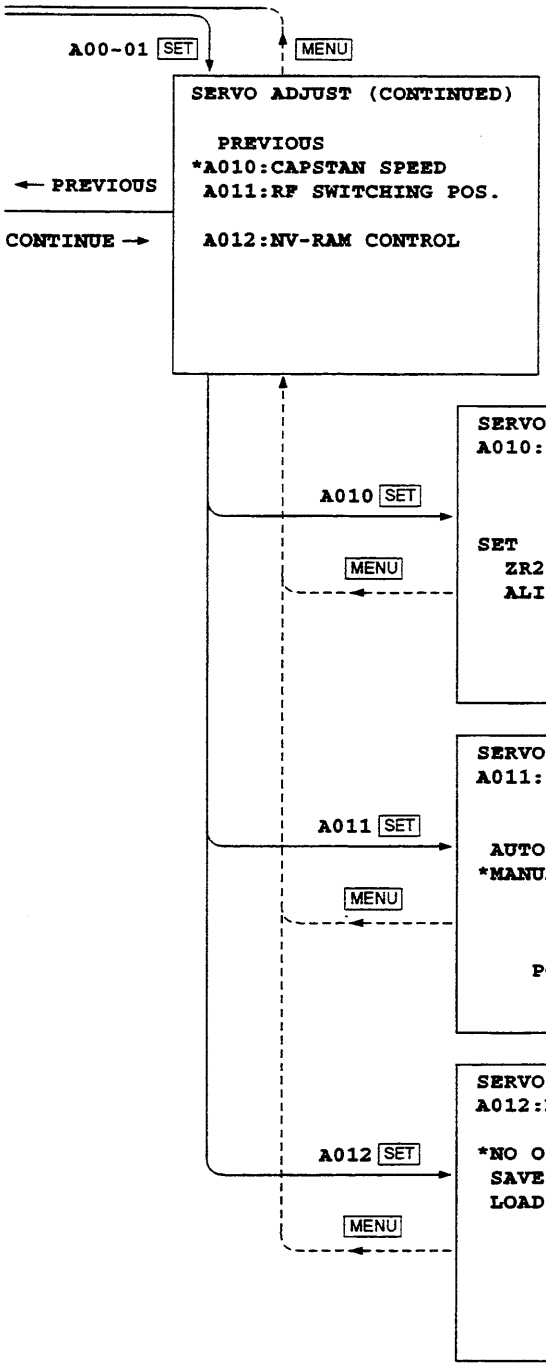
A005: T REEL OFFSET/FRICTION
Adjusts the T reel offset and friction.
For more details, refer to page 5-44.

A006: S REEL TORQUE
Adjusts the S reel torque.
For more details, refer to page 5-45.

A007: T REEL TORQUE
Adjusts the T reel torque.
For more details, refer to page 5-45.

A008: S/T TENSION OFFSET
Adjusts the offset of an S/T tension regulator.
For more details, refer to page 5-46.

5-40



Press the MENU button on the SERVO ADJUST (CONTINUED) screen to return to the SERVO/DT ADJUST menu, then select the A00-01: SERVO ADJUST again. This screen at left is displayed at that time.

A010: CAPSTAN FREE SPEED
Adjusts the free speed of a capstan motor.
For more details, refer to page 5-47.

A011: RF SWITCHING POS.
Adjusts the RF switching position.
For more details, refer to page 5-48.
(Only the automatic adjustment operation is described in this case.)

A012: NV-RAM CONTROL
Saves the servo system adjustment data in an NV-RAM.
For more details, refer to page 5-50.

a) A000: A001-A008 ADJ.

This mode executes the adjustment menus below automatically and continuously.

A001: S REEL FG DUTY
A002: T REEL FG DUTY
A003: CAPSTAN FG DUTY
A004: S REEL OFFSET/FRICTION
A005: T REEL OFFSET/FRICTION
A006: S REEL TORQUE
A007: T REEL TORQUE
A008: S/T TENSION OFFSET

(1) Press the SET button (or switch S300 on the SS board) to initiate the adjustment.

The "A001: S REEL FG DUTY" adjustment is performed first.
The "ADJUSTING....." message is displayed during adjustment.

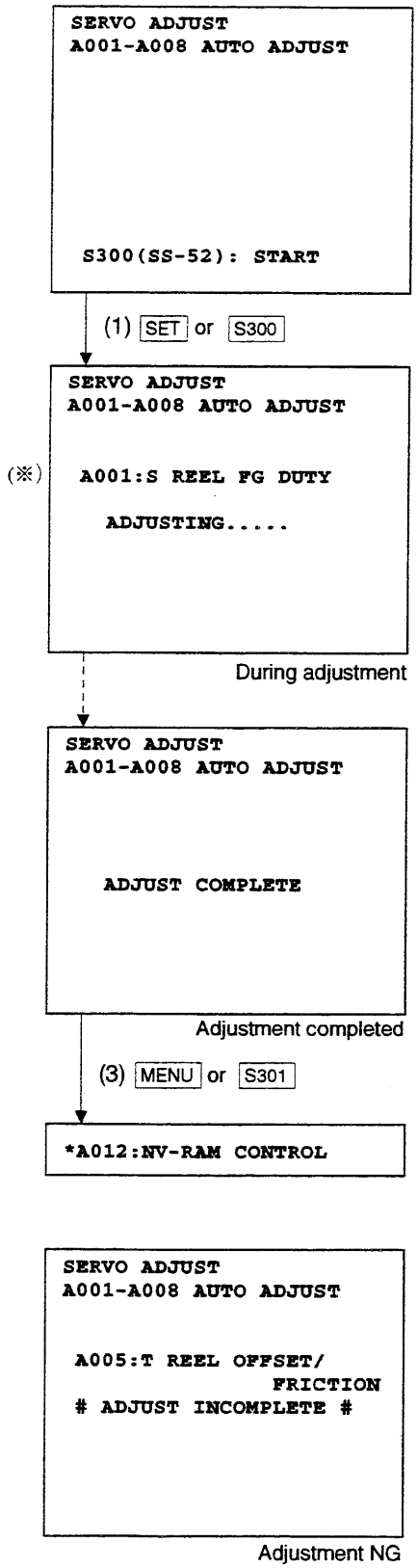
As the adjustment progresses, the display in the fifth line (※) changes.

(2) If no abnormality is found after all the adjustments are completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

(3) Press the MENU button (or switch S301 on the SS board) to return to the SERVO ADJUST menu screen.

(4) To save the adjustment data in an NV-RAM, execute the "A012: NV-RAM CONTROL" mode.

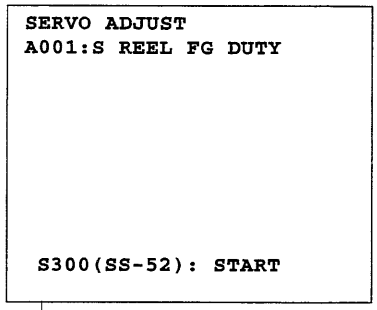
In case of NG; (The screen at right is one example.)
When the "ADJUST INCOMPLETE" message is displayed on the monitor screen.
Refer to the "In case of NG" in each adjustment menu.



b) A001: S REEL FG DUTY
A002: T REEL FG DUTY
A003: CAPSTAN FG DUTY

A001: Adjusts the S reel FG duty cycle.
A002: Adjusts the T reel FG duty cycle.
A003: Adjusts the capstan FG duty cycle.

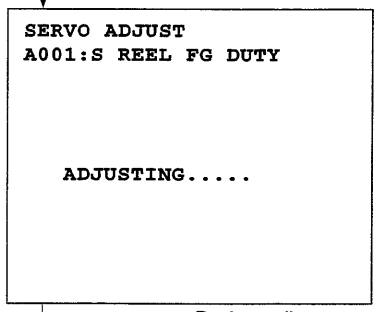
These operation methods are the same as one another. The monitor screen at right is displayed for "A001: S REEL FG DUTY".



(1) SET or S300

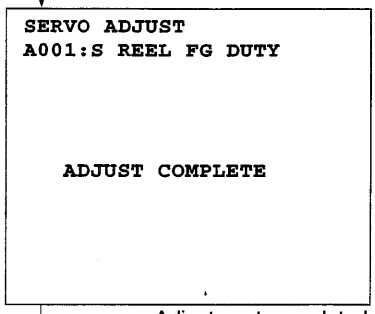
(1) Press the SET button (or switch S300 on the SS board) to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.



During adjustment

(2) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

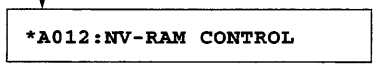


Adjustment completed

(3) MENU or S301

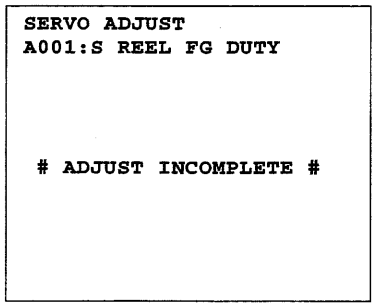
(3) Press the MENU button (or switch S301 on the SS board) to return to the SERVO ADJUST menu screen.

(4) To save the adjustment data in an NV-RAM, execute the "A012: NV-RAM CONTROL" mode.



In case of NG;
When the "ADJUST INCOMPLETE" message is displayed on the monitor screen, perform the following checks.

- For "A001: S REEL FG DUTY", check the S reel FG amplifier circuit and S reel motor driver circuit on the DR-307/200 board.
- For "A002: T REEL FG DUTY", check the T reel FG amplifier circuit and T reel motor driver circuit on the DR-307/200 board.
- For "A003: CAPSTAN FG DUTY", check the capstan FG amplifier circuit and capstan motor driver circuit on the DR-307/200 board.

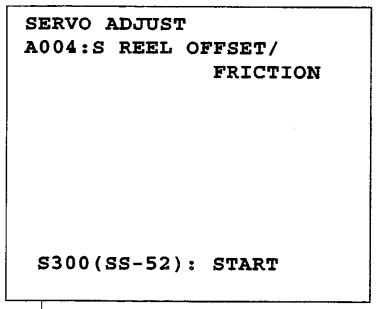


Adjustment NG

c) A004: S REEL OFFSET/FRICTION
A005: T REEL OFFSET/FRICTION

A004: Adjusts the S reel offset and friction.
A005: Adjusts the T reel offset and friction.

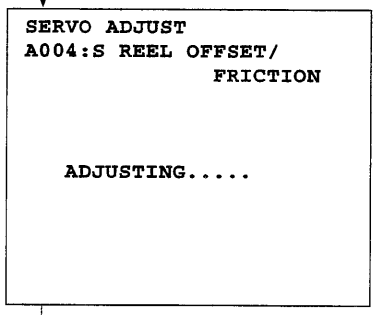
These operation methods are the same as each other. The monitor screen at right is displayed for "A004: S REEL OFFSET/FRICTION".



(1) SET or S300

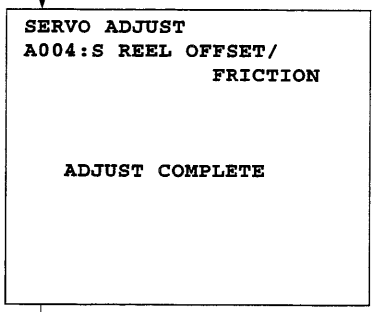
(1) Press the SET button (or switch S300 on the SS board) to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.



During adjustment

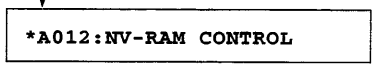
(2) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.



Adjustment completed

(3) MENU or S301

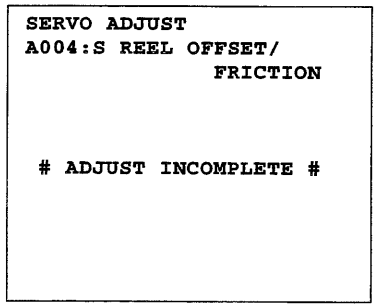
(3) Press the MENU button (or switch S301 on the SS board) to return to the SERVO ADJUST menu screen.



(4) To save the adjustment data in an NV-RAM, execute the "A012: NV-RAM CONTROL" mode.

In case of NG;
When the "ADJUST INCOMPLETE" message is displayed on the monitor screen, perform the following adjustments and checks.

- For "A004: S REEL OFFSET/FRICTION", adjust the S reel FG duty cycle (A001: S REEL FG DUTY) again and check the S reel motor driver circuit on the DR-307/200 board.
- For "A005: T REEL OFFSET/FRICTION", adjust the T reel FG duty cycle (A002: T REEL FG DUTY) again and check the T reel motor driver circuit on the DR-307/200 board.

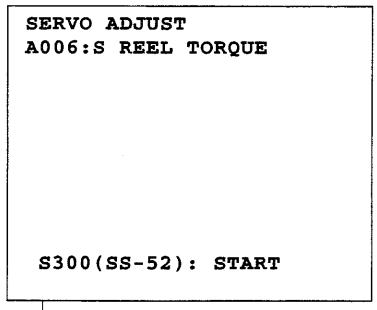


Adjustment NG

d) A006: S REEL TORQUE
A007: T REEL TORQUE

A006: Adjusts the S reel torque.
A007: Adjusts the T reel torque.

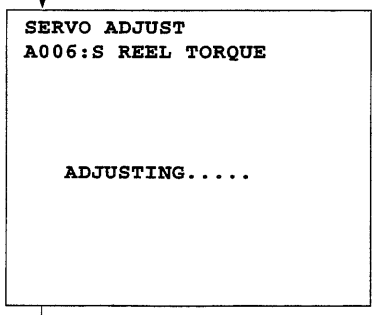
These operation methods are the same as each other. The monitor screen at right is displayed for "A006: S REEL TORQUE".



(1) SET or S300

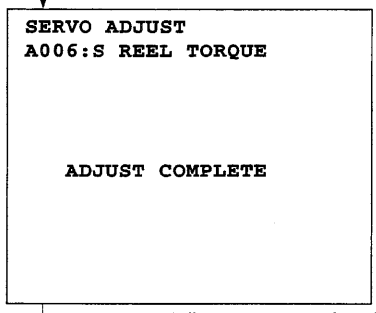
(1) Press the SET button (or switch S300 on the SS board) to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.



During adjustment

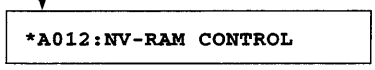
(2) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.



Adjustment completed

(3) MENU or S301

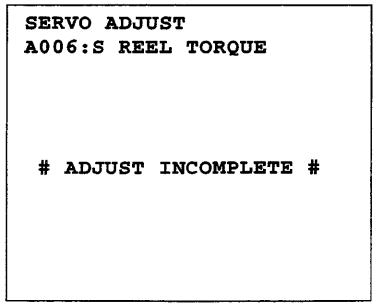
(3) Press the MENU button (or switch S301 on the SS board) to return to the SERVO ADJUST menu screen.



(4) To save the adjustment data in an NV-RAM, execute the "A012: NV-RAM CONTROL" mode.

In case of NG;
When the "ADJUST INCOMPLETE" message is displayed on the monitor screen, perform the following adjustments and checks.

- For "A006: S REEL TORQUE", adjust the S reel FG duty cycle (A001: S REEL FG DUTY) again and check the S reel motor driver circuit on the DR-307/200 board.
- For "A007: T REEL TORQUE", adjust the T reel FG duty cycle (A002: T REEL FG DUTY) again and check the T reel motor driver circuit on the DR-307/200 board.



Adjustment NG

e) A008: S/T TENSION OFFSET

This mode adjusts the offset of an S/T tension regulator.

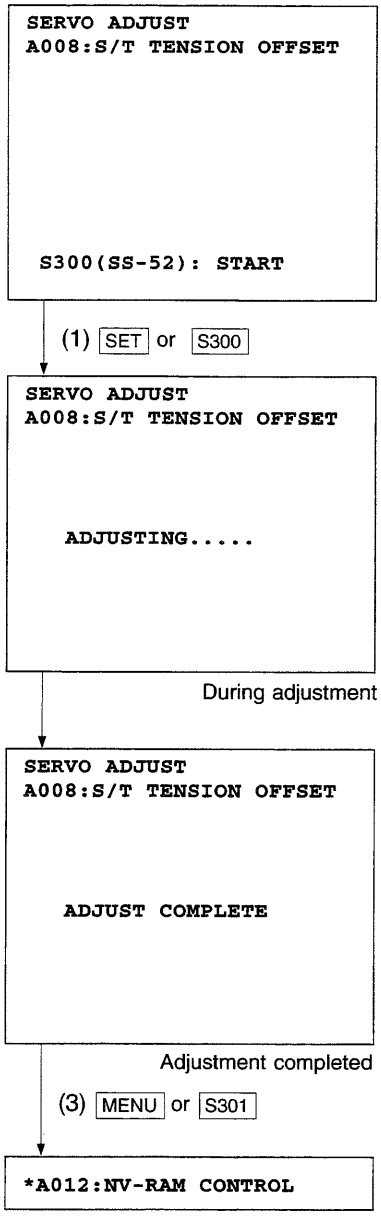
(1) Press the SET button (or switch S300 on the SS board) to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.

(2) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

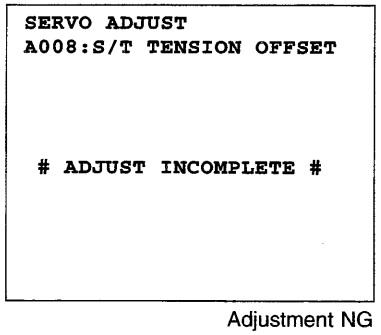
(3) Press the MENU button (or switch S301 on the SS board) to return to the SERVO ADJUST menu screen.

(4) To save the adjustment data in an NV-RAM, execute the "A012: NV-RAM CONTROL" mode.



In case of NG;

When the "ADJUST INCOMPLETE" message is displayed on the monitor screen.
Check the S tension detector circuit (IC40) or T tension detector circuit (IC32) on the DR-307/200 board.



f) A010: CAPSTAN FREE SPEED

This mode adjusts the free speed of a capstan.

(1) When alignment tape ZR2-1P/1 is inserted into this unit, this adjustment is initiated automatically.

ZR2-1P; for DVW-A510P/510P
ZR2-1 ; for DVW-A510/510

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.

Note: Be sure to use alignment tape ZR2-1P/1. If not, the adjustment is not performed correctly even if the "ADJUST COMPLETE" message is displayed after adjustment is completed.

(2) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

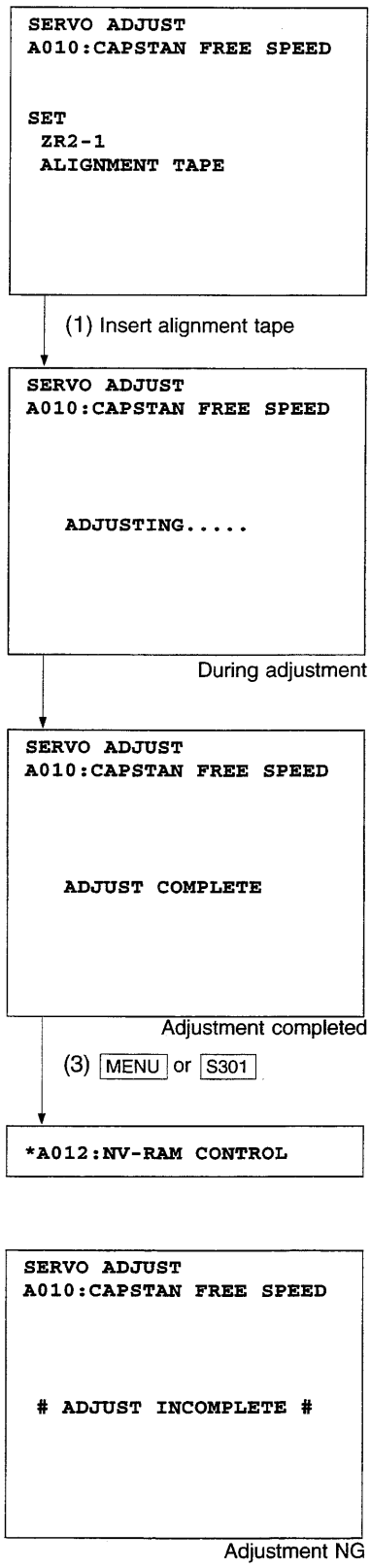
The alignment tape is ejected automatically.

(3) Press the MENU button (or switch S301 on the SS board) to return to the SERVO ADJUST menu screen.

(4) To save the adjustment data in an NV-RAM, execute the "A012: NV-RAM CONTROL" mode.

In case of NG;

When the "ADJUST INCOMPLETE" message is displayed on the monitor screen.
Confirm that the playback tape is alignment tape ZR2-1P/1.
Then, check the capstan FG amplifier circuit, capstan motor driver circuit, and CTL amplifier circuit on the DR-307/200 board.



g) A011: RF SWITCHING POS.

This mode adjusts the RF switching position.
This step describes the automatic adjustment operation. (The PG data displayed in this case is a standard value.)

> To perform this adjustment, alignment tape ZR2-1P/1 on which the beginning of the time code is beforehand located in 00:25:00:00 is required.

(1) Set the "*" mark to "AUTO" using a search dial (JOG mode).

(2) Press the SET button (or switch S300 on the SS board).
The monitor screen changes as shown at right.

(3) When alignment tape ZR2-1P/1 is inserted into this unit, this adjustment is initiated automatically.

ZR2-1P; for DVW-A510P/510P
ZR2-1 ; for DVW-A510/510

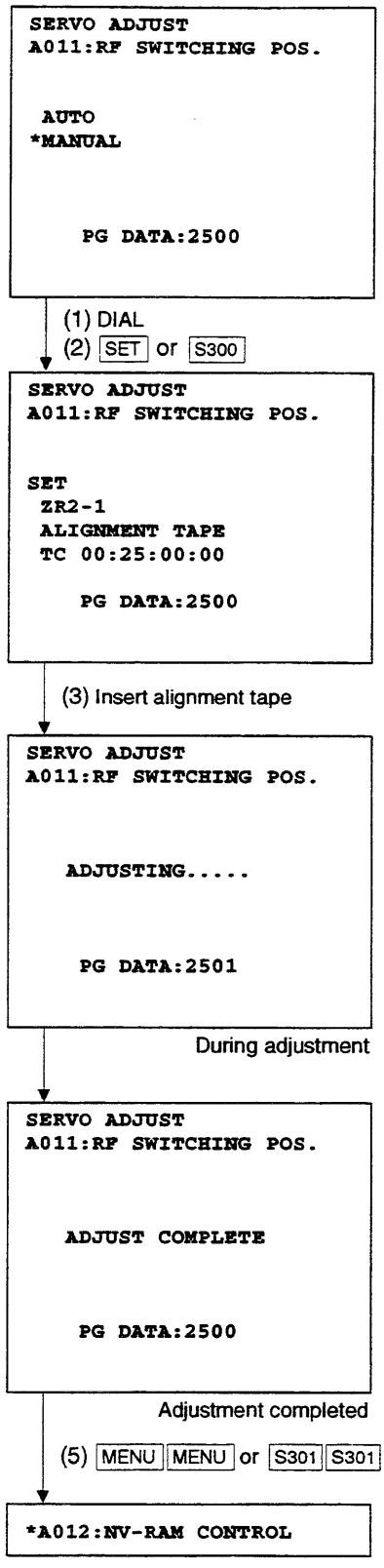
During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.

Note: Be sure to use alignment tape ZR2-1P/1. If not, the adjustment is not performed correctly even if the "ADJUST COMPLETE" message is displayed after adjustment is completed.

(4) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.
The alignment tape is then ejected automatically.

(5) Press the MENU button (or switch S301 on the SS board) two times to return to the SERVO ADJUST menu screen.

(6) To save the adjustment data in an NV-RAM, execute the "A012: NV-RAM CONTROL" mode.



In case of NG; (The screen at right is one example.)

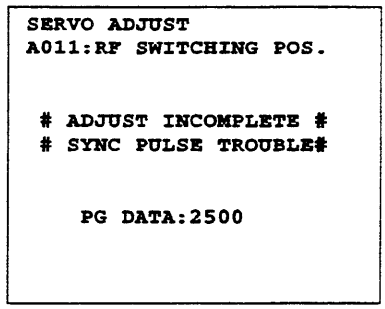
- When the "SYNC PULSE TROUBLE" message is displayed on the monitor screen.
  (1) Confirm that the playback tape is alignment tape ZR2-1P/1.
  (2) Confirm that the SYNC pulse exists at the test terminal below on the SS board.

      TP802: SYNC PLS

      No SYNC pulse exists: Perform the steps (3) and (4).
      A SYNC pulse exist: Check the SS board.

  (3) Perform the "C050: DT DRIVER CHECK" and "C051: SG LOOP CHECK" in the digital DT system.
  (4) Confirm that a segment signal exists at pins 41A and 41B of connector CN123 on the SS board.
      CN123-41A: DT SEG 0
      CN123-41B: DT SEG 1

      No segment signal exists: Check the DPR-36H board.
      A segment signal exists: Check the SS board.



Adjustment NG

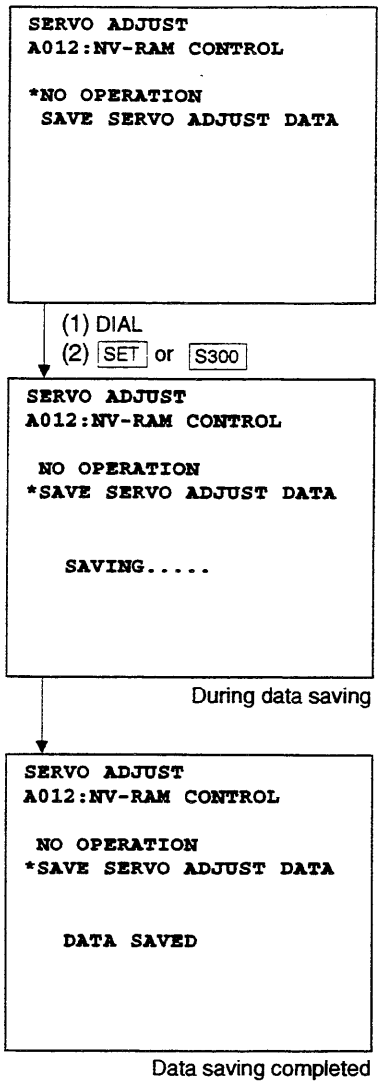
h) A012: NV-RAM CONTROL

This mode saves the servo system adjustment data in an NV-RAM.

(1) Set the "*" mark to "SAVE SERVO ADJUST DATA" using a search dial (JOG mode).

(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer.
The "SAVING....." message is then displayed on the monitor screen.

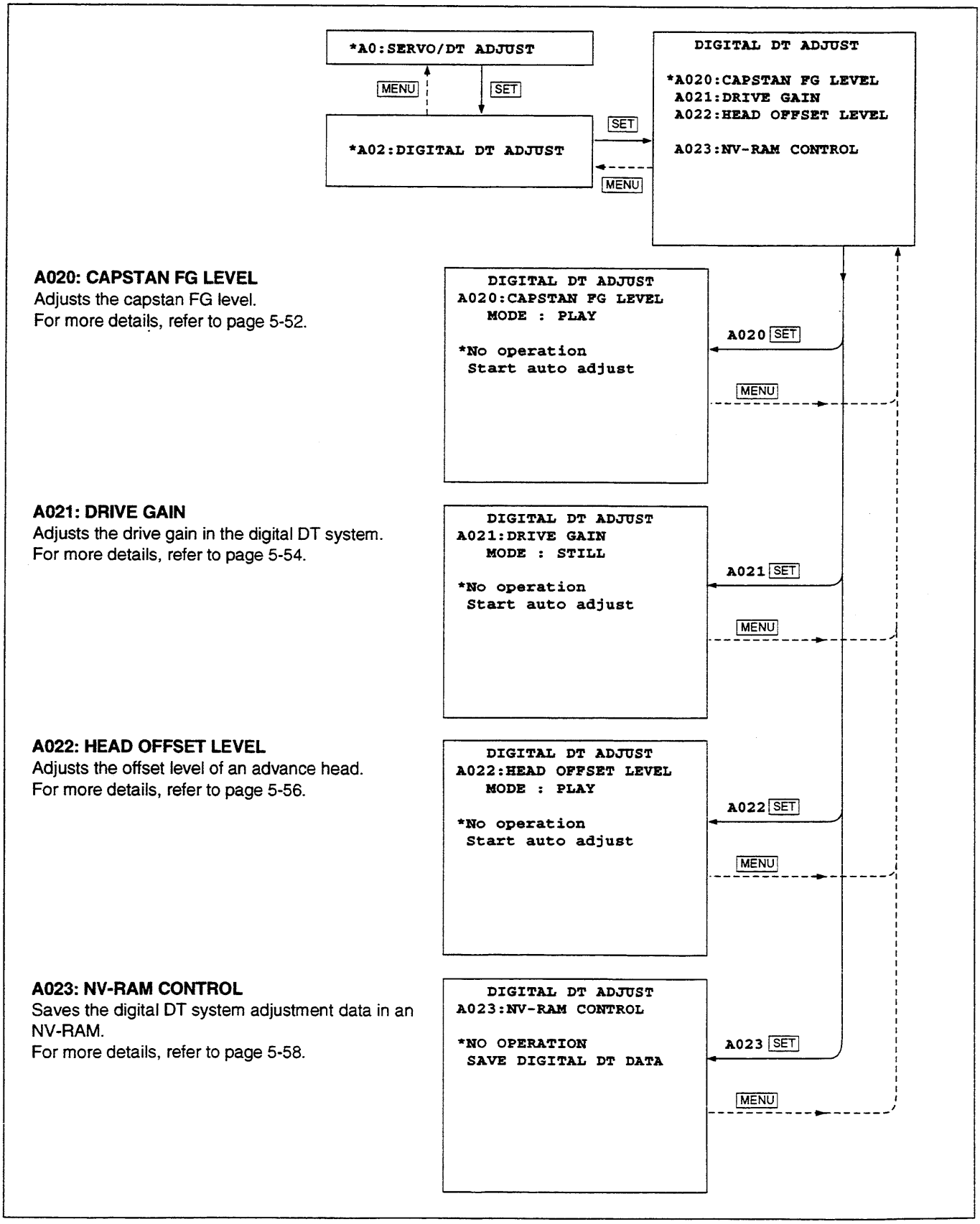
(3) After data transfer is completed, the "DATA SAVED" message is displayed on the monitor screen.



Note: If the power of this unit is turned off without saving the adjustment data in an NV-RAM after adjustment is completed, the adjustment data in the servo system returns to the preadjustment state.

5-7-2. Digital DT System Adjustment Mode (A02: DIGITAL DT ADJUST)

This section describes the "A02: DIGITAL DT ADJUST" mode.



A020: CAPSTAN FG LEVEL
Adjusts the capstan FG level.
For more details, refer to page 5-52.

A021: DRIVE GAIN
Adjusts the drive gain in the digital DT system.
For more details, refer to page 5-54.

A022: HEAD OFFSET LEVEL
Adjusts the offset level of an advance head.
For more details, refer to page 5-56.

A023: NV-RAM CONTROL
Saves the digital DT system adjustment data in an NV-RAM.
For more details, refer to page 5-58.

a) A020: CAPSTAN FG LEVEL

This mode adjusts the capstan FG level.

(1) Insert alignment tape ZR5-1P/1 into this unit.

ZR5-1P; for DVW-A510P/510P
ZR5-1 ; for DVW-A510/510

(2) Set the "*" mark to "Start auto adjust" using a search dial (JOG mode).

(3) Press the SET button (or switch S300 on the SS board).
(If the unit has already entered the PLAY mode, the adjustment is initiated.)

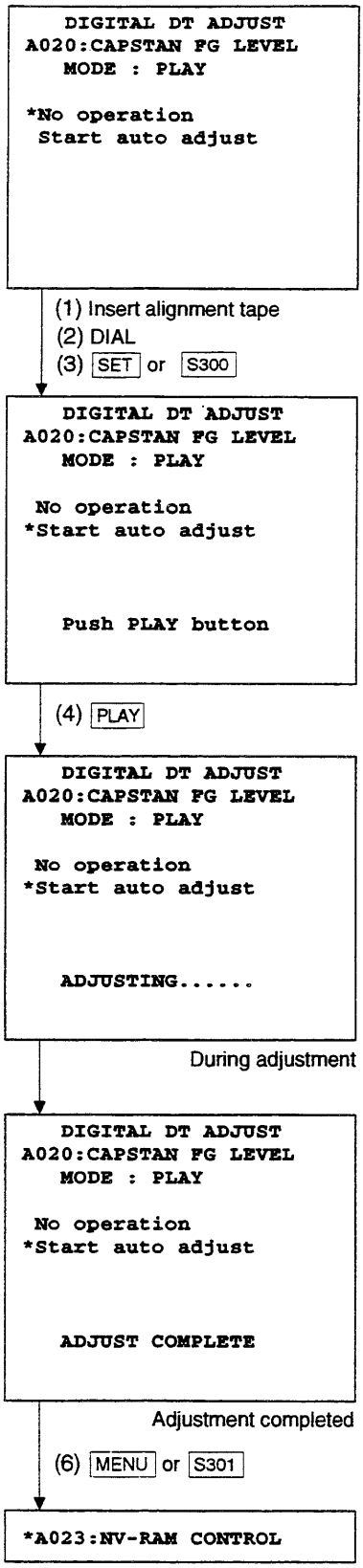
(4) The "Push PLAY button" message is displayed on the monitor screen. Press the PLAY button to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.

(5) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

(6) Press the MENU button (or switch S301 on the SS board) to return to the DIGITAL DT ADJUST menu screen.

(7) To save the adjustment data in an NV-RAM, execute the "A023: NV-RAM CONTROL" mode.

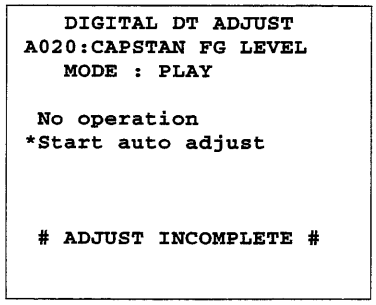


How to eject the cassette tape

Return to the menu in the servo/DT system adjustment mode. The cassette tape is then ejected automatically.

In case of NG;

When the "ADJUST COMPLETE" message is not displayed on the monitor screen.
Check the capstan motor and capstan FG amplifier (on the DR-307/200 board).



Adjustment NG

b) A021: DRIVE GAIN

This mode adjusts the drive gain of the bimorph head.

(1) Insert alignment tape ZR5-1P/1 into this unit.

ZR5-1P; for DVW-A510P/510P
ZR5-1 ; for DVW-A510/510

(2) Set the "*" mark to "Start auto adjust" using a search dial (JOG mode).

(3) Press the SET button (or switch S300 on the SS board).
(If the unit has already entered the STILL mode, the adjustment is initiated.)

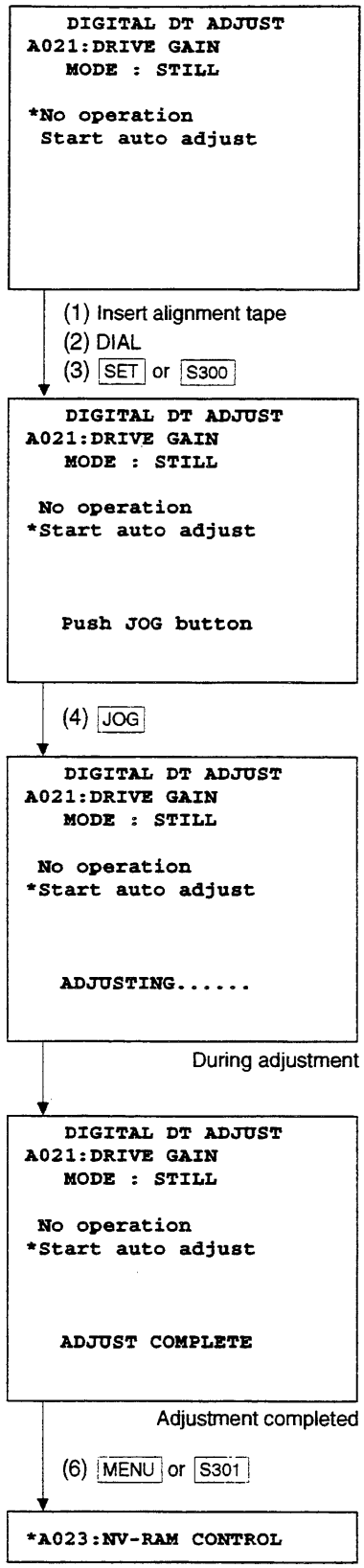
(4) The "Push JOG button" message is displayed on the monitor screen.
Press the JOG button. The unit then enters the STILL mode to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.

(5) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

(6) Press the MENU button (or switch S301 on the SS board) to return to the DIGITAL DT ADJUST menu screen.

(7) To save the adjustment data in an NV-RAM, execute the "A023: NV-RAM CONTROL" mode.



How to eject the cassette tape

Return to the menu in the servo/DT system adjustment mode. The cassette tape is then ejected automatically.

In case of NG; (The screen at right is one example.)
When the "ADJUST COMPLETE" message is not displayed on the monitor screen, perform the following checks and confirmation.

(1) Perform the "C050: DT DRIVER CHECK" and "C051: SG LOOP CHECK" in the digital DT system.
(2) Confirm that an RF envelope signal exists at the test terminals below on the SS board.
    TP2501: ENV B/D
    TP2502: ENV A/C

    No RF envelope signal exists: Check the EQ board.
    An RF envelope signal exists: Check the SS board.

```
   DIGITAL DT ADJUST
A021:DRIVE GAIN
   MODE : STILL

 No operation
*Start auto adjust



 # ADJUST INCOMPLETE #
     A/B ch
```

Adjustment NG

c) A022: HEAD OFFSET LEVEL

This mode adjusts the offset level of an advance head.

(1) Insert alignment tape ZR5-1P/1 into this unit.

ZR5-1P; for DVW-A510P/510P
ZR5-1 ; for DVW-A510/510

(2) Set the "*" mark to "Start auto adjust" using a search dial (JOG mode).

(3) Press the SET button (or switch S300 on the SS board).
(If the unit has already entered the PLAY mode, the adjustment is initiated.)

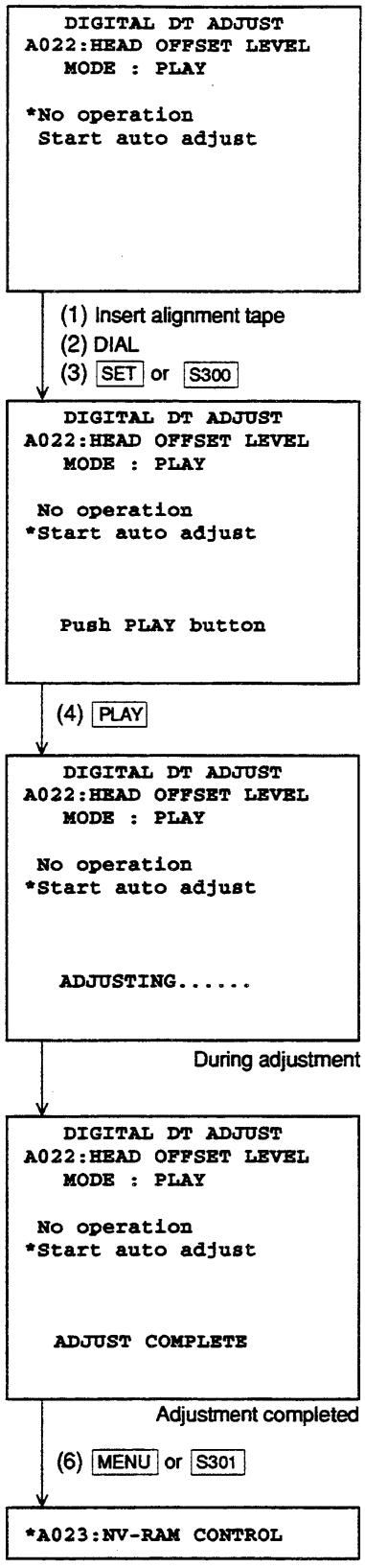
(4) The "Push PLAY button" message is displayed on the monitor screen.
Press the PLAY button to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.

(5) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

(6) Press the MENU button (or switch S301 on the SS board) to return to the DIGITAL DT ADJUST menu screen.

(7) To save the adjustment data in an NV-RAM, execute the "A023: NV-RAM CONTROL" mode.



How to eject the cassette tape

Return to the menu in the servo/DT system adjustment mode. The cassette tape is then ejected automatically.

In case of NG; (The screen at right is one example.)
When the "ADJUST COMPLETE" message is not displayed on the monitor screen, perform the following checks and confirmation.

(1) Perform the "C050: DT DRIVER CHECK" and "C051: SG LOOP CHECK" in the digital DT system.
(2) Confirm that a segment signal exists at pins 41A and 41B of connector CN123 on the SS board.
    CN123-41A: DT SEG 0
    CN123-41B: DT SEG 1

    No segment signal exists: Check the DPR-36H board.
    A segment signal exists: Check the SS board.

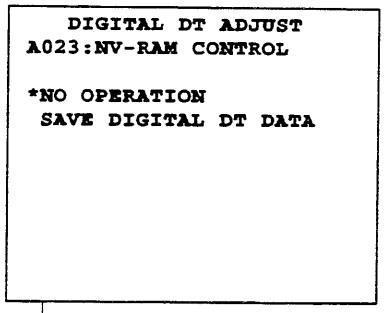
```
   DIGITAL DT ADJUST
A022:HEAD OFFSET LEVEL
   MODE : PLAY

 No operation
*Start auto adjust



 # ADJUST INCOMPLETE #
     A/B ch
```

Adjustment NG

d) A023: NV-RAM CONTROL

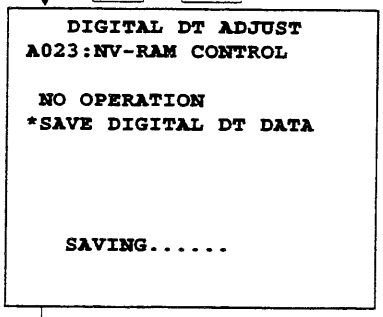
This mode saves the digital DT system adjustment data in an NV-RAM.

(1) Set the "*" mark to "SAVE DIGITAL DT DATA" using a search dial (JOG mode).



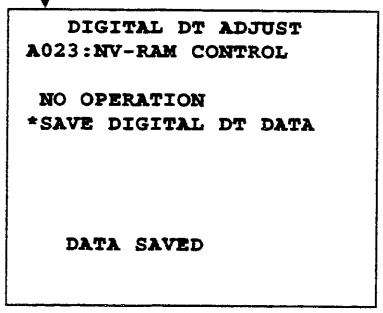
(1) DIAL
(2) SET or S300

(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer.
The "SAVING....." message is then displayed on the monitor screen.



During data saving

(3) After data transfer is completed, the "DATA SAVED" message is displayed on the monitor screen.



Data saving completed

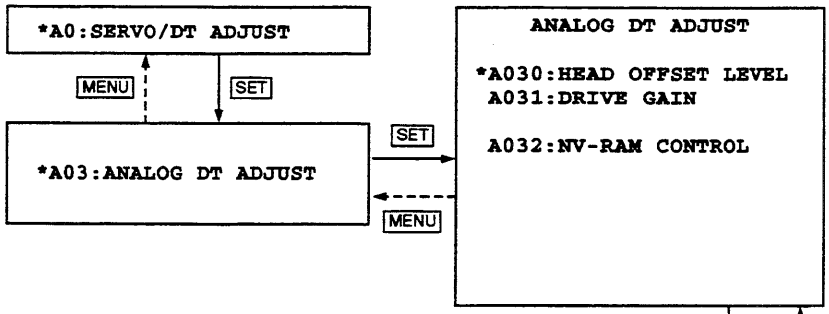
Note: If the power of this unit is turned off without saving the adjustment data in an NV-RAM after adjustment is completed, the adjustment data in the digital DT system returns to the preadjustment state.

5-7-3. Analog DT System Adjustment Mode (For DVW-A510P/A510) (A03: ANALOG DT ADJUST)

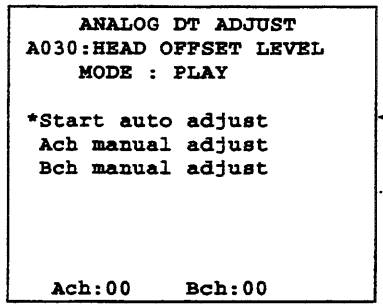
This section describes the "A03: ANALOG DT ADJUST" mode.

Exclusive mode for the DVW-A510P/A510

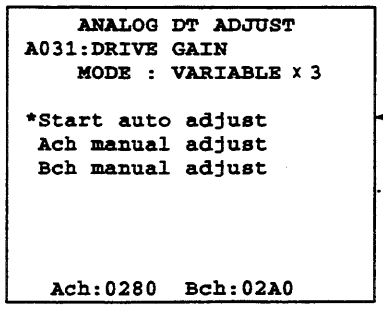
Note: The data value displayed in this case is one example.



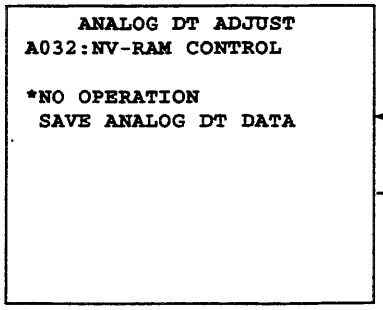
A030: HEAD OFFSET LEVEL
Adjusts the offset level of a Betacam PB head.
For more details, refer to page 5-60.
(Page 5-58 describes for automatic adjustment only.)



A031: DRIVE GAIN
Adjusts the drive gain of an analog DT system.
For more details, refer to page 5-62.
(Page 5-60 describes for automatic adjustment only.)



A032: NV-RAM CONTROL
Saves the analog DT system adjustment data in an NV-RAM.
For more details, refer to page 5-63.



a) A030: HEAD OFFSET LEVEL

This mode adjusts the offset level of a Betacam PB head.
This step describes the automatic adjustment operation.
(The data value displayed in this case is a standard value.)

(1) Insert alignment tape CR5-1BPS/1B or CR5-2APS/2A whose beginning is beforehand located in the color bars signal portion into this unit.

CR5-1B PS : TC 00:14:00:00
CR5-2A PS : TC 00:00:00:00
} for DVW-A510P/510P

CR5-1B : TC 00:14:00:00
CR5-2A : TC 00:00:00:00
} for DVW-A510/510

(2) Set the "*" mark to "Start auto adjust" using a search dial (JOG mode).

(3) Press the SET button (or switch S300 on the SS board).
(If the unit has already entered the PLAY mode, the adjustment is initiated.)

(4) The "Push PLAY button" message is displayed on the monitor screen.
Press the PLAY button to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen.
However, the displayed data value does not change during adjustment.

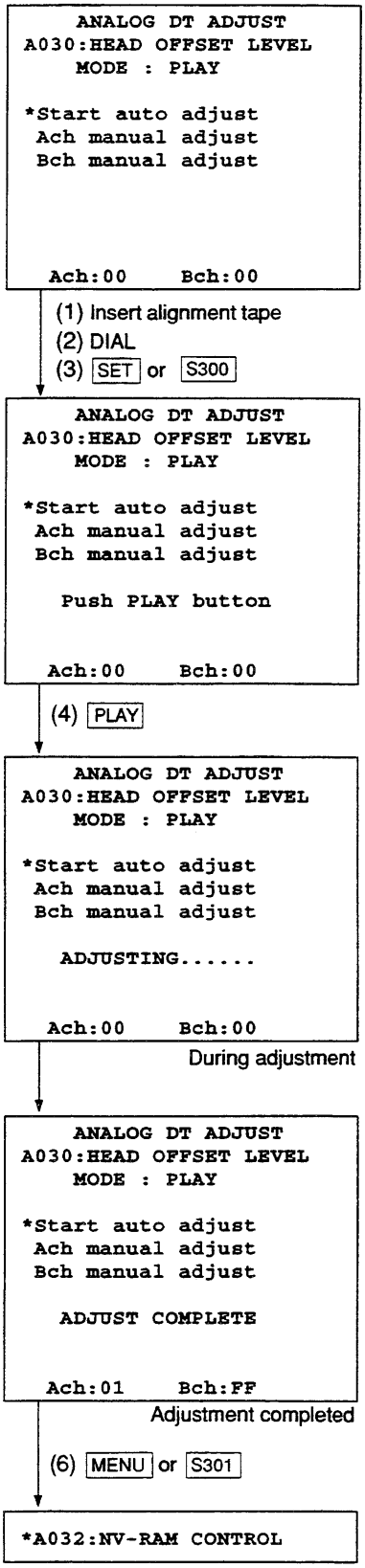
(5) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.
The data value changes to the data value during this adjustment.

(6) Press the MENU button (or switch S301 on the SS board) to return to the ANALOG DT ADJUST menu screen.

(7) To save the adjustment data in an NV-RAM, execute the "A032: NV-RAM CONTROL" mode.

How to eject the cassette tape

Return to the menu in the servo/DT system adjustment mode. The cassette tape is then ejected automatically.



In case of NG; (The screen at right is one example.)
When the "ADJUST COMPLETE" message is not displayed on the monitor screen, perform the following check and confirmation.

(1) Perform the "C060: SG LOOP CHECK" in the analog DT system.
(2) Confirm that an RF envelope signal exists at the test terminal below on the SS board.

TP2100: Y RF ENVELOPE

No RF envelope signal exists: Check the DM-89 board.
An RF envelope signal exists: Check the SS board.

```
     ANALOG DT ADJUST
A030:HEAD OFFSET LEVEL
     MODE : PLAY

*Start auto adjust
 Ach manual adjust
 Bch manual adjust

 # ADJUST INCOMPLETE #
      Ach

  Ach:00     Bch:00
```

Adjustment NG

b) A031: DRIVE GAIN

This mode adjusts the drive gain of an analog DT system.
This step describes the automatic adjustment operation.
(The data value displayed in this case is a standard value.)

(1) Insert alignment tape CR5-1BPS/1B or CR5-2APS/2A whose beginning is beforehand located in the color bars signal portion into this unit.

CR5-1B PS : TC 00:14:00:00
CR5-2A PS : TC 00:00:00:00
} for DVW-A510P/510P

CR5-1B : TC 00:14:00:00
CR5-2A : TC 00:00:00:00
} for DVW-A510/510

(2) Set the "*" mark to "Start auto adjust" using a search dial (JOG mode).

(3) Press the SET button (or switch S300 on the SS board).
(If the unit has already entered the variable three times (×3) the normal mode, the adjustment is initiated.)

(4) The "Set VARIABLE ×3" message is displayed on the monitor screen.
Press the VAR button, then turn the search dial in the forward direction and put the unit into the variable three times (×3) the normal mode to initiate the adjustment.

During adjustment, the "ADJUSTING....." message is displayed on the monitor screen. The data value then changes.

(5) After adjustment is completed, the "ADJUST COMPLETE" message is displayed on the monitor screen.

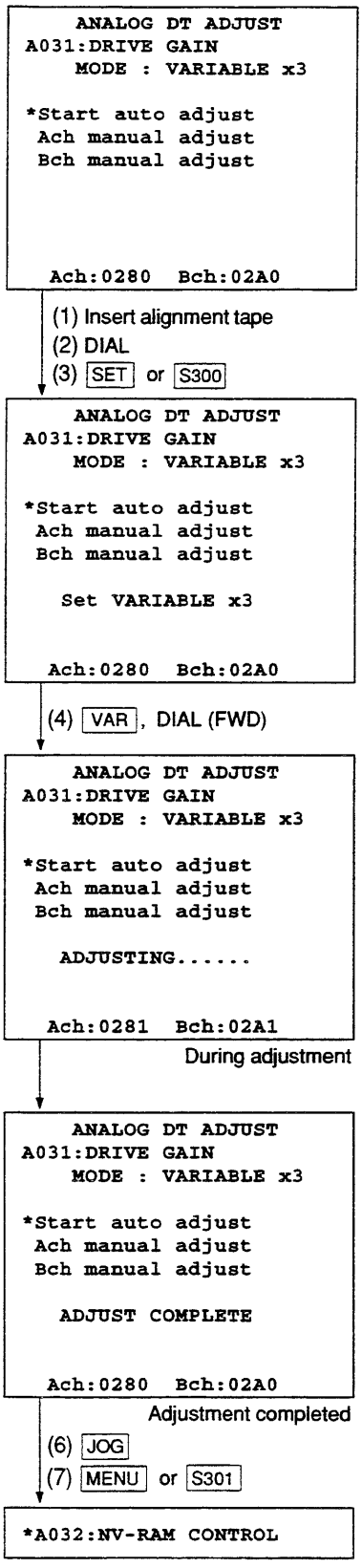
(6) Press the JOG button.
(Set the search dial to the JOG mode)

(7) Press the MENU button (or switch S301 on the SS board) to return to the ANALOG DT ADJUST menu screen.

(8) To save the adjustment data in an NV-RAM, execute the "A032: NV-RAM CONTROL" mode.

How to eject the cassette tape

Return to the menu in the servo/DT system adjustment mode. The cassette tape is then ejected automatically.



In case of NG; (The screen at right is one example.)
When the "ADJUST COMPLETE" message is not displayed on the monitor screen, perform the following check and confirmation.

(1) Perform the "C060: SG LOOP CHECK" in the analog DT system.
(2) Confirm that the signals at pins 9A and 9B of connector CN123 on the SS board are synchronized.
CN123-9A: Y WZ (⎍⎍⎍⎍)
CN123-9B: C WZ (⎍⎍⎍⎍)

When no signals exist and are synchronized, check the DM-89 board, TBC-24/23 boards, then EQ board.
When signals exist and are synchronized, check the SS board.

```
    ANALOG DT ADJUST
A031:DRIVE GAIN
    MODE : VARIABLE x3

*Start auto adjust
 Ach manual adjust
 Bch manual adjust

 # ADJUST INCOMPLETE #
      Ach

  Ach:0280  Bch:02A0
```

Adjustment NG

c) A032: NV-RAM CONTROL
This mode saves the analog DT system adjustment data in an NV-RAM.

(1) Set the "*" mark to "SAVE ANALOG DT DATA" using a search dial (JOG mode).

```
    ANALOG DT ADJUST
A032:NV-RAM CONTROL

*NO OPERATION
 SAVE DIGITAL DT DATA
```

(1) DIAL
(2) [SET] or [S300]

(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer. The "SAVING....." message is then displayed on the monitor screen.

```
    ANALOG DT ADJUST
A032:NV-RAM CONTROL

 NO OPERATION
*SAVE DIGITAL DT DATA


   SAVING.....
```

During data saving

(3) After data transfer is completed, the "DATA SAVED" message is displayed on the monitor screen.

```
    ANALOG DT ADJUST
A032:NV-RAM CONTROL

 NO OPERATION
*SAVE DIGITAL DT DATA


  DATA SAVED
```

Data saving completed

Note: If the power of this unit is turned off without saving the adjustment data in an NV-RAM after adjustment is completed, the adjustment data in the analog DT system returns to the preadjustment state.

5-8. RF SYSTEM ADJUSTMENT MODE

5-8. RF SYSTEM ADJUSTMENT MODE (A1: RF ADJUST)

This section describes the "A1: RF ADJUST" mode.
For how to activate and terminate the maintenance mode, refer to page 5-3.

Note: The data value displayed in this case is one example.

```
MAINTENANCE MODE

 C0 :  SERVO/DT     CHECK
 C1 :     RF        CHECK
 C2 : AUDIO/VIDEO   CHECK
 C3 : BETACAM PB    CHECK
 C4 :   OTHERS      CHECK
 A0 :  SERVO/DT     ADJUST
*A1 :     RF        ADJUST
 A2 : AUDIO/VIDEO   ADJUST
 A3 : BETACAM PB    ADJUST
```

(Above screen is displayed for the DVW-A510P/A510.)

A1 [SET] / [MENU]

```
RF ADJUST MODE

*A10:A11-17,1B,1C ADJUST
 A11:PLAY PLL
 A12:ADV EQUALIZER
 A14:SHUTTLE FWD PLL
 A15:SHUTTLE REV PLL
 A16:VAR FWD PLL
 A17:VAR REV PLL
 A19:ADV LEVEL
 A1B:P.PLAY+ PLL
 A1C:P.PLAY- PLL
```

(Left screen is displayed when the BKDW-507 is installed.)

The "A1F:NV-RAM CONTROL" mode are scrolled and displayed only when the optional BKDW-507 is installed.

The "A1B: P.PLAY+ PLL" and "A1C: P.PLAY– PLL" modes are displayed only when the BKDW-507 is installed.

The A1B and A1C modes are added on the unit in which the version No. of both SYS1 ROM (IC12) and SV1 ROM (IC761) on the SS board are 2.10 or higher.

A10: A11-A17 ADJUST
(When BKDW-507 is not installed)
A10: A11-17, 1B, 1C ADJUST
(When BKDW-507 is installed)

Automatically executes the adjustment menus in A11 through A17(and A1B, A1C).
For more details, refer to page 5-67.

The screen at right is displayed when optional BKDW-507 is installed.

```
RF ADJUST MODE
A10:A11-17,1B,1C ADJUST

 Set alignment tape
 and push SET button.
```

A10 [SET] / [MENU]

A15 [SET] / [MENU]

```
RF ADJUST MODE
A15:SHUTTLE REV PLL
*Manual

 ADV A/Cch PLL        55

 ADV B/Dch PLL        55
```

A15: SHUTTLE REV PLL
Adjusts the VCO free-running frequency of a PB PLL circuit in the SHUTTLE REV mode.
For more details, refer to page 5-68.

A11: PLAY PLL
Adjusts the VCO free-running frequency of a PB PLL circuit in the PLAY mode.
For more details, refer to page 5-68.

```
RF ADJUST MODE
A11:PLAY PLL
*Manual

 ADV A/Cch PLL        55

 ADV B/Dch PLL        55
```

A11 [SET] / [MENU]

A16 [SET] / [MENU]

```
RF ADJUST MODE
A16:VAR FWD PLL
*Manual

 ADV A/Cch PLL        55

 ADV B/Dch PLL        55
```

A16: VAR FWD PLL
Adjusts the VCO free-running frequency of a PB PLL circuit in the VARIABLE FWD mode.
For more details, refer to page 5-68.

A12: ADV EQUALIZER
Adjusts the gain and phase of the PB equalizer circuit for an advance head.
For more details, refer to page 5-70.

```
RF ADJUST MODE
A12:ADV EQUALIZER
*Manual

 Ach  GAIN 55  PHASE 55

 Bch  GAIN 55  PHASE 55

 Cch  GAIN 55  PHASE 55

 Dch  GAIN 55  PHASE 55
```

A12 [SET] / [MENU]

A17 [SET] / [MENU]

```
RF ADJUST MODE
A17:VAR REV PLL
*Manual

 ADV A/Cch PLL        55

 ADV B/Dch PLL        55
```

A17: VAR REV PLL
Adjusts the VCO free-running frequency of a PB PLL circuit in the VARIABLE REV mode.
For more details, refer to page 5-68.

A14: SHUTTLE FWD PLL
Adjusts the VCO free-running frequency of a PB PLL circuit in the SHUTTLE FWD mode.
For more details, refer to page 5-68.

```
RF ADJUST MODE
A14:SHUTTLE FWD PLL
*Manual

 ADV A/Cch PLL        55

 ADV B/Dch PLL        55
```

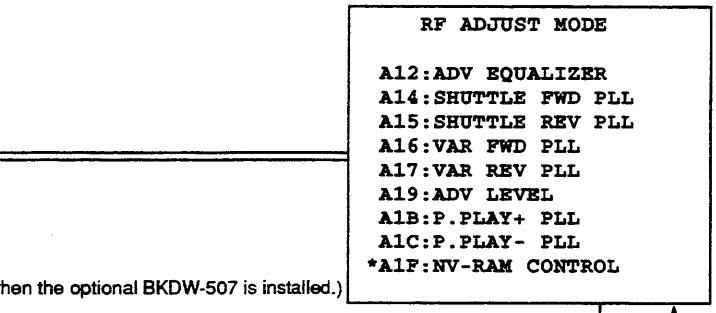
A14 [SET] / [MENU]

A19 [SET] / [MENU]

```
RF ADJUST MODE
A19:ADV LEVEL

*Ach LEVEL            55
 Bch LEVEL            55
 Cch LEVEL            55
 Dch LEVEL            55
```

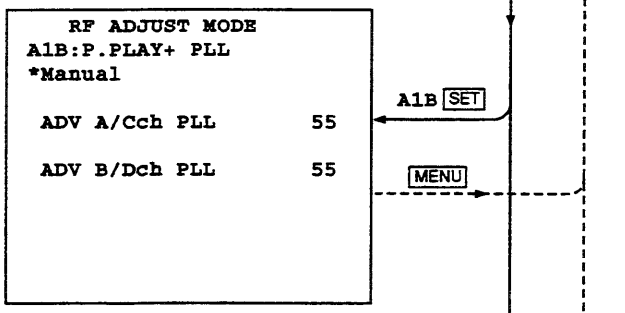
A19: ADV LEVEL
Adjusts the RF PB level of an advance head.
For more details, refer to page 5-72.

5-64

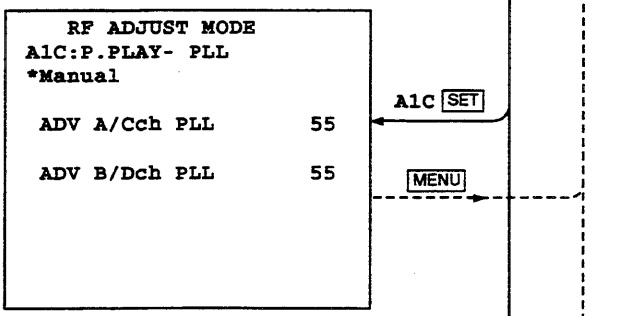


(Right screen isdisplayed when the optional BKDW-507 is installed.)

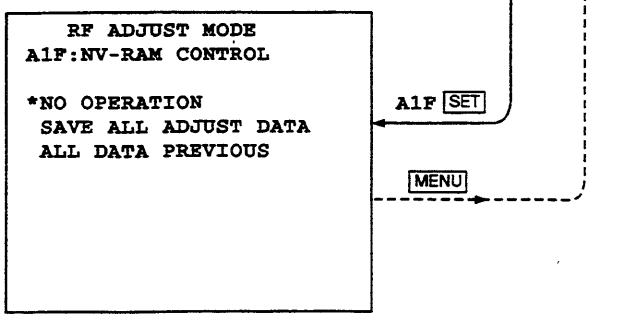
A1B : P.PLAY+ PLL
Adjusts the VCO free-runing frequency of a PB PLL circuit in the PROGRAM PLAY(FAST) mode.
For more details, refer to page 5-68.



A1C : P.PLAY– PLL
Adjusts the VCO free-runing frequency of a PB PLL circuit in the PROGRAM PLAY(SLOW) mode.
For more details, refer to page 5-68.



A1F: NV-RAM CONTROL
Saves the RF system adjustment data in an NV-RAM or returns it to the preadjustment data.
For more details, refer to page 5-73.



a) A10: A11-A17 ADJUST/A10: A11-17, 1B, 1C ADJUST

This mode executes the following adjustment menus automatically and continuously.

A11 : PLAY PLL
A12 : ADV EQUALIZER
A14 : SHUTTLE FWD PLL
A15 : SHUTTLE REV PLL
A16 : VAR FWD PLL
A17 : VAR REV PLL
A1B : P.PLAY+ PLL } These adjustments are performed when
A1C : P.PLAY– PLL } BKDW-507 is installed.

(1) Insert alignment tape ZR5-1P/1 into this unit (with the tape rewound in advance).

ZR5-1P; for DVW-A510P/510P
ZR5-1 ; for DVW-A510/510

(2) Press the SET button (or switch S300 on the SS board) to initiate the adjustment.

The "A11: PLAY PLL" adjustment is performed first.
The "Adjusting..." message is displayed during adjustment.

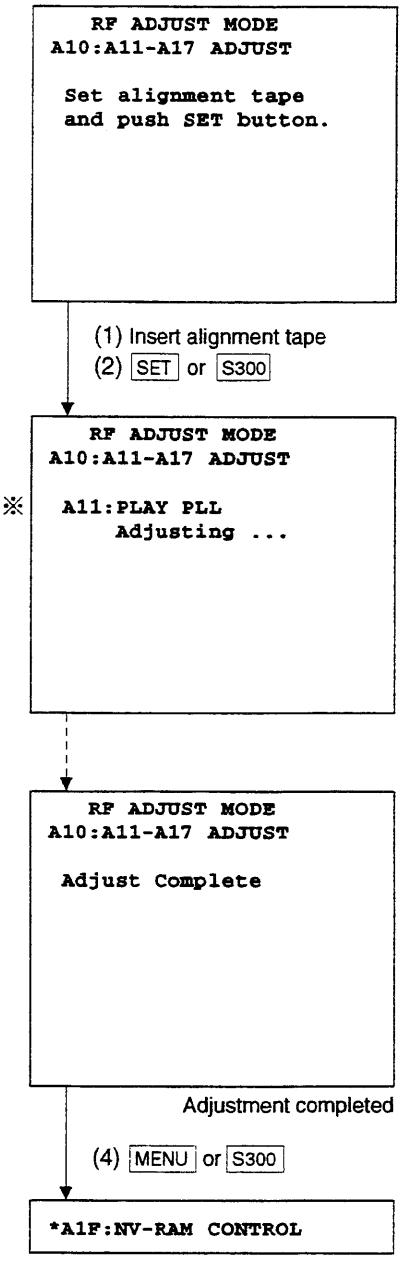
As the adjustment progresses, the display in the fourth line (※) changes.

Note: The "Adjust Incomplete" message is displayed when the tape running stops during adjustment.

(3) If no abnormality is found after all the adjustments are completed, the "Adjust Complete" message is displayed on the monitor screen.

(4) Press the MENU button (or switch S301 on the SS board) to return to the RF ADJUST MODE menu screen.

(5) To save the adjustment data in an NV-RAM, execute the "A1F: NV-RAM CONTROL" mode.



b) **A11 : PLAY PLL**
A14 : SHUTTLE FWD PLL
A15 : SHUTTLE REV PLL
A16 : VAR FWD PLL
A17 : VAR REV PLL
A1B: P.PLAY+ PLL } These adjustments are displayed when
A1C: P.PLAY– PLL } BKDW-507 is installed.

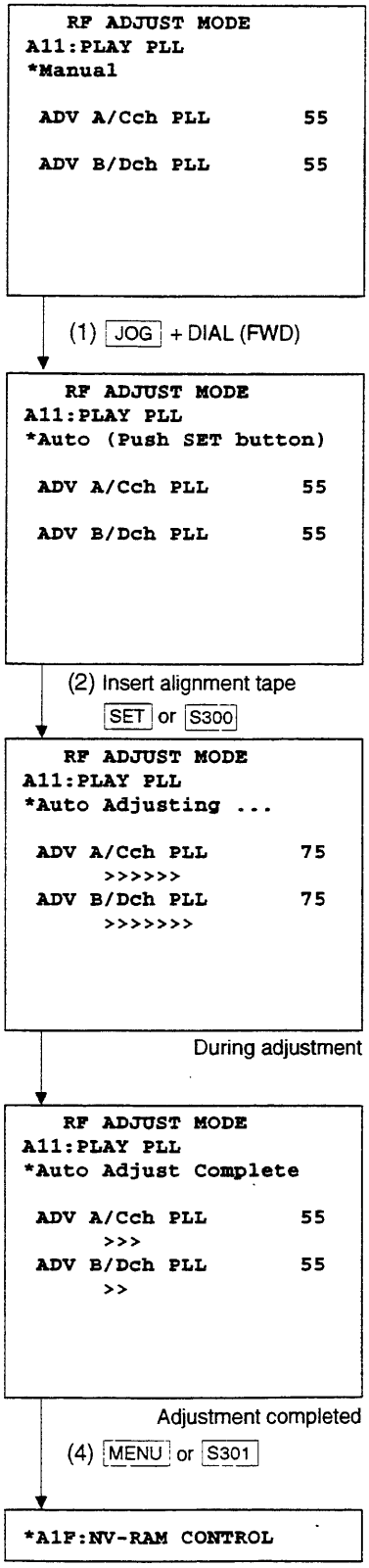
These modes adjust the VCO free-running frequency of a PB PLL circuit in the following PB modes. For these modes, manual or automatic adjustment can be selected. In this case, only the automatic adjustment is described on the next page with "A11: PLAY PLL" as an example.

A11: PLAY mode
A14: SHUTTLE FWD mode [Tape top]
A15: SHUTTLE REV mode [Tape end]
A16: VARIABLE FWD mode
A17: VARIABLE REV mode
A1B: PROGRAM PLAY (FAST) mode
A1C: PROGRAM PLAY (SLOW) mode

Note: The "Adjust Incomplete" message is displayed when the tape running stops during adjustment.
In this case, rewind or fast forward the alignment tape, then readjust.
For the adjustment in the SHUTTLE mode, especially, put the tape into the state in [ ] mentioned above, then adjust.

Operation during automatic adjustment

(The monitor screen is displayed as an example of "A11: PLAY PLL". The displayed data value and the ">" number are an example.)



(1) Change "Manual" to "Auto".

Set the "*" mark to "Manual" using a search dial. After that, turn the search dial in the forward (↻) direction while pressing and holding the JOG (or SHUTTLE) button.
The "Auto (Push SET button)" message is then displayed on the monitor screen.

(2) Insert alignment tape ZR5-1P/1 into this unit and press the SET button (or switch S300 on the SS board). The tape then runs, and the adjustment is initiated.

ZR5-1P; for DVW-A510P/510P
ZR5-1 ; for DVW-A510/510

When the SET button (or switch S300) is pressed without inserting the alignment tape, the "Waiting ..." message is displayed until the alignment tape is inserted.

During adjustment, the "Auto Adjusting ..." message is displayed on the monitor screen.

Note: The "Adjust Incomplete" message is displayed when the tape running stops during adjustment.

(3) After adjustment is completed, the "Auto Adjust Complete" message is displayed on the monitor screen. The tape running then stops.

(4) Press the MENU button (or switch S301 on the SS board) to return to the RF ADJUST MODE menu screen.

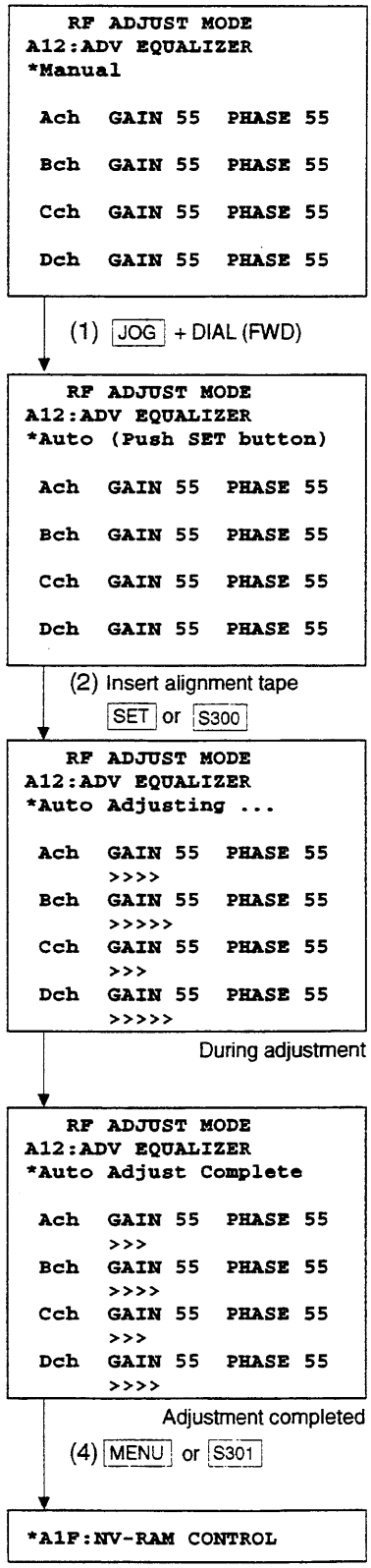
(5) To save the adjustment data in an NV-RAM, execute the "A1F: NV-RAM CONTROL" mode.

c) A12: ADV EQUALIZER

This mode adjust the gain and phase of the PB equalizer circuit for the advance head. For this mode, manual or automatic adjustment can be selected. In this case, only the automatic adjustment operation is described on the next page.

Note: The "Adjust Incomplete" message is displayed when the tape running stops during adjustment.
In this case, rewind or fast forward the alignment tape, then readjust.

Operation during automatic adjustment
(The displayed data value and the ">" number are an example.)



(1) Change "Manual" to "Auto".

Set the "*" mark to "Manual" using a search dial. After that, turn the search dial in the forward (↻) direction while pressing and holding the JOG (or SHUTTLE) button.
The "Auto (Push SET button)" message is then displayed on the monitor screen.

(2) Insert alignment tape ZR5-1P/1 into this unit and press the SET button (or switch S300 on the SS board). The tape then runs, and the adjustment is initiated.

ZR5-1P; for DVW-A510P/510P
ZR5-1 ; for DVW-A510/510

When the SET button (or switch S300) is pressed without inserting the alignment tape, the "Waiting ..." message is displayed until the alignment tape is inserted.

During adjustment, the "Auto Adjusting ..." message is displayed on the monitor screen.

Note: The "Adjust Incomplete" message is displayed when the tape running stops during adjustment.

(3) After adjustment is completed, the "Auto Adjust Complete" message is displayed on the monitor screen. The tape running then stops.

(4) Press the MENU button (or switch S301 on the SS board) to return to the RF ADJUST MODE menu screen.

(5) To save the adjustment data in an NV-RAM, execute the "A1F: NV-RAM CONTROL" mode.

e) A19: ADV LEVEL

This mode adjust the RF PB level of the advance head. The RF PB level is adjusted manually. Only the manual adjustment operation is described on the next page.

Caution: Do not change the adjustment data carelessly. This causes a trouble. To adjust the data, adjust it according to the adjustment described in the Maintenance Manual Part 2, Volume-1.

If the adjustment data has been changed carelessly, execute the "ALL DATA PREVIOUS" mode in A1F: NV-RAM CONTROL or turn off the power of this unit without executing the A1F: NV-RAM CONTROL.
Never execute the "SAVE ALL ADJUST DATA" mode.

Operation during manual adjustment
(The displayed data value is an example.)

(1) Press the SET button (or switch S300 on the SS board). At that time, the unit temporarily exits the maintenance mode. This enables the normal operation. (Prompt "■" is displayed in the upper-right position of the superimposed screen, and the time counter is put into the normal state.)

(2) Insert alignment tape ZR5-1P/1 into this unit and press the PLAY button.

ZR5-1P; for DVW-A510P/510P
ZR5-1 ; for DVW-A510/510

(3) Press the MENU button (or switch S301 on the SS board) to return to the maintenance mode.
(The "■" prompt display disappears on the screen, and the time counter displays the menu number.)

(4) Set "*" mark to the channel to be adjusted using a search dial (JOG mode).

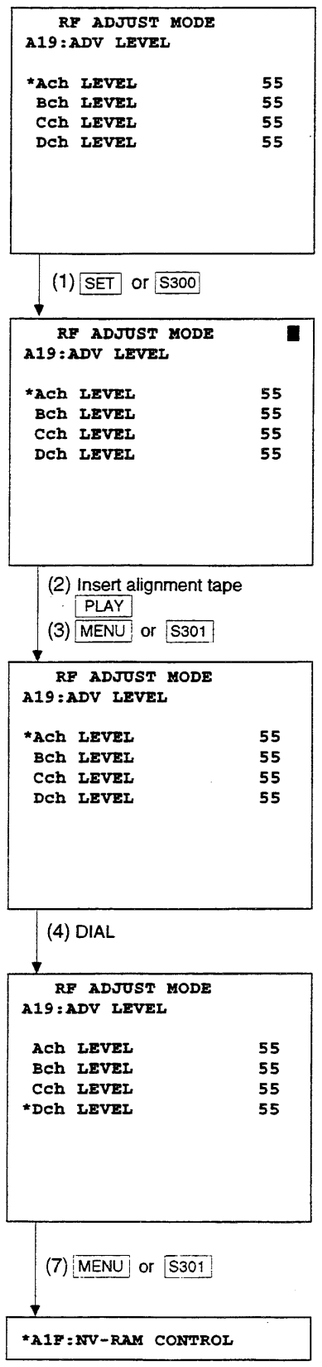
(5) Turn the search dial to change the data while pressing the JOG (or SHUTTLE) button.

FWD (↻): Increases the data value. (FF is followed by 00.)
REV (↺) : Decreases the data value. (00 is followed by FF.)

(6) For any other channels, repeat steps (4) and (5).

(7) After adjustment is completed, press the MENU button (or switch S301 on the SS board) to return to the RF ADJUST MODE menu screen.

(8) To save the adjustment data in an NV-RAM, execute the "A1F: NV-RAM CONTROL" mode.



f) A1F: NV-RAM CONTROL

This mode saves the RF system adjustment data in an NV-RAM or returns it to the preadjustment state without saving the RF system adjustment data.

Caution: Once the RF system adjustment data is saved in an NV-RAM, it cannot return to the preadjustment state.

(1) Using a search dial (JOG mode), set the "*" mark as follows:
Set it to "SAVE ALL ADJUST DATA" when the adjustment data after adjustment is saved.
Set it to "ALL DATA PREVIOUS" when the adjustment data before adjustment is returned.

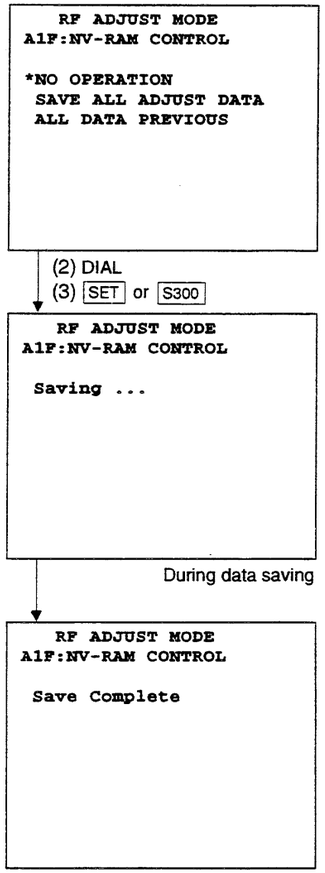
(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer.

The monitor screen at right is displayed when the adjustment data is saved.
The "Loading ..." message is displayed when the adjustment data before adjustment is returned.

(3) After data transfer is completed, the "Complete" message is displayed on the monitor screen.

The monitor screen at right is displayed when the adjustment data is saved.
The "Load Complete" message is displayed when the adjustment data before adjustment is returned.

Note: If the power of this unit is turned off without saving the adjustment data in an NV-RAM after adjustment is completed, the adjustment data in the RF system returns to the preadjustment state.



5-9. AUDIO/VIDEO SYSTEM ADJUSTMENT MODE (A2: AUDIO/VIDEO ADJUST)

This section describes the "A2: AUDIO/VIDEO ADJUST" mode.
For how to activate and terminate the maintenance mode, refer to page 5-3.

Caution: Do not change the adjustment data carelessly. This causes a trouble. To adjust the data, adjust it according to the operation described in section 6 or 8 of this manual.
For the items not described in section 6 or 8, perform each adjustment according to the adjustment in the Maintenance Manual Part 2, Volume-1.

If the adjustment data has been changed carelessly, execute the "ALL DATA PREVIOUS" mode in A2F: NV-RAM CONTROL or turn off the power of this unit without executing the A2F: NV-RAM CONTROL.
Never execute the "SAVE ALL ADJUST DATA" mode.

a) Operation during manual adjustment

(1) Set the "*" mark to the item to be adjusted using a serach dial (JOG mode).

(2) Turn the search dial to change the data while pressing and holding the JOG (or SHUTTLE) button.

FWD (↻): Increases the data value. (FF is followed by 00.)
REV (↺): Decreases the data value. (00 is followed by FF.)

(3) For any other items, repeat steps (1) and (2).

(4) After adjustment is completed, press the MENU button (or switch S301 on the SS board) to return to the AUDIO/VIDEO ADJUST MODE menu screen.

(5) To save the adjustment data in an NV-RAM, execute the "A2F: NV-RAM CONTROL" mode.

b) A2F: NV-RAM CONTROL

This mode saves the audio/video system adjustment data in an NV-RAM or returns it to the preadjustment state without saving the audio/video system adjustment data.

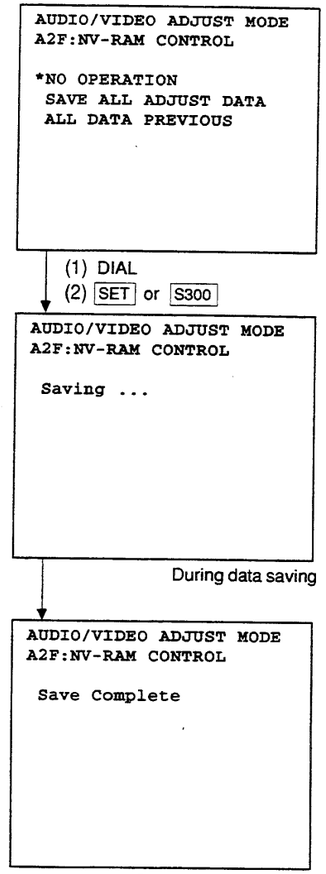
Caution: Once the audio/video system adjustment data is saved in an NV-RAM, it cannot return to the preadjustment state.

(1) Using a search dial (JOG mode), set the "*" mark as follows:
Set it to "SAVE ALL ADJUST DATA" when the adjustment data after adjustment is saved.
Set it to "ALL DATA PREVIOUS" when the adjustment data before adjustment is returned.

(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer. The monitor screen at right is displayed when the adjustment data is saved. The "Loading ..." message is displayed when the adjustment data before adjustment is returned.

(3) After data transfer is completed, the "Complete" message is displayed on the monitor screen.

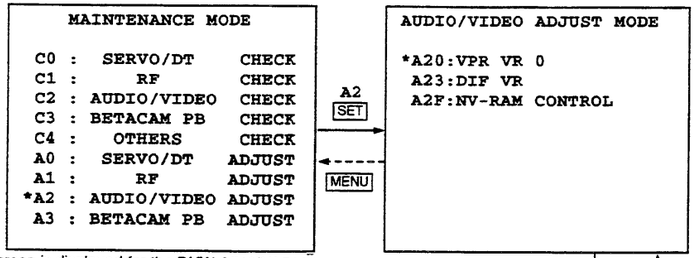
The monitor screen at right is displayed when the adjustment data is saved.
The "Load Complete" message is displayed when the adjustment data before adjustment is returned.



Note: If the power of this unit is turned off without saving the adjustment data in an NV-RAM after adjustment is completed, the adjustment data in the audio/video system returns to the preadjustment state.

5-9. AUDIO/VIDEO SYSTEM ADJUSTMENT MODE

Note: The data value displayed in this case is one example.



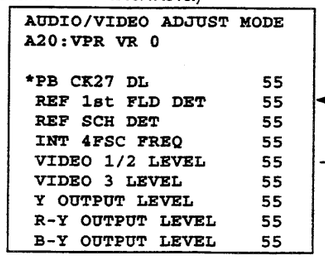
(Above screen is displayed for the DVW-A510P/A510.)

A20: VPR VR 0

Adjusts the reference signal system and video output system on the VPR-1B board.

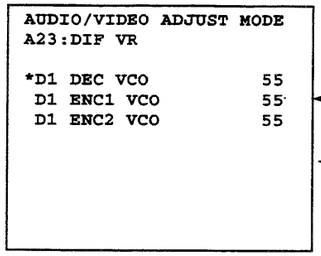
In addition to the screen display at right, the items below are scrolled and displayed.

B-CAM R-Y OUT LEVEL } for DVW-A510/510
B-CAM B-Y OUT LEVEL } only



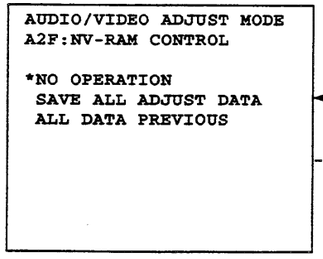
A23: DIF VR

Adjusts the frequency of the voltage-controlled oscillator (VCO) on the DIF-16B board.



A2F: NV-RAM CONTROL

Saves the audio/video system adjustment data in an NV-RAM or returns it to the preadjustment data.



5-75

5-10. BETACAM PB SYSTEM ADJUSTMENT MODE (For DVW-A510P/A510) (A3: BETACAM PB ADJUST)

This section describes the "A3: BEATCAM PB ADJUST" mode.
For how to activate and terminate the maintenance mode, refer to page 5-3.

Caution: Do not change the adjustment data carelessly. This causes a trouble. To adjust the data, adjust it according to the operation described in section 6 or 8 of this manual.
For the items not described in section 6 or 8, perform each adjustment according to the adjustment in the Maintenance Manual Part 2, Volume-1.

If the adjustment data has been changed carelessly, execute the "ALL DATA PREVIOUS" mode in A3F: NV-RAM CONTROL or turn off the power of this unit without executing the A3F: NV-RAM CONTROL.
Never execute the "SAVE ALL ADJUST DATA" mode.

a) Operation during manual adjustment (data setting)

(1) If the specified alignment tape has already been inserted and the specified tape portion has been played back, steps (2),(3), and (4) are omitted.
For the item in which the playback of an alignment tape is not required, proceed to step (5).

(2) Press the SET button (or switch S300 on the SS board). At that time, the unit temporarily exits the maintenance mode. This enables the normal operation.
(Prompt "■" is displayed in the upper-right position of the superimposed screen, and the time counter is put into the normal state.)

(3) Insert the specified alignment tape into this unit and play back it from the specified tape portion.
(For the guard band width adjustment in A35: DM VR 4, put the unit into the STOP mode.)

(4) Press the MENU button (or switch S301 on the SS board) to return to the maintenance mode.
(The "■" prompt display disappears on the screen, and the time counter displays the menu number.)

(5) Set the "*" mark to the item to be adjusted using a serach dial (JOG mode).

(6) Turn the search dial to change the data while pressing and holding the JOG (or SHUTTLE) button.

FWD (↻): Increases the data value. (FF is followed by 00.)
REV (↺): Decreases the data value. (00 is followed by FF.)

(7) For any other items, repeat steps (1) through (6).

(8) After adjustment is completed, press the MENU button (or switch S301 on the SS board) to return to the BETACAM PB ADJUST mode menu screen.

(9) To save the adjustment data in an NV-RAM, execute the "A3F: NV-RAM CONTROL" mode.

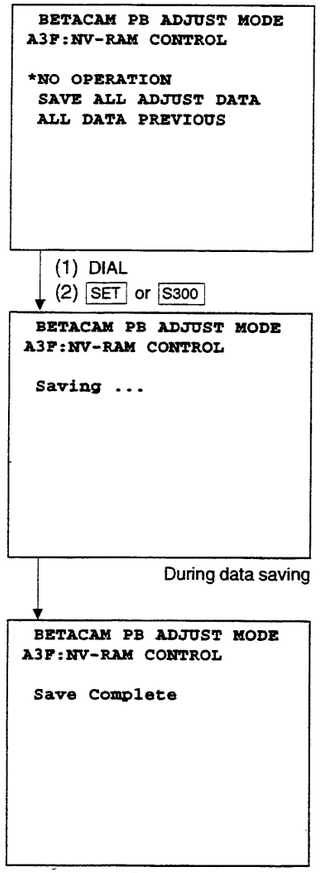
b) A3F: NV-RAM CONTROL

This mode saves the Betacam PB system adjustment data in an NV-RAM or returns it to the preadjustment state without saving the Betacam PB system adjustment data.

Caution: Once the Betacam PB system adjustment data is saved in an NV-RAM, it cannot return to the preadjustment state.

(1) Using a search dial (JOG mode), set the "*" mark as follows:
Set it to "SAVE ALL ADJUST DATA" when the adjustment data after adjustment is saved.
Set it to "ALL DATA PREVIOUS" when the adjustment data before adjustment is returned.

(2) Press the SET button (or switch S300 on the SS board) to initiate the data transfer.
The monitor screen at right is displayed when the adjustment data is saved. The "Loading ..." message is displayed when the adjustment data before adjustment is returned.



(3) After data transfer is completed, the "Complete" message is displayed on the monitor screen.

The monitor screen at right is displayed when the adjustment data is saved.
The "Load Complete" message is displayed when the adjustment data before adjustment is returned.

Note: If the power of this unit is turned off without saving the adjustment data in an NV-RAM after adjustment is completed, the adjustment data in the Betacam PB system returns to the preadjustment state.

5-10. BETACAM PB SYSTEM ADJUSTMENT MODE (For DVW-A510P/A510)

Exclusive mode for the DVW-A510P/A510

Note: The data value displayed in this case is one example.

```
    MAINTENANCE MODE

 C0 :   SERVO/DT     CHECK
 C1 :      RF        CHECK
 C2 : AUDIO/VIDEO    CHECK
 C3 : BETACAM PB     CHECK
 C4 :   OTHERS       CHECK
 A0 :   SERVO/DT     ADJUST
 A1 :      RF        ADJUST
 A2 : AUDIO/VIDEO    ADJUST
*A3 : BETACAM PB     ADJUST
```

A3 [SET] → / [MENU] ←

```
 BETACAM PB ADJUST MODE

*A30:EQ VR
 A31:DM VR 0
 A32:DM VR 1
 A33:DM VR 2
 A34:DM VR 3
 A35:DM VR 4
 A36:DM VR 5
 A37:TBC VR
 A3F:NV-RAM CONTROL
```

A3F [SET] → / [MENU] ←

```
 BETACAM PB ADJUST MODE
A3F:NV-RAM CONTROL

*NO OPERATION
 SAVE ALL ADJUST DATA
 ALL DATA PREVIOUS
```

A3F: NV-RAM CONTROL
Saves the Betacam PB system adjustment data in an NV-RAM or returns it to the preadjustment data.

A30: EQ VR
Adjusts the gain of a Betacam PB RF amplifier (on the EQ board).

```
 BETACAM PB ADJUST MODE
A30:EQ VR

*RF GAIN METAL-Y-A   55
 RF GAIN METAL-Y-B   55
 RF GAIN METAL-C-A   55
 RF GAIN METAL-C-B   55
 RF GAIN OXIDE-Y-A   55
 RF GAIN OXIDE-Y-B   55
 RF GAIN OXIDE-C-A   55
 RF GAIN OXIDE-C-B   55
```

A30 [SET] → / [MENU] ←

A34 [SET] → / [MENU] ←

```
 BETACAM PB ADJUST MODE
A34:DM VR 3

*SUB METAL-Y-A       55
 SUB METAL-Y-B       55
 SUB METAL-C-A       55
 SUB METAL-C-B       55
 SUB OXIDE-Y-A       55
 SUB OXIDE-Y-B       55
 SUB OXIDE-C-A       55
 SUB OXIDE-C-B       55
```

A34: DM VR 3
Adjusts the frequencey characteristic of a secondary cosine equalizer (sub).

A31: DM VR 0
Adjusts the gain of a Betacam PB RF amplifier (on the DM-89 board).

```
 BETACAM PB ADJUST MODE
A31:DM VR 0

*RF LEVEL METAL-Y-A  55
 RF LEVEL METAL-Y-B  55
 RF LEVEL METAL-C-A  55
 RF LEVEL METAL-C-B  55
 RF LEVEL OXIDE-Y-A  55
 RF LEVEL OXIDE-Y-B  55
 RF LEVEL OXIDE-C-A  55
 RF LEVEL OXIDE-C-B  55
```

A31 [SET] → / [MENU] ←

A35 [SET] → / [MENU] ←

```
 BETACAM PB ADJUST MODE
A35:DM VR 4

*GUARD BAND METAL-Y  55
 GUARD BAND METAL-C  55
 GUARD BAND OXIDE-Y  55
 GUARD BAND OXIDE-C  55
 OMC DC METAL-Y      E4
 OMC DC METAL-C      D0
 OMC DC METAL-Y      D0
 OMC DC METAL-C      D0
```

A35: DM VR 4
- Adjusts the guard band width.
- Sets the DC offset level of an overmodulation compensator circuit.

A32: DM VR 1
Adjusts the frequencey characteristic of a primary cosine equalizer.

```
 BETACAM PB ADJUST MODE
A32:DM VR 1

*EQ1 METAL-Y-A       55
 EQ1 METAL-Y-B       55
 EQ1 METAL-C-A       55
 EQ1 METAL-C-B       55
 EQ1 OXIDE-Y-A       55
 EQ1 OXIDE-Y-B       55
 EQ1 OXIDE-C-A       55
 EQ1 OXIDE-C-B       55
```

A32 [SET] → / [MENU] ←

A36 [SET] → / [MENU] ←

```
 BETACAM PB ADJUST MODE
A36:DM VR 5

*OMC DC T METAL-Y    00
 OMC DC T METAL-C    00
 DO TH METAL-Y       64
 DO TH METAL-C       64
 DO TH OXIDE-Y       64
 DO TH OXIDE-C       64
 ENV-TH-H            20
 ENV-TH-L            10
```

A36: DM VR 5
- Sets the DC offset level of an overmodulation compensator test circuit.
- Adjusts the dropout threshold level.
- Sets the RF envelope threshold level.

A33: DM VR 2
Adjusts the frequencey characteristic of a secondary cosine equalizer (main).

```
 BETACAM PB ADJUST MODE
A33:DM VR 2

*MAIN METAL-Y-A       55
 MAIN METAL-Y-B       55
 MAIN METAL-C-A       55
 MAIN METAL-C-B       55
 MAIN OXIDE-Y-A       55
 MAIN OXIDE-Y-B       55
 MAIN OXIDE-C-A       55
 MAIN OXIDE-C-B       55
```

A33 [SET] → / [MENU] ←

A37 [SET] → / [MENU] ←

```
 BETACAM PB ADJUST MODE
A37:TBC VR

*SQ-Y RZ             4A
 SQ-C RZ             4E
 VISC PHASE          02
```

A37: TBC VR
- Sets the read clock timing.
- Sets the data of the PB VISC phase detector circuit (on the TBC-23 board).

SECTION 6
REPLACEMENT OF POWER BLOCK AND CIRCUIT BOARDS

6-1. GENERAL INFORMATION FOR POWER/BOARDS REPLACEMENT

6-1-1. Index for Board Replacement

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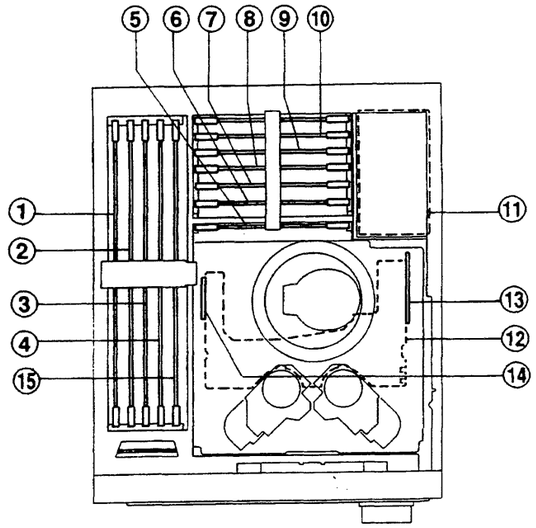
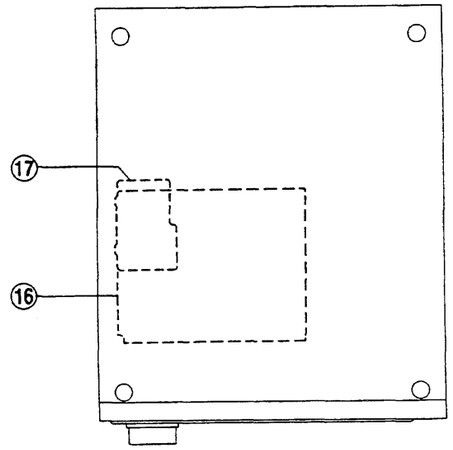
6-1-1. Index for Board Replacement

[Location]

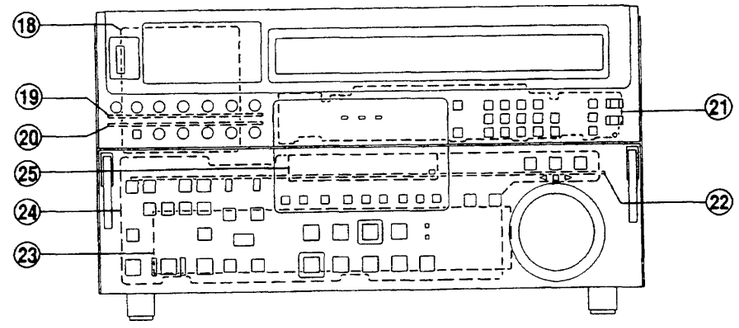
<Top View>



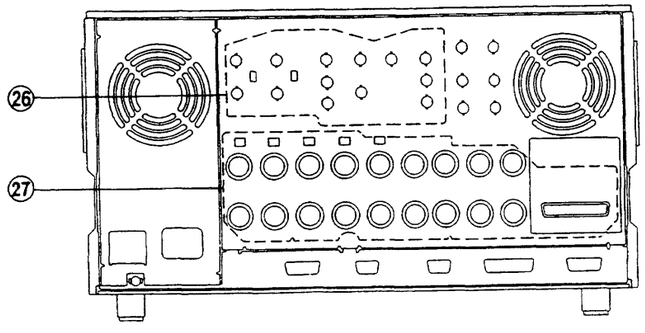
<Bottom View>



<Front View>



<Rear View>



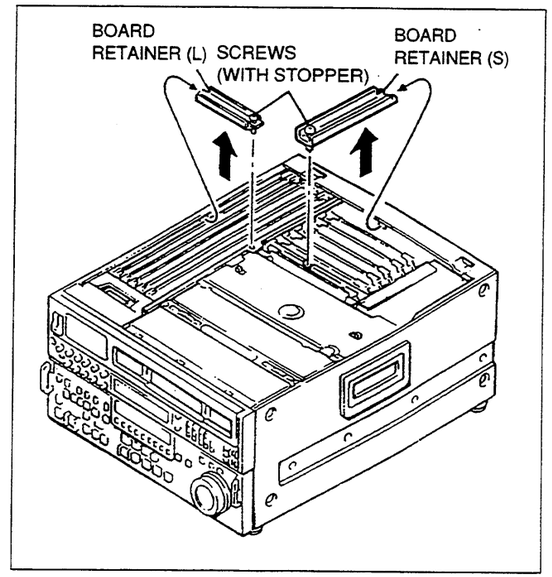
6-1-2. Plug-in Board Pulling Out/ Inserting

6-1-2. Plug-in Board Pulling Out/ Inserting

Always switch off the power before removing or installing the plug-in board.

Pulling out

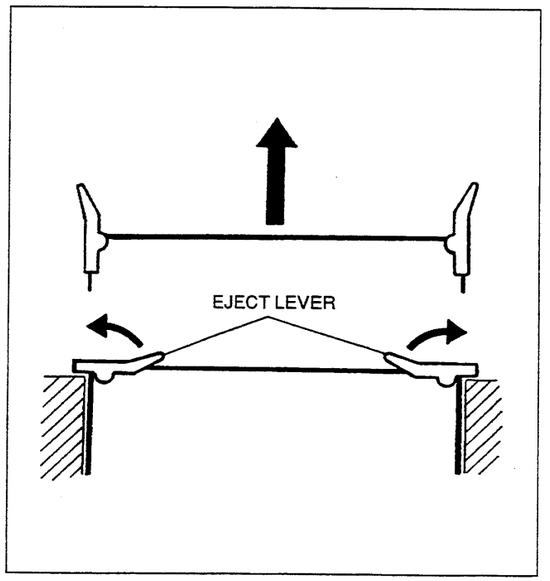
1. Loosen a screw, and remove the board retainer (L) or (S).



2. Pull up the eject levers on the board in the direction of the arrows when pulling out the board from the connector.

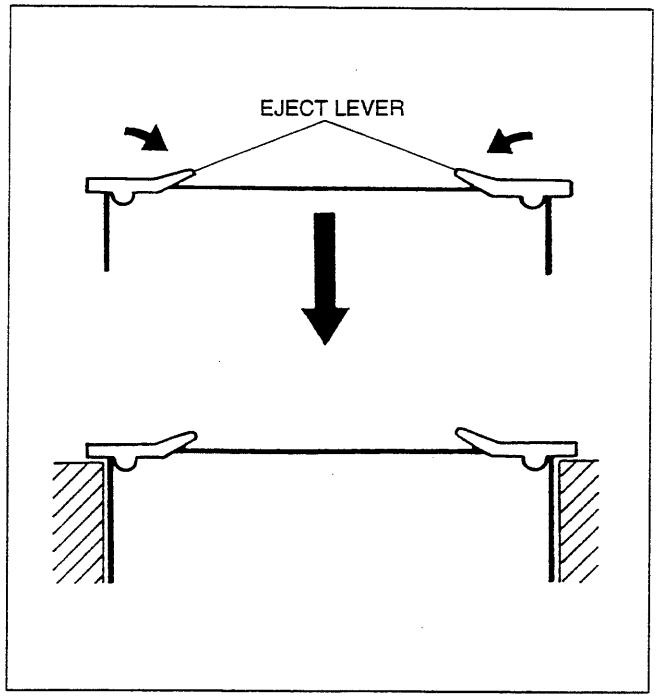
   Note
   Do not try to pull the board by grasping any of the components on the board.
   Pull out the board with equal force for both sides.

3. Disconnect the connected harness.

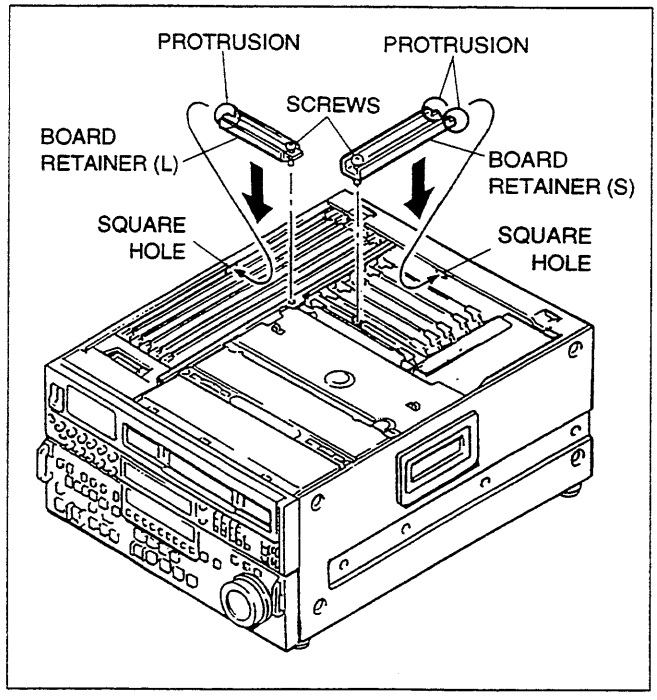


Inserting

1. Connect the disconnected harness.
2. Insert the board after pushing down the eject levers as shown in the figure.



3. Insert the protrusion of the board retainer (L) or (S) into the square hole, and tighten the screw.



6-1-3. Flexible Card Wire Replacement

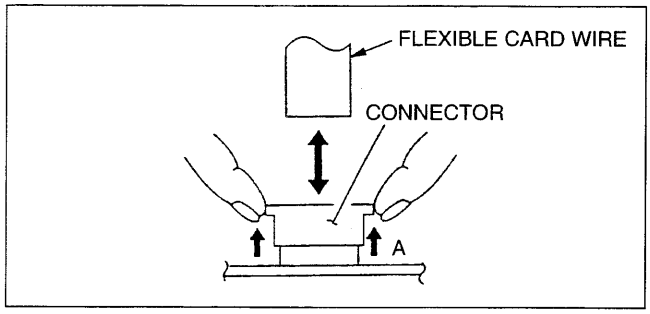
Two 36P flexible card wires are used on between DR-307/200 board and HN-181 board. 13P flexible card wires are used on between DR-307/200 board and each reel motor.
When handing the flexible card wire, be very careful not to bend it because this will markedly reduce its life.

Disconnection

1. Pull up the A portions of the connector.

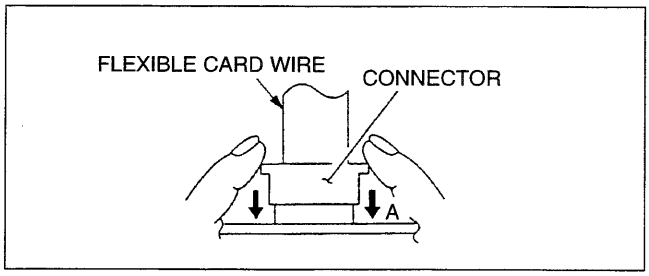
   Note
   Never pull the flexible card wire first.

2. Pull out the flexible card wire from the connector.



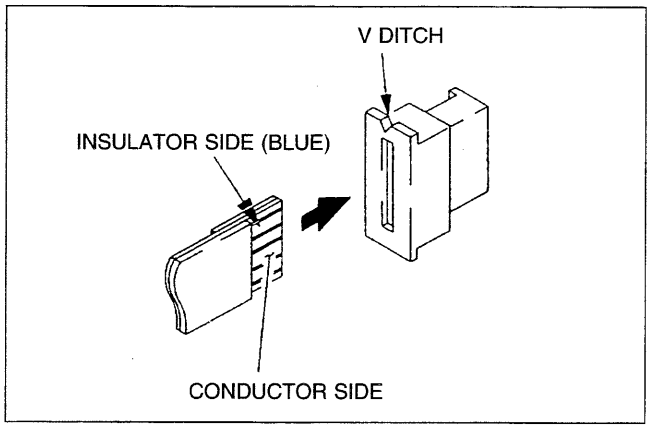
Connection

1. Distinguish the front from back faces of the cable, then insert the cable into the connector.
2. Push down the A portions.



Note
The flexible card wire consists of conductor side and insulator side.The flexible card wire must be inserted with the conductor side facing the correct way. If the flexible card wire is inserted wrongly, the circuit will not operate.

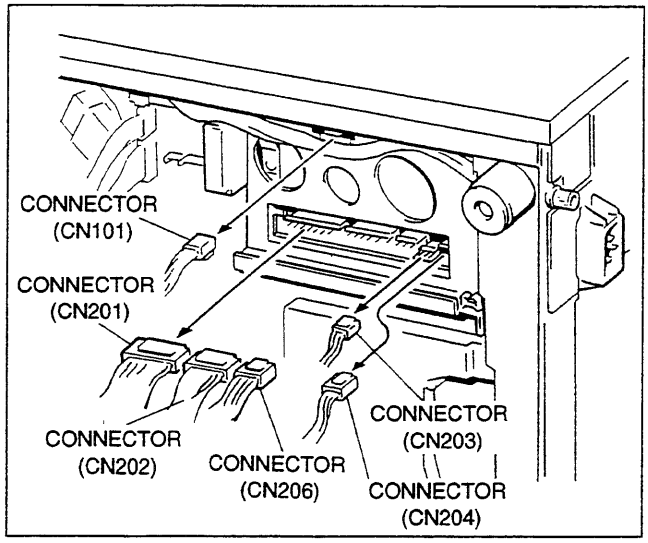
CN214 and CN215 of the HN-181 board do not have a lock mechanism, so these connector's flexible card wire replacement are performed if only pulling out and inserting the cable.



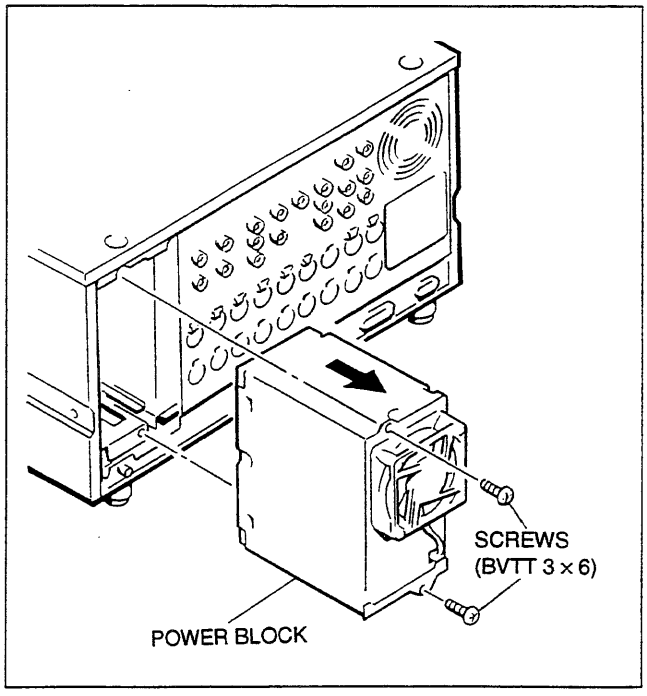
6-2. POWER BLOCK/BOARD REPLACEMENT

After replacing this board, electrical adjustment should be performed.
(Refer to maintenance manual Part 2.)

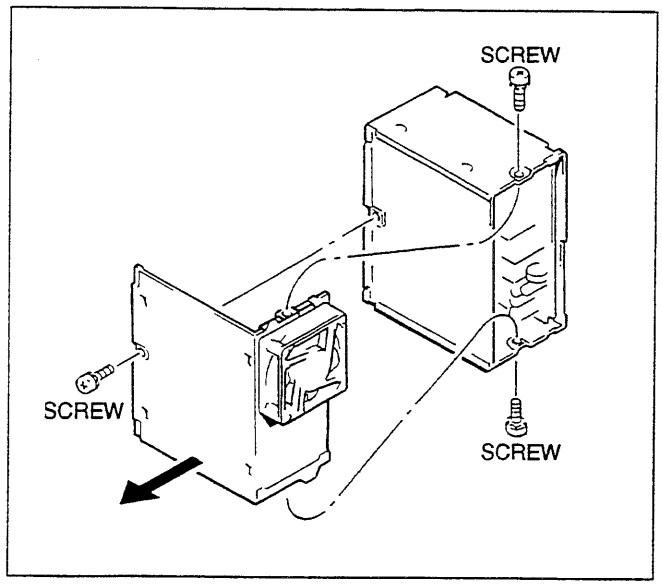
1. Remove the power panel.
   (Refer to section 1-2-4.)
2. Disconnect six connectors (CN101, CN201, CN202, CN203, CN204 and CN206).



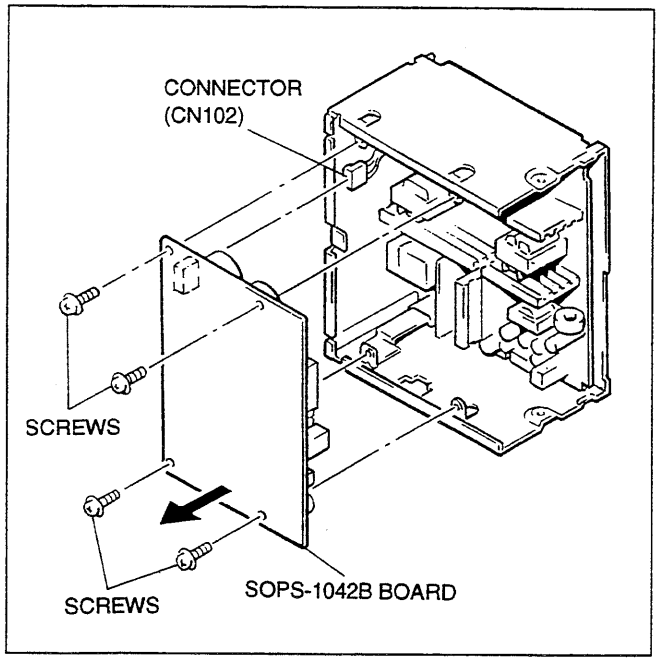
3. Remove two screws, and remove the power block.



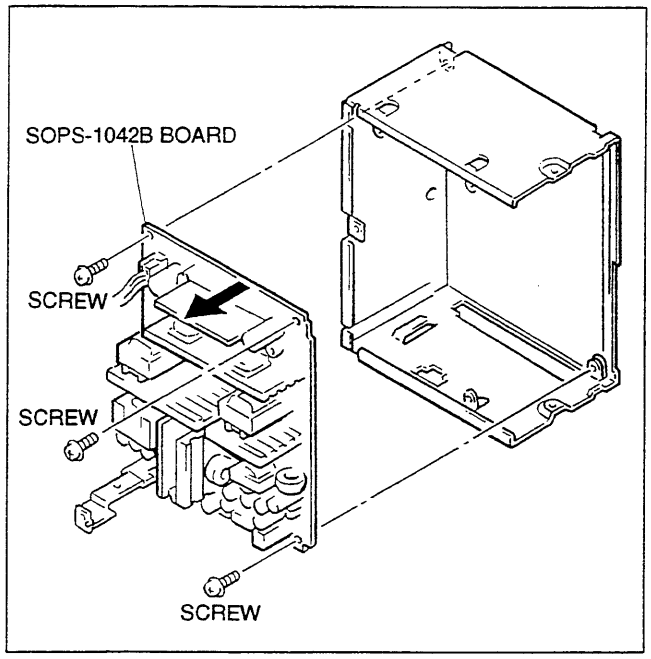
4. Remove three screws, and disassemble the power block.



5. Remove four screws, disconnect connector (CN102) and remove the SOPS-1042B board.



6. Remove three screws, and remove the SOPS-1042A board.

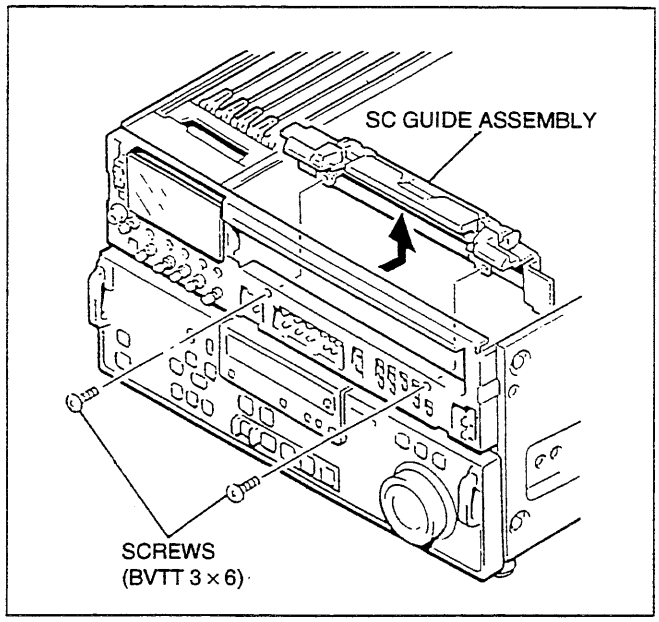


7. Install the power block/board in the reverse order of steps 1 through 6.

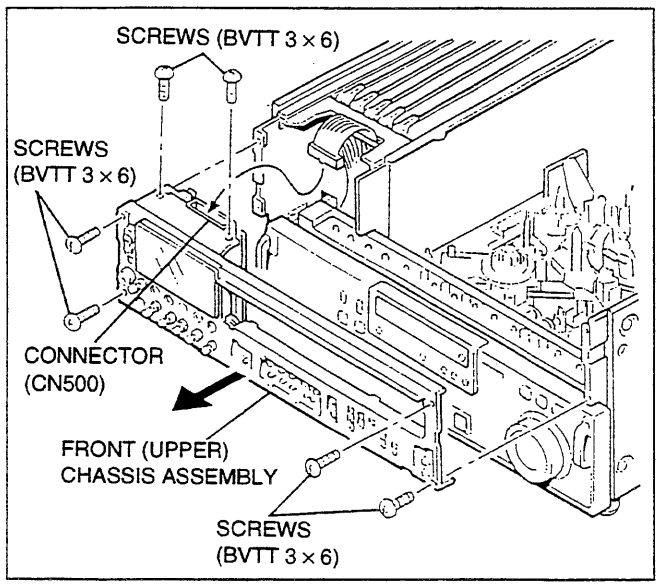
6-3. HOW TO REPLACE BOARDS

6-3-1. SWC-17 Board

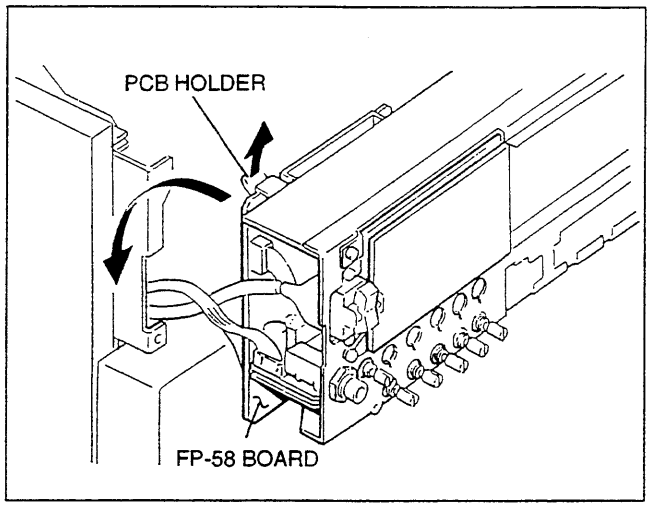
1. Turn off the power.
2. Remove the upper lid.
   (Refer to section 1-2-1.)
3. Remove the MD plate.
   (Refer to section 1-3.)
4. Remove the cassette compartment assembly.
   (Refer to section 1-2-2.)
5. Remove the upper control panel.
   (Refer to section 1-2-1.)
6. Remove two screws, and remove the SC guide assembly.



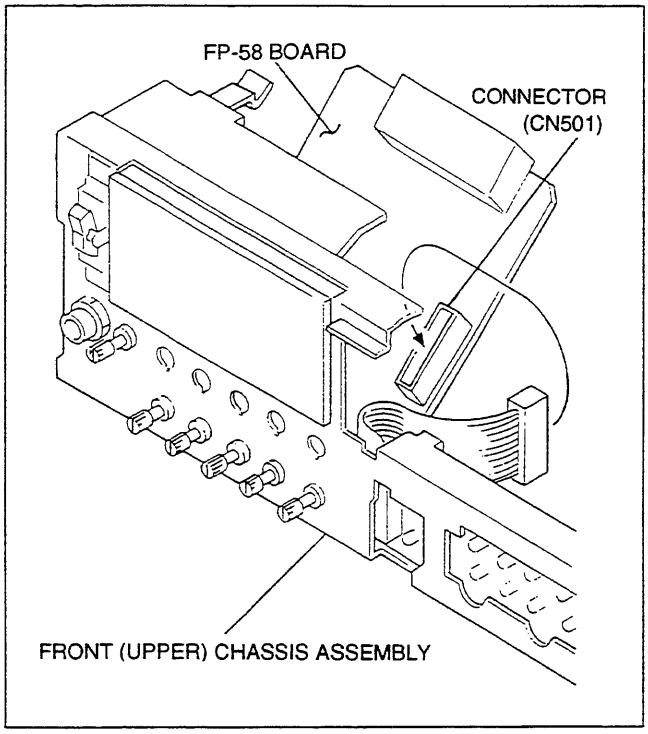
7. Disconnect connector (CN500), remove six screws and pull out the front (upper) chassis assembly.



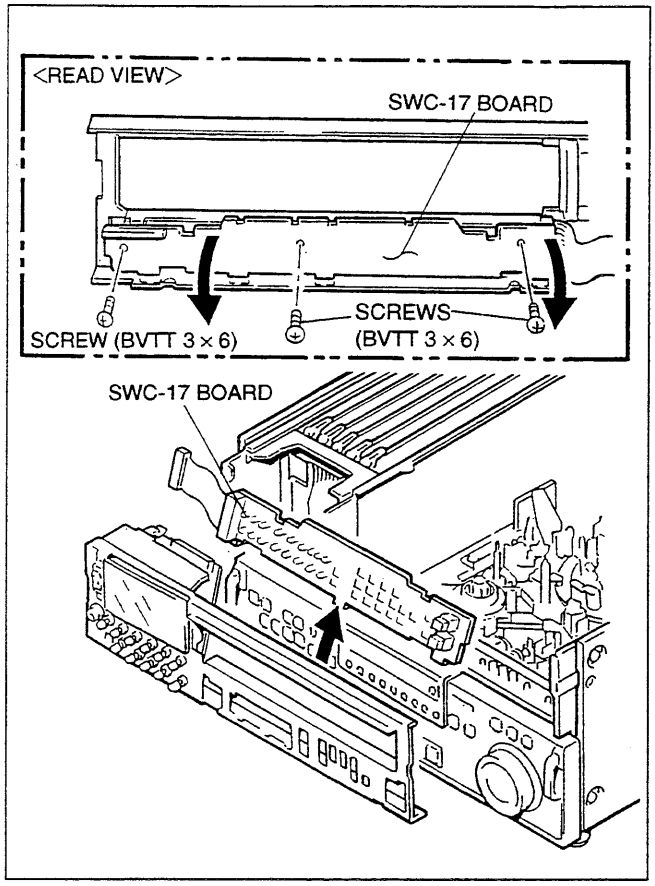
8. Undo the PCB holder, and open the FP-58 board to rear.



9. Disconnect connector (CN501) on the FP-58 board.



10. Remove three screws, and remove the SWC-17 board by lift the board after inclining to rear.

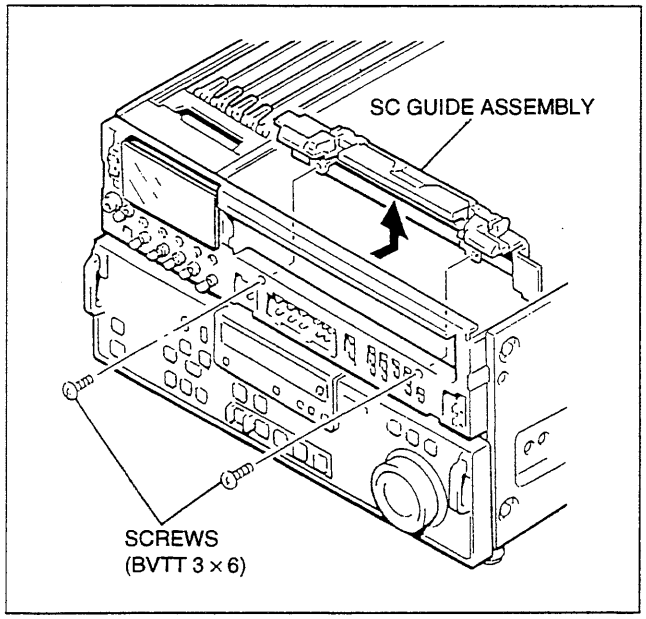


11. Install the SWC-17 board in the reverse order of steps 1 through 10.

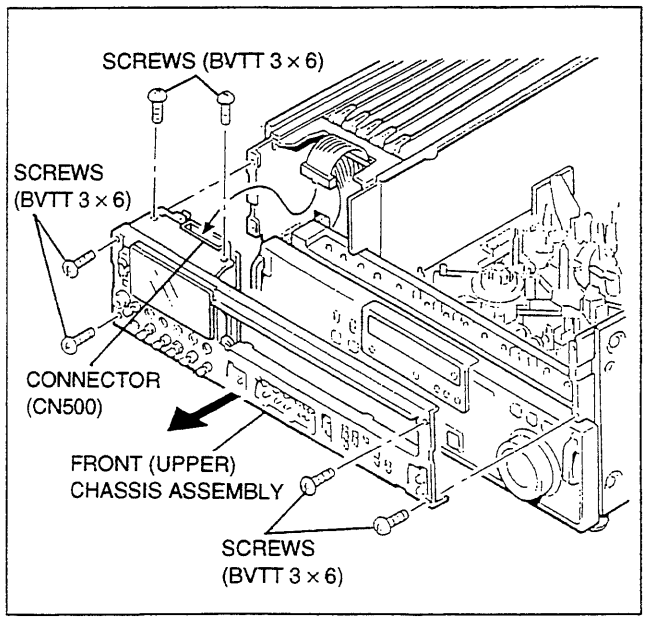
6-3-2. FP-58 Board

After replacing this board, preset level adjustment (PROCESS CONTROL switch : REMOTE) should be performed.
(Refer to maintenance manual Part 2.)

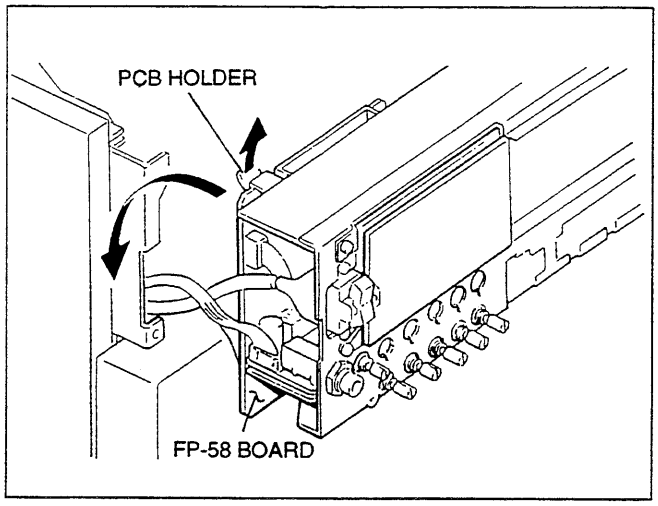
1. Turn off the power.
2. Remove the upper lid.
   (Refer to section 1-2-1.)
3. Remove the MD plate.
   (Refer to section 1-3.)
4. Remove the cassette compartment assembly.
   (Refer to section 1-2-2.)
5. Remove the upper control panel.
   (Refer to section 1-2-1.)
6. Remove two screws, and remove the SC guide assembly.



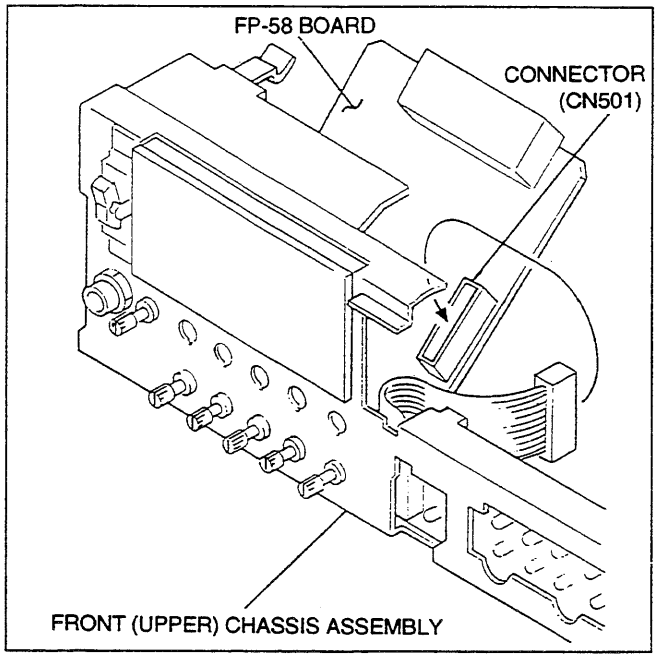
7. Disconnect connector (CN500), remove six screws and pull out the front (upper) chassis assembly.



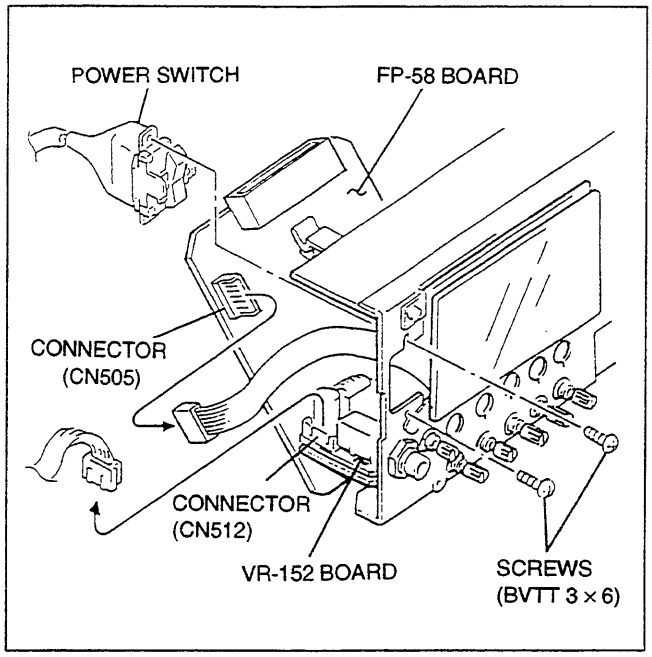
8. Undo the PCB holder, and open the FP-58 board to rear.



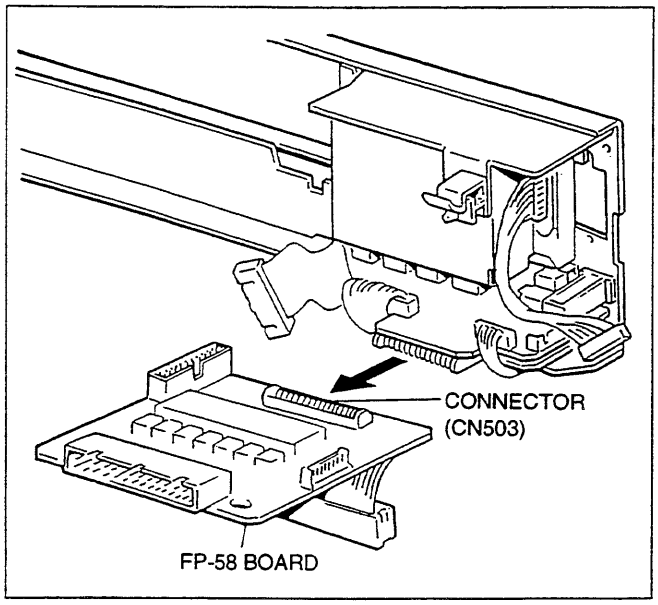
9. Disconnect connector (CN501) on the FP-58 board.



10. Remove two screws, and remove the power switch.
11. Disconnect connector (CN512) on the VR-152 board and connector (CN505) on the FP-58 board, and remove the front (upper) chassis assembly.



12. Disconnect connector (CN503), and remove the FP-58 board.



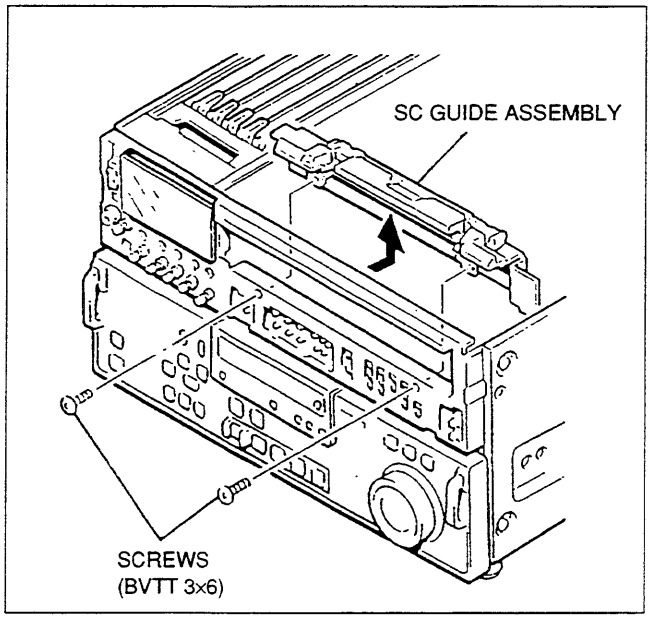
13. Install the FP-58 board in the reverse order of steps 1 through 12.

Note

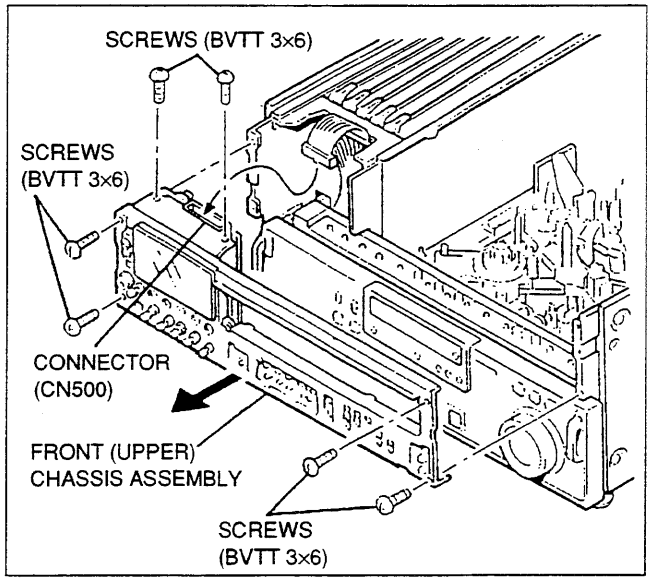
When connecting connector (CN503), put the protrusions of the connector on the VR-153 board in the hollow of CN503, then stand the FP-58 board.

6-3-3. VR-152 Board

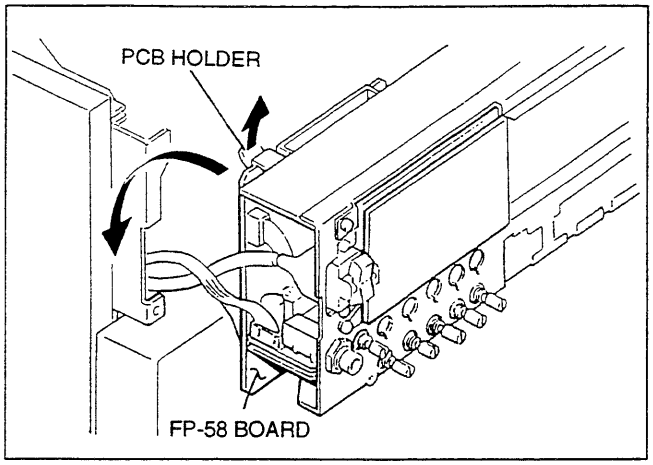
1. Turn off the power.
2. Remove the upper lid.
   (Refer to section 1-2-1.)
3. Remove the MD plate.
   (Refer to section 1-3)
4. Remove the cassette compartment assembly.
   (Refer to section 1-2-2.)
5. Remove the upper control panel.
   (Refer to section 1-2-1.)
6. Remove two screws, and remove the SC guide assembly.



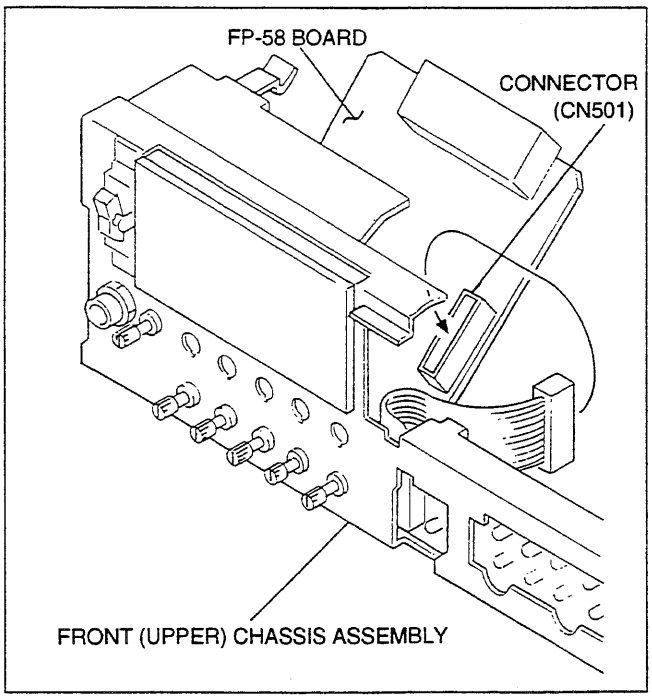
7. Disconnect connector (CN500), remove six screws and pull out the front (upper) chassis assembly.



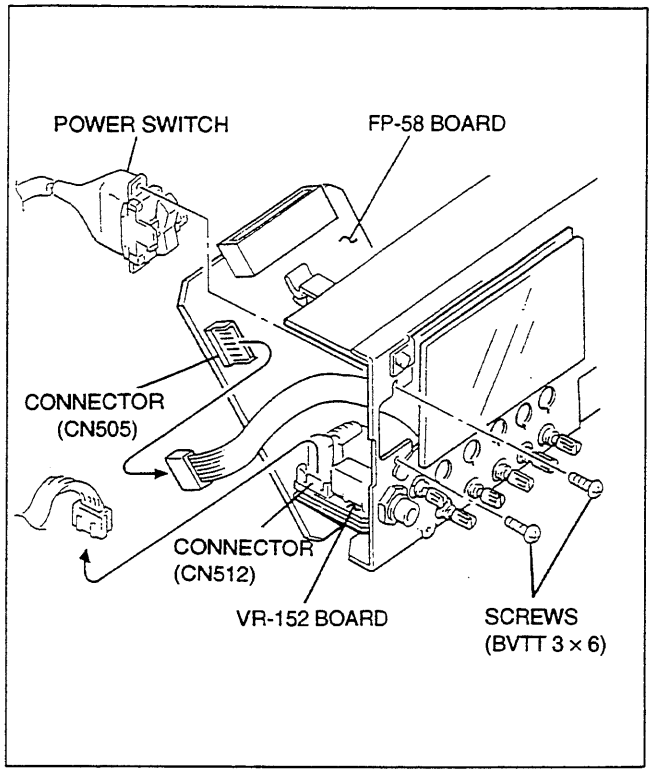
8. Undo the PCB holder, and open the FP-58 board.



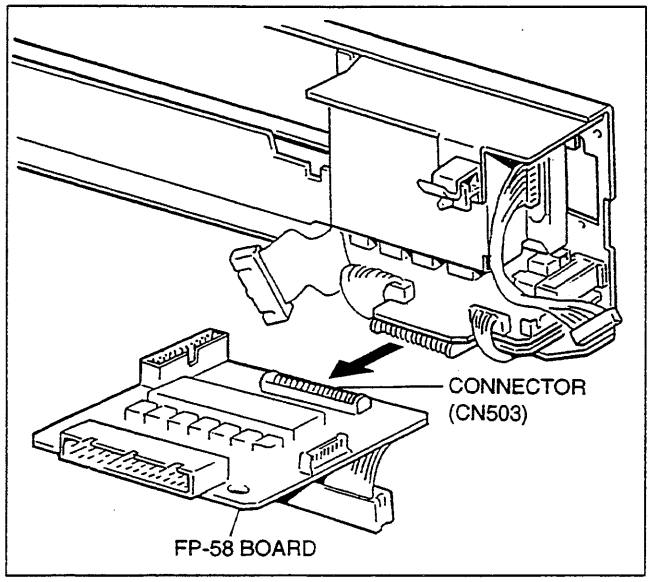
9. Disconnect connector (CN501) on the FP-58 board.



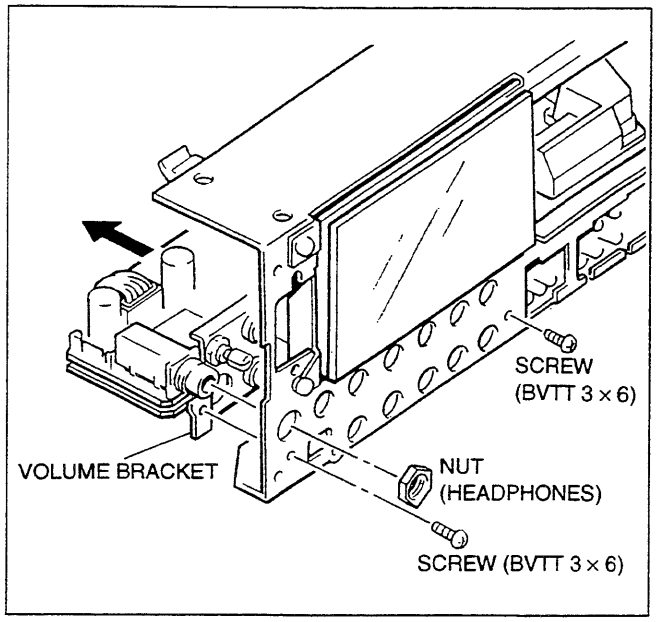
10. Remove two screws, and remove the power switch.
11. Disconnect connector (CN512) on the VR-152 board and connector (CN505) on the FP-58 board, and remove the front (upper) chassis assembly.



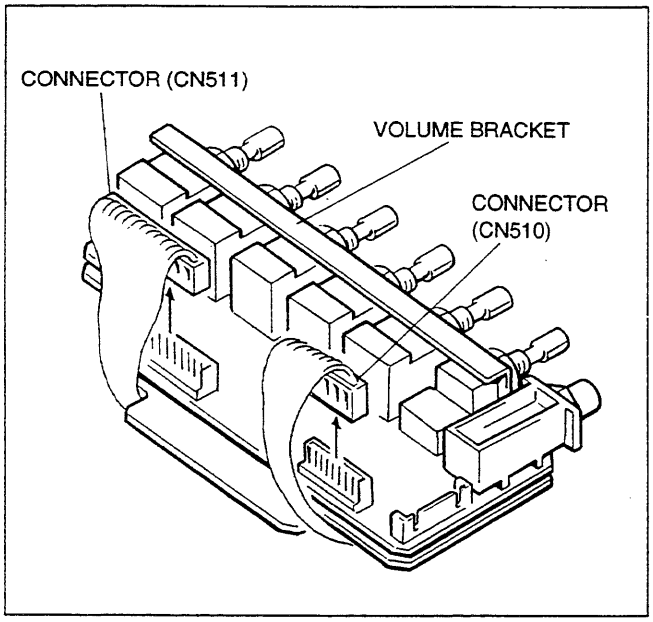
12. Disconnect connector (CN503), and remove the FP-58 board.



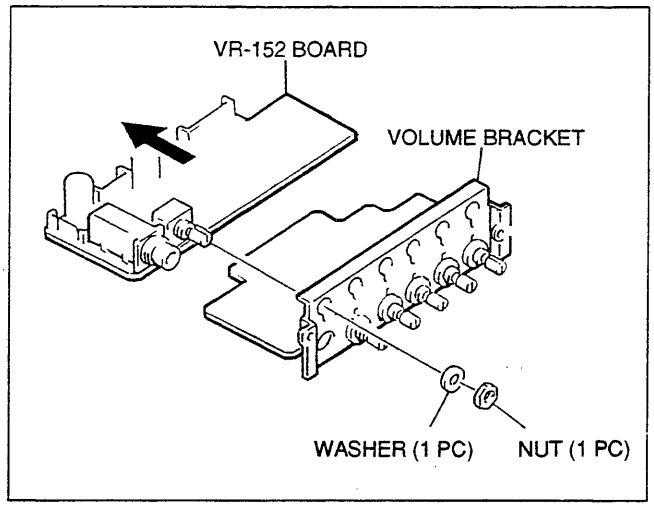
13. Remove the nut of HEADPHONES jack.
14. Remove two screws, and remove the volume bracket.



15. Disconnect two connectors (CN510 and CN511).



16. Remove one nut and washer, and remove the VR-152 board.



17. Install the VR-152 board in the reverse order of steps 1 through 16.

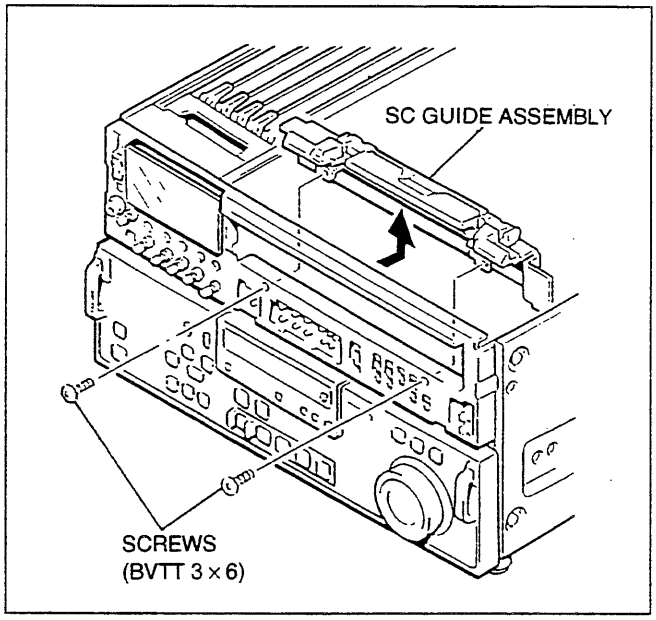
Note

After installing the nuts, apply locking compound.

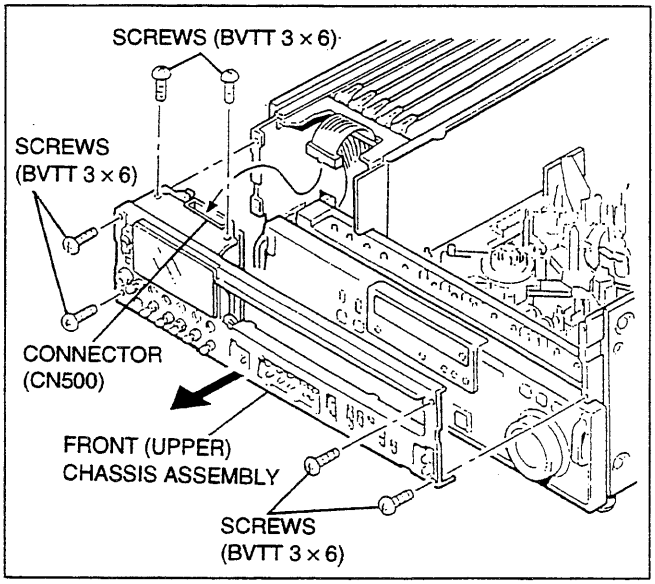
6-3-4. VR-153 Board

After replacing this board, audio PB should be performed.
(Refer to maintenance manual Part 2.)

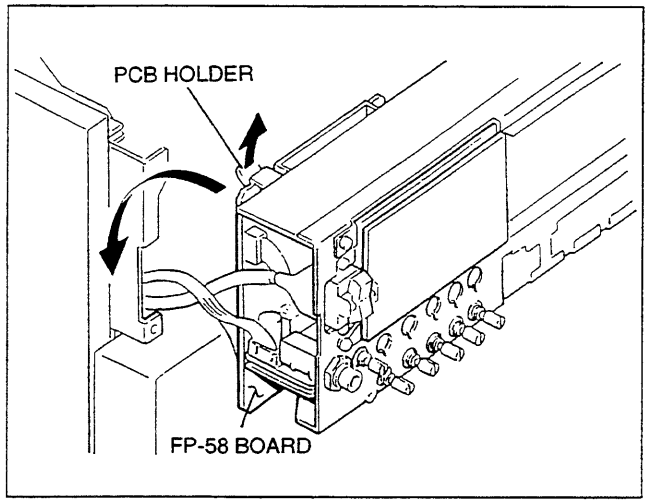
1. Turn off the power.
2. Remove the upper lid.
   (Refer to section 1-2-1.)
3. Remove the MD plate.
   (Refer to section 1-3.)
4. Remove the cassette compartment assembly.
   (Refer to section 1-2-2.)
5. Remove the upper control panel.
   (Refer to section 1-2-1.)
6. Remove two screws, and remove the SC guide assembly.



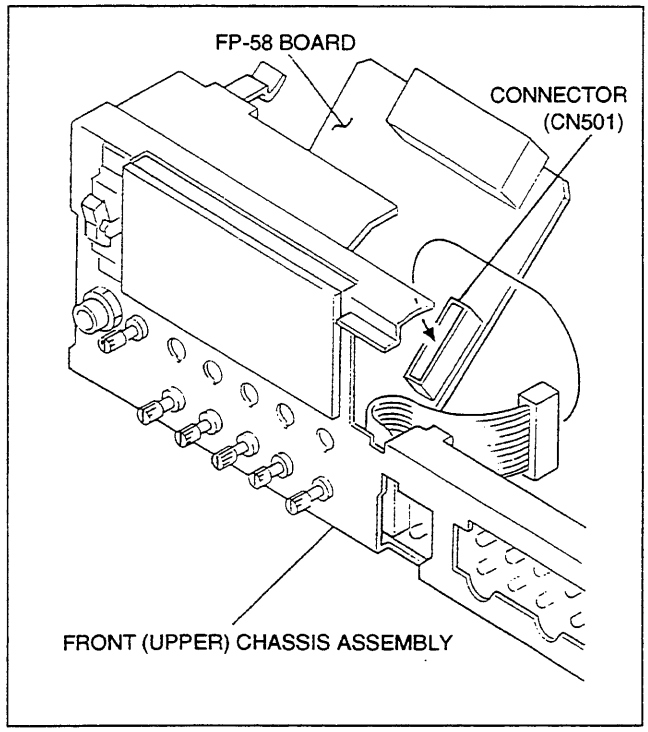
7. Disconnect connector (CN500), remove six screws and pull out the front (upper) chassis assembly.



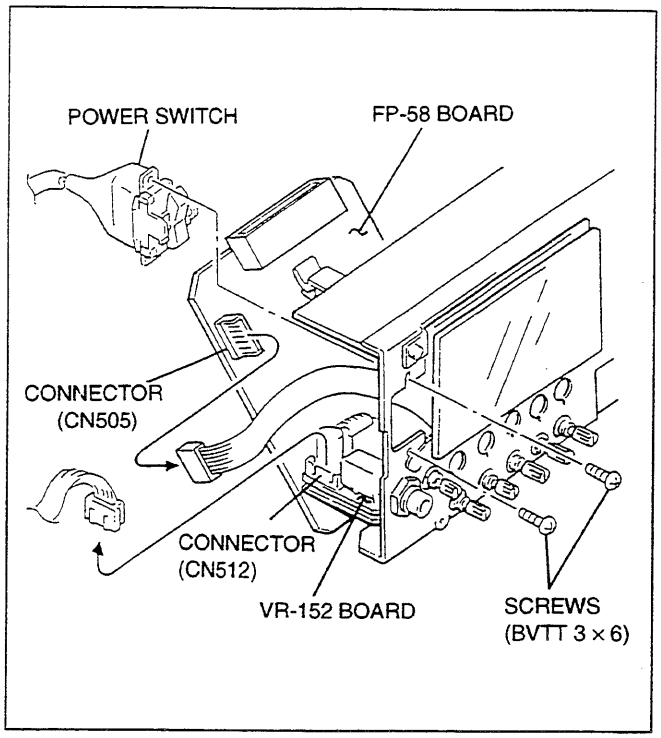
8. Undo the PCB holder, and open the FP-58 board.



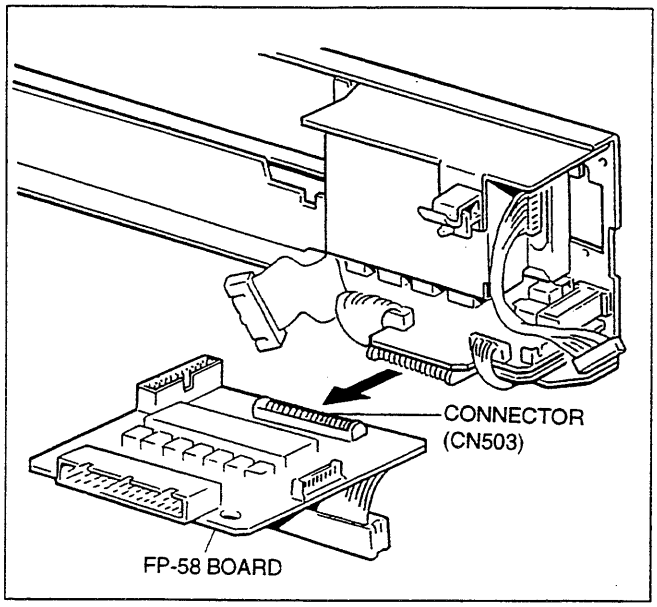
9. Disconnect connector (CN501) on the FP-58 board.



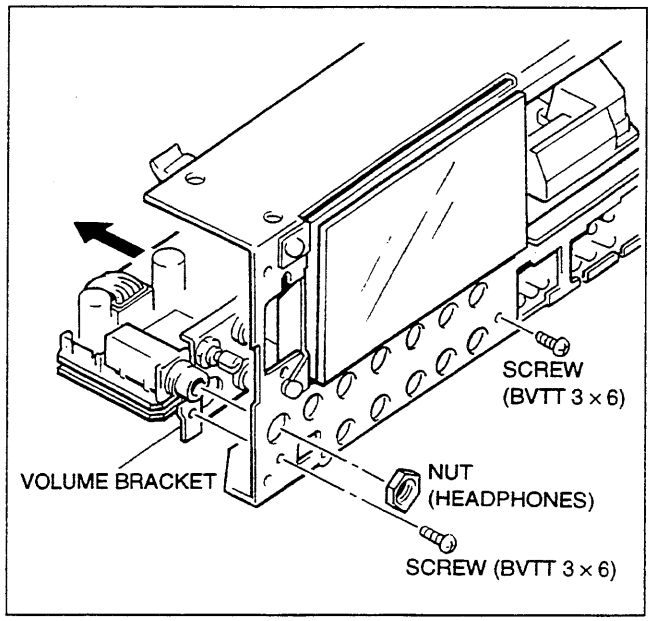
10. Remove two screws, and remove the power switch.
11. Disconnect connector (CN512) on the VR-152 board and connector (CN505) on the FP-58 board, and remove the front (upper) chassis assembly.



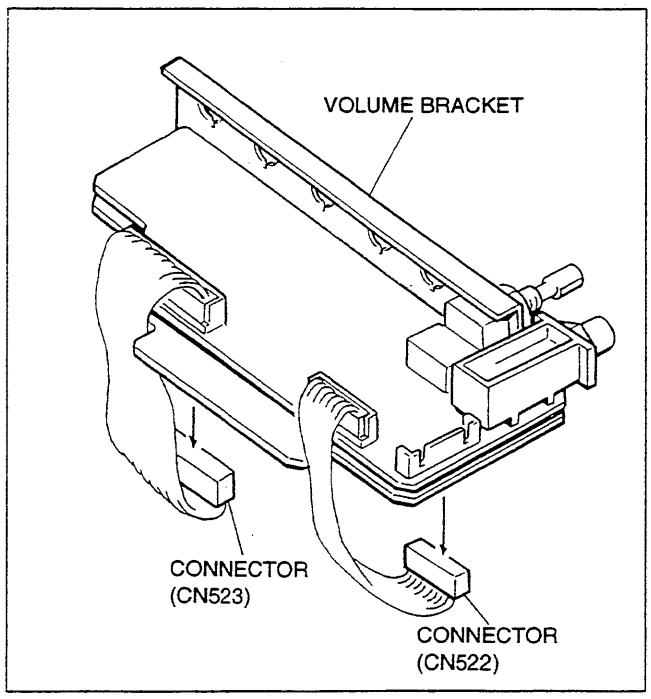
12. Disconnect connector (CN503), and remove the FP-58 board.



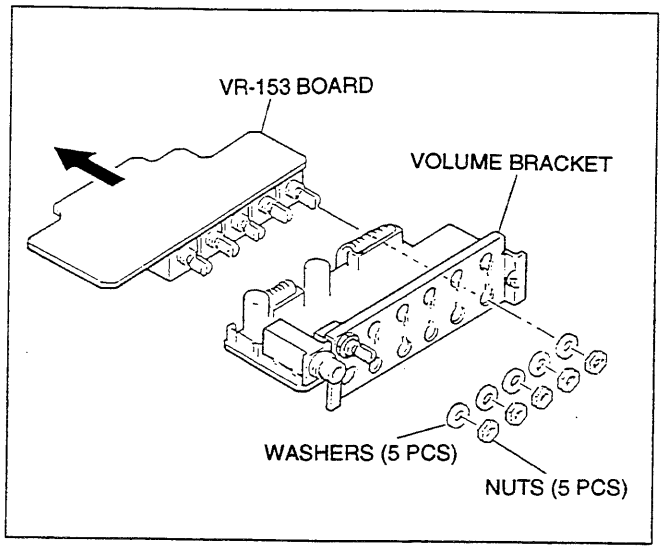
13. Remove the nut of HEADPHONES jack.
14. Remove two screws, and remove the volume bracket.



15. Disconnect two connectors (CN522 and CN523).



16. Remove five nuts and washers, and remove the VR-153 board.



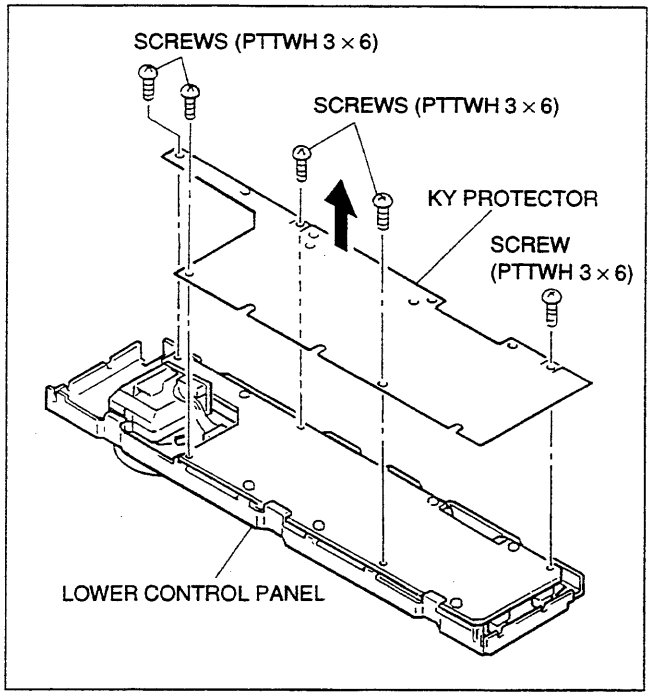
17. Install the VR-153 board in the reverse order of steps 1 through 16.

Note

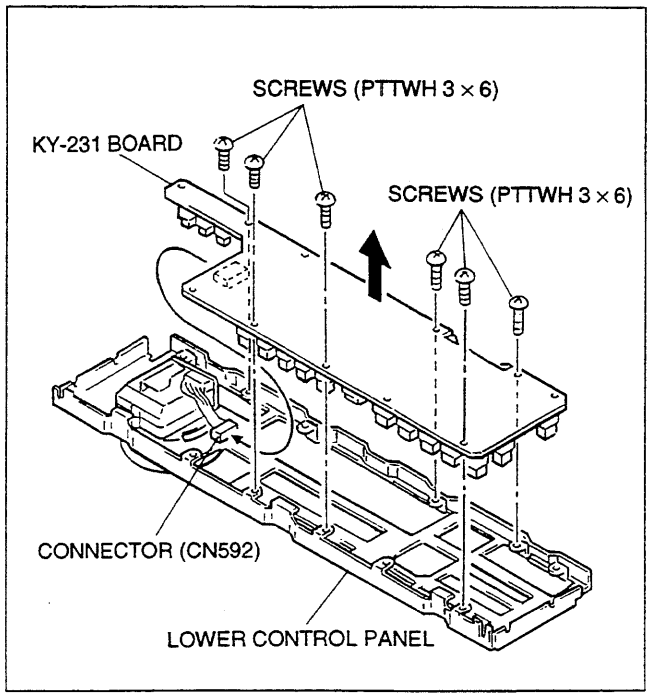
After installing the nuts, apply locking compound.

6-3-5. KY-231 Board

1. Turn off the power.
2. Remove the lower control panel assembly. (Refer to section 1-9.)
3. Remove five screws as shown in the figure, and remove the KY protector.



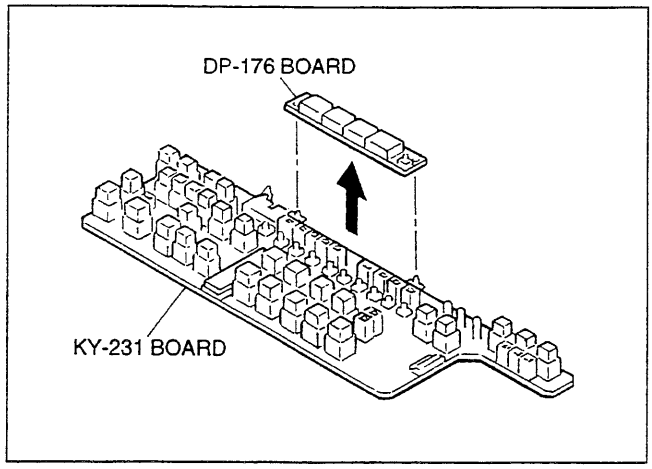
4. Remove six screws as shown in the figure.
5. Disconnect connector (CN592).



6. Install the KY-231 board in the reverse order of steps 1 through 5.

6-3-6. DP-176 Board

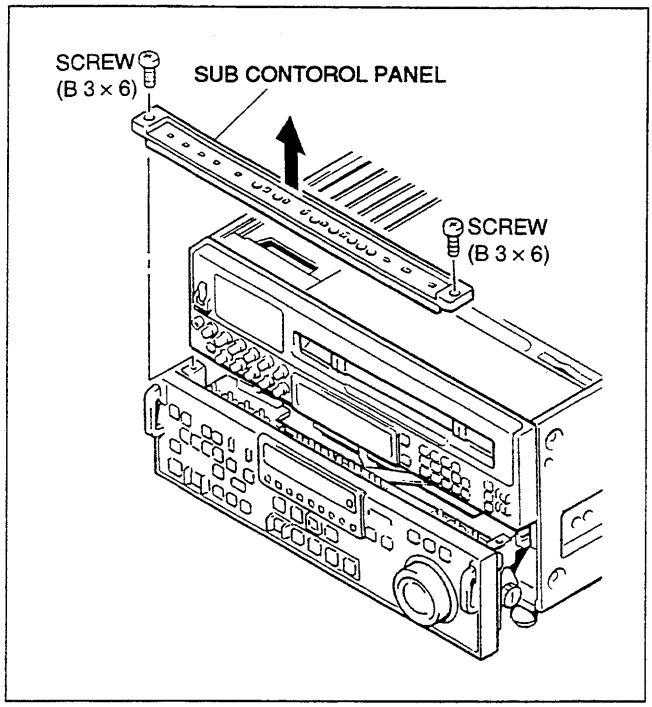
1. Turn off the power.
2. Remove the KY-231 board.
   (Refer to section 6-3-5.)
3. Unsolder connector (CN591), and remove the DP-176 board.



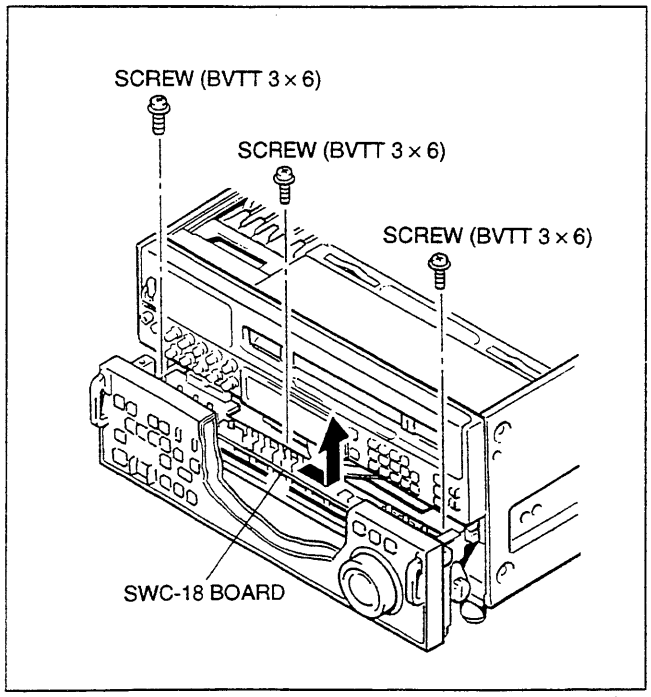
4. Install the DP-176 board in the reverse order of steps 1 through 3.

6-3-7. SWC-18 Board

1. Turn off the power.
2. Pull out the lower control panel assembly.
   (Refer to section 1-8.)
3. Remove two screws, and remove the sub control panel.



4. Remove three screws.
5. Unlock by sliding the SWC-18 board in the direction of the arrow, and remove the board.

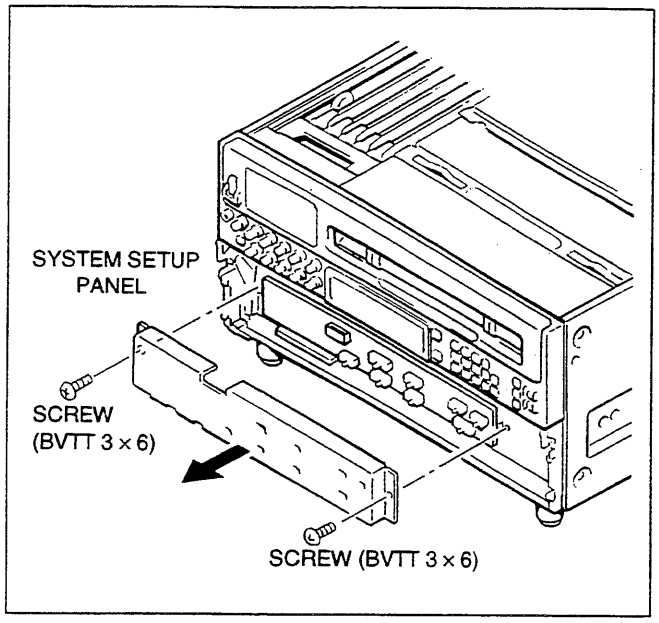


6. Install the SWC-18 board in the reverse order of steps 1 through 5.

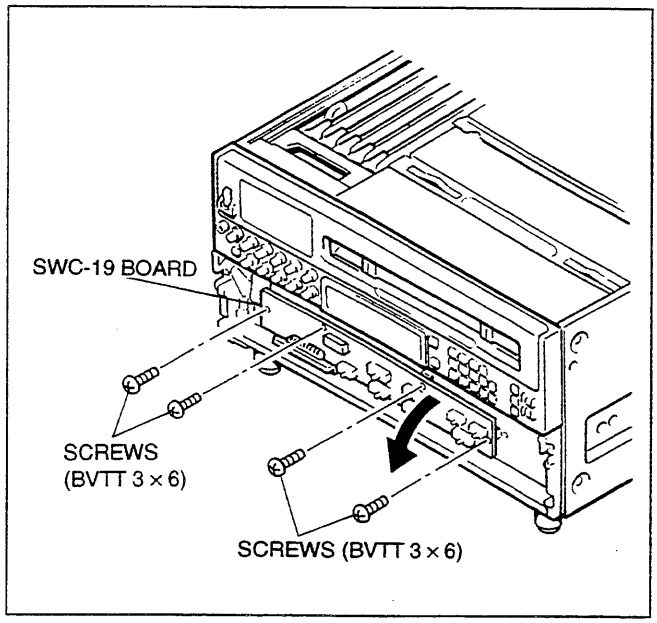
6-3-8. SWC-19 Board

After replacing this board, RF (digital) system adjustment should be performed.
(Refer to maintenance manual Part 2.)

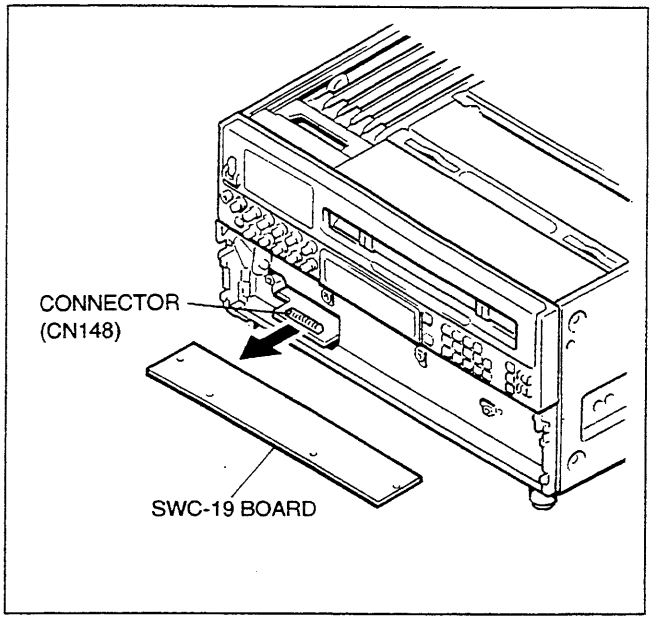
1. Turn off the power.
2. Remove the lower control panel assembly.
   (Refer to section 1-9.)
3. Remove two screws, and remove the system setup panel.



4. Remove four screws, and open the SWC-19 board.



5. Disconnect connector (CN148).

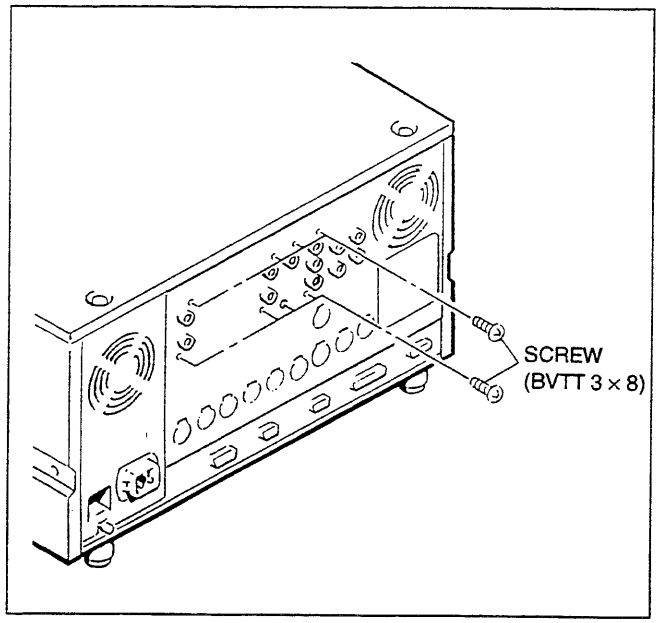


6. Install the SWC-19 board in the reverse order of steps 1 through 5.

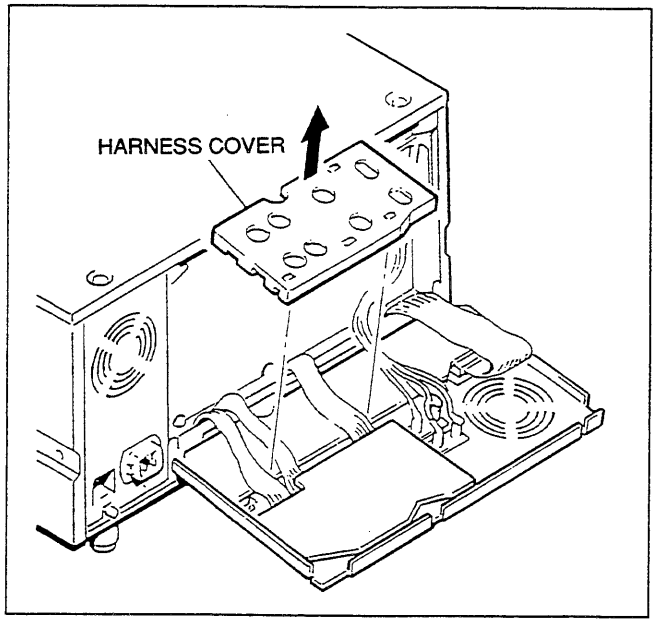
6-3-9. CP-218 Board

After replacing this board, analog video output level check should be performed.
(Refer to maintenance manual Part 2.)

1. Turn off the power.
2. Remove 7 screws.



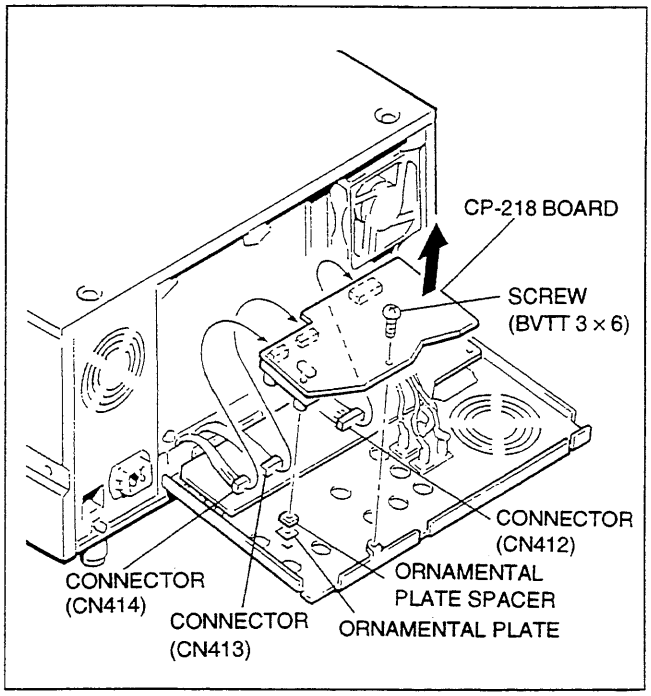
3. Remove the connector panel.
   (Refer to section 1-2-3.)
4. Remove the harness cover.



5. Remove a screw, and remove the CP-218 board.

Note
At this time, an ornamental plate and an ornamental plate spacer are come off. Do not lose them.

6. Disconnect three connectors (CN412, CN413 and CN414).

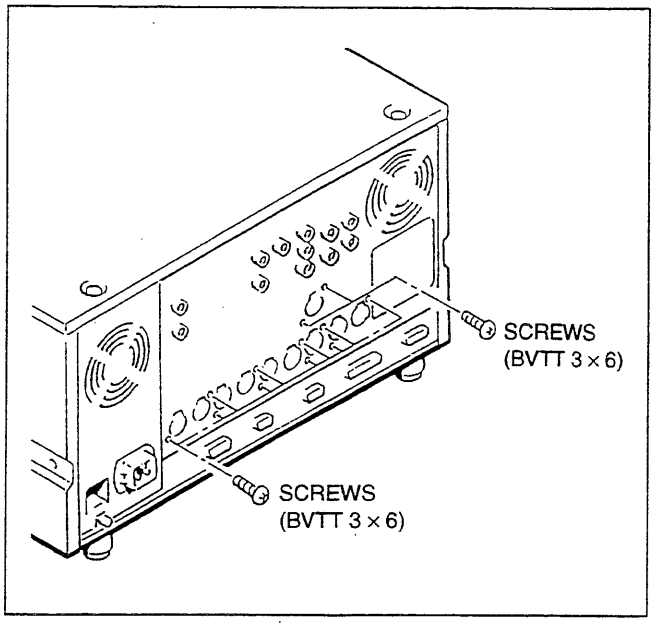


7. Install the CP-218 board in the reverse order of steps 1 through 6.

Note
When installing the duct cover, exercise caution so as not to nip the harness.

6-3-10. CP-220 Board

1. Turn off the power.
2. Remove the CP-218 board, (Refer to section 6-3-9.)
3. Remove 12 screws.

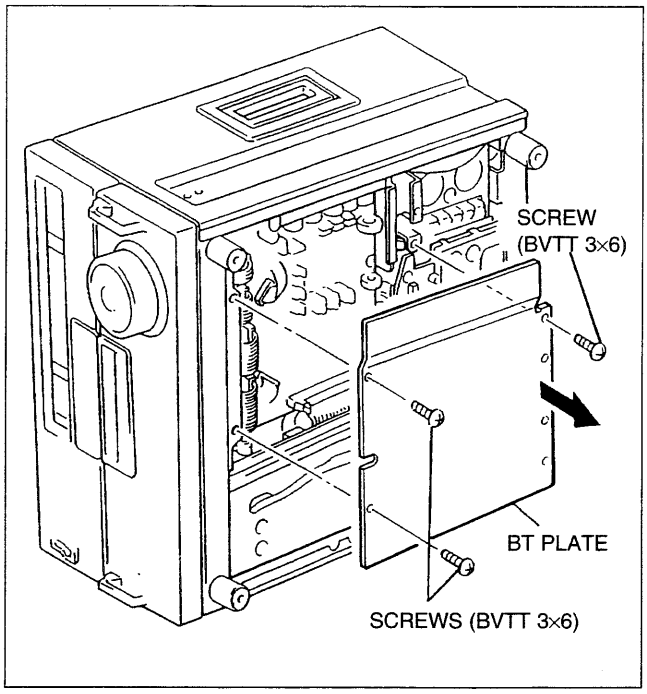


4. Remove a screw, and remove the CP-220 board.
5. Disconnect four connectors (CN400, CN401, CN402 and CN403).
6. Install the CP-220 board in the reverse order of steps 1 through 5.

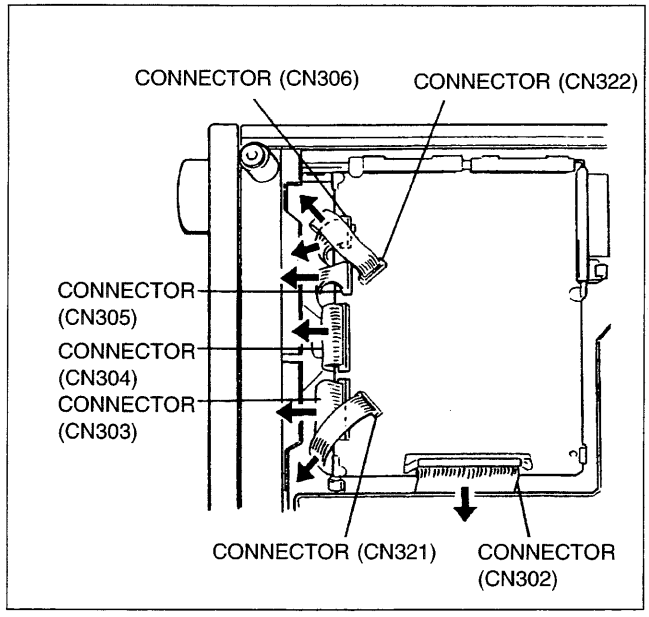
6-3-11.DR-307/200 Board

After replacing this board, servo/DT adjustment should be performed.
(Refer to maintenance manual Part 2.)

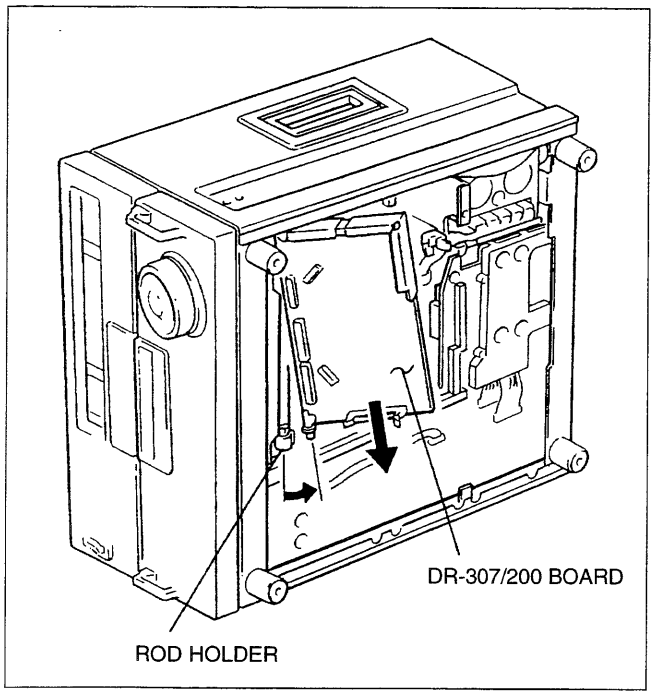
1. Turn off the power.
2. Remove the bottom plate.
   (Refer to section 1-2-1.)
3. Remove three screws, and remove the BT plate.



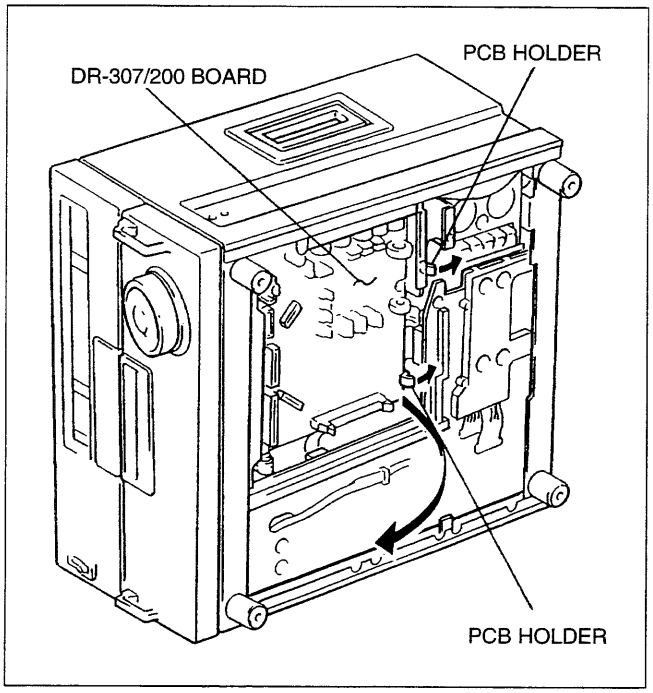
4. Disconnect seven connectors (CN302, CN303, CN304, CN305, CN306, CN321 and CN322).
   (Refer to section 6-1-3.)



5. Undo the PCB holder, and open the DR-307/200 board.



6. Remove the DR-307/200 board from the rod holder.



7. Install the DR-307/200 board in the reverse order of steps 1 through 6.

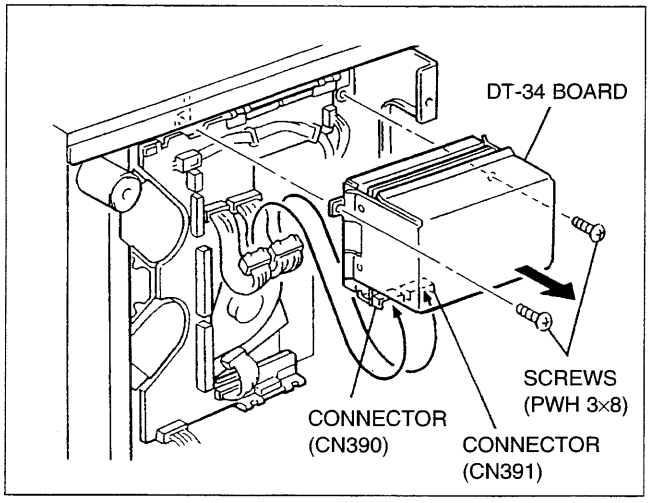
Note

When closing the DR-307/200 board, harness of the CN302 should be put in.

6-3-12. DT-34 Board

After replacing this board, DT adjustment should be performed.
(Refer to maintenance manual Part 2.)

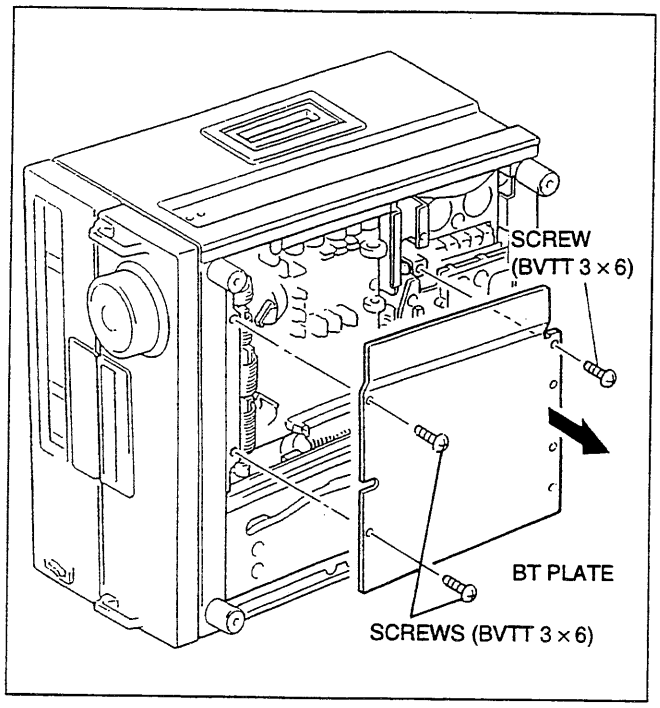
1. Turn off the power.
2. Remove the DR-307/200 board.
   (Refer to section 6-3-11.)
3. Disconnect two connectors (CN390 and CN391).
4. Remove two screws, and remove the DT-34 board.



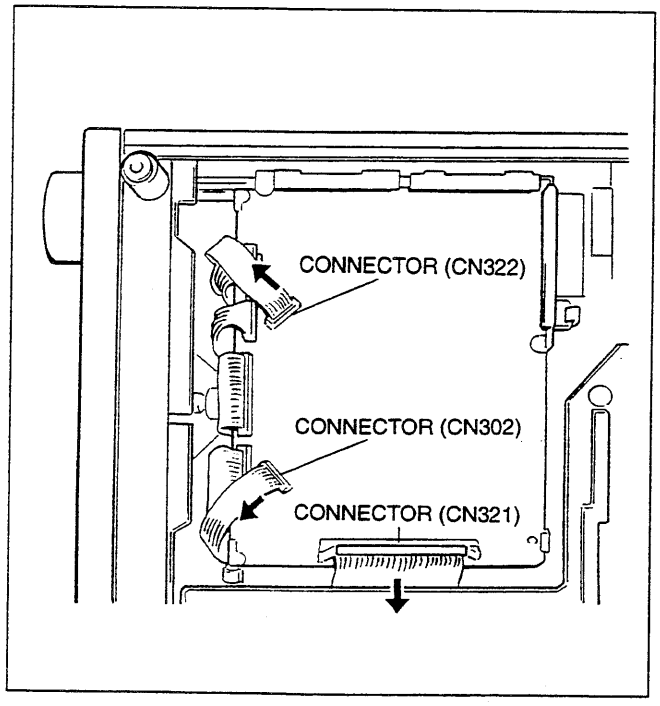
5. Install the DT-34 board in the reverse order of steps 1 through 4.

6-3-13.HN-181 Board

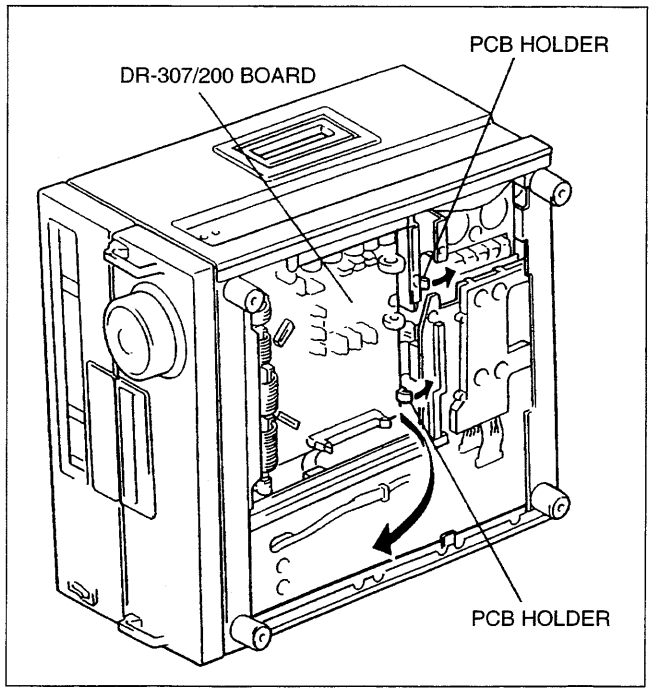
1. Turn off the power.
2. Remove the upper lid.
   (Refer to section 1-2-1.)
3. Remove the MD plate.
   (Refer to section 1-3.)
4. Remove the bottom plate.
   (Refer to section 1-2-1.)
5. Remove three screws, and remove the BT plate.



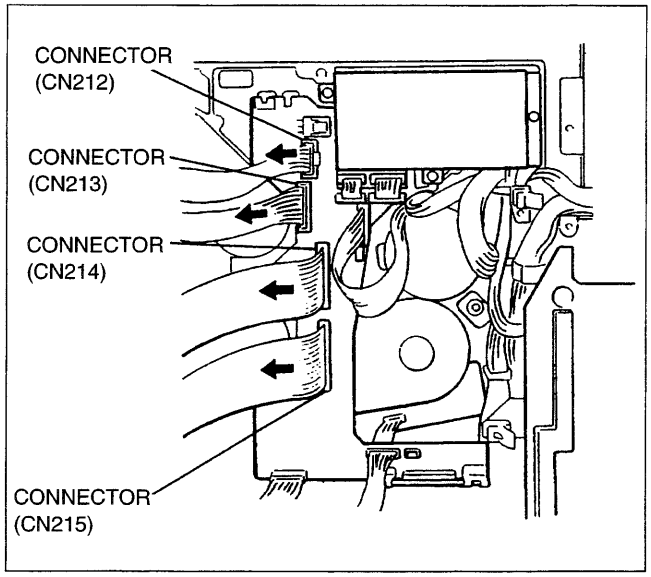
6. Disconnect three connectors (CN302, CN321 and CN322).



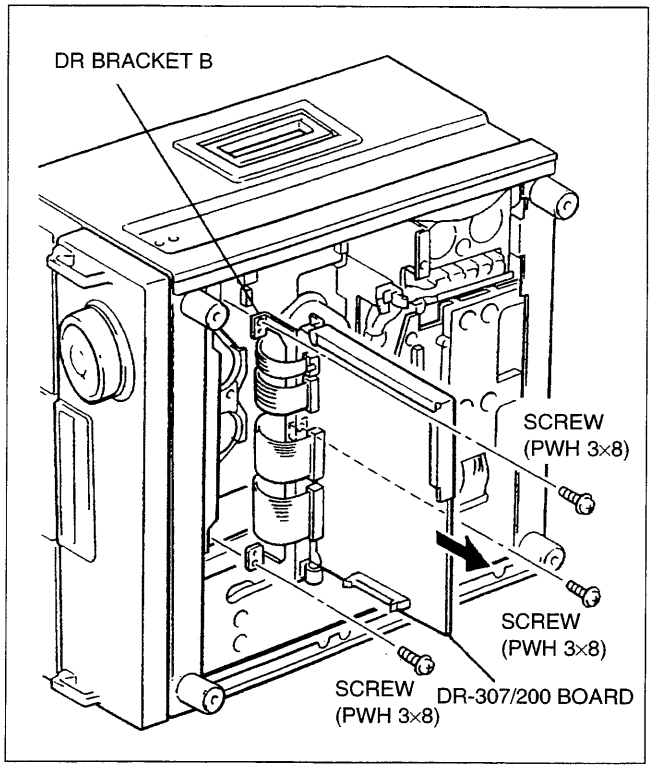
7. Undo the PCB holder, and open the DR-307/200 board.



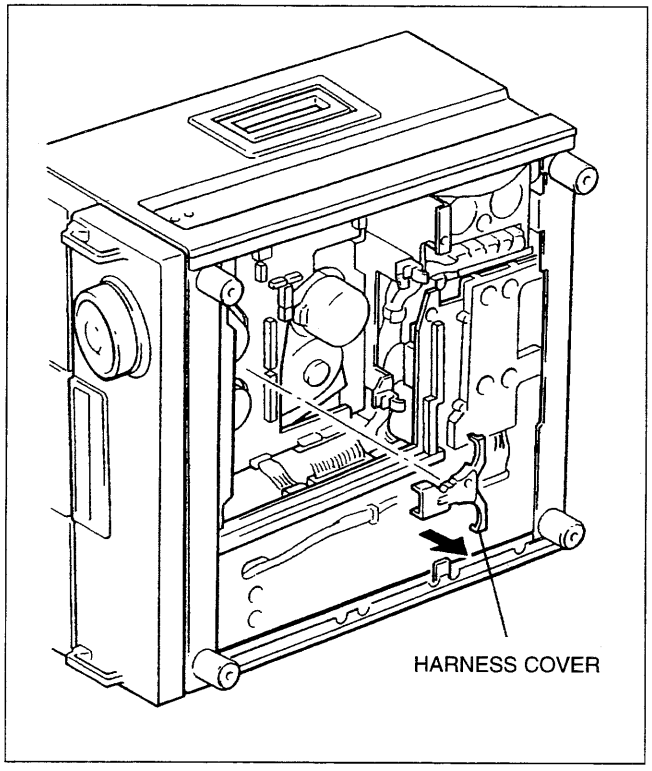
8. Disconnect four connectors (CN212, CN213, CN214 and CN215) on the HN-181 board.



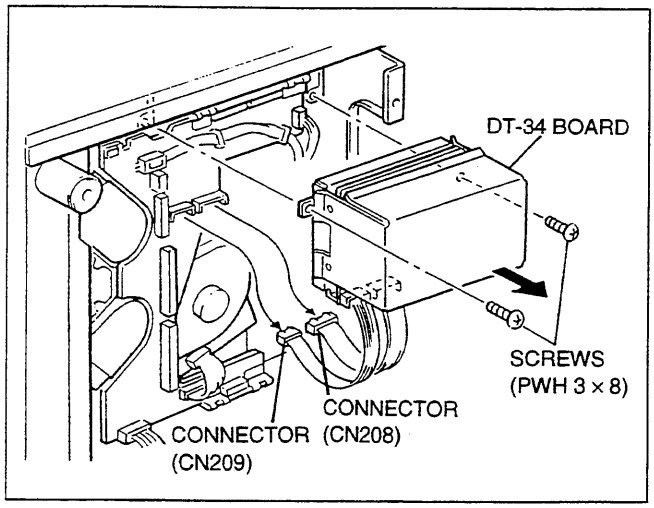
9. Remove three screws, then remove the DR bracket B and DR-307/200 board.



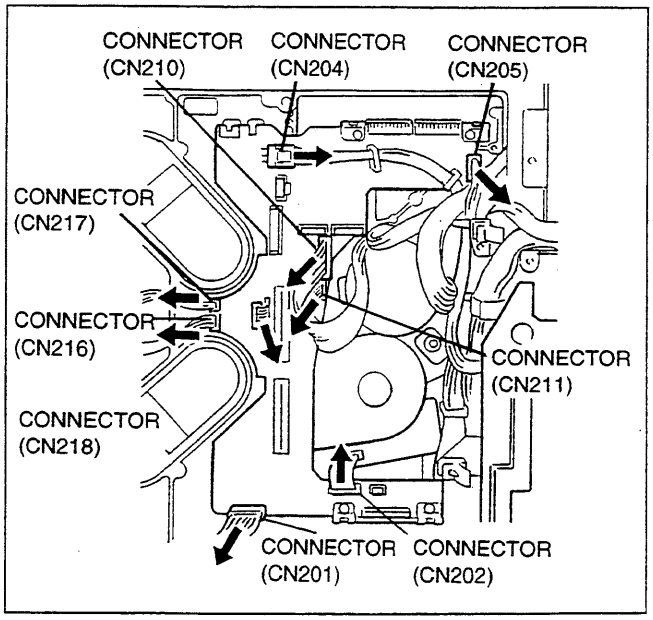
10. Remove the harness cover.



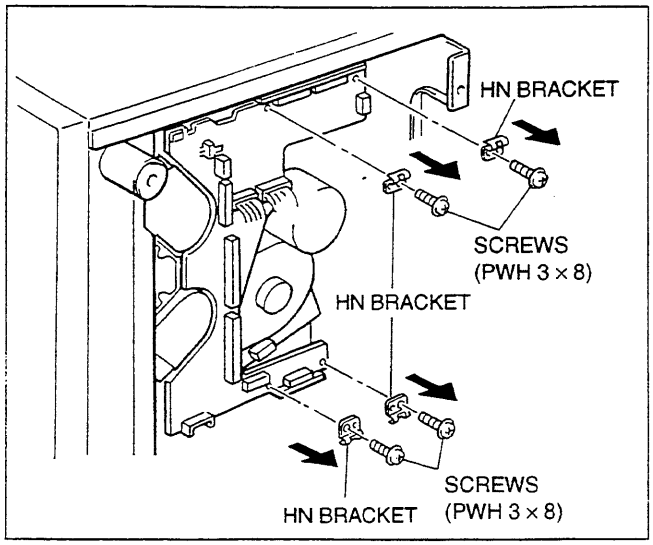
11. Remove two screws, and remove the DT-34 board, then disconnect two connectors (CN208 and CN209).



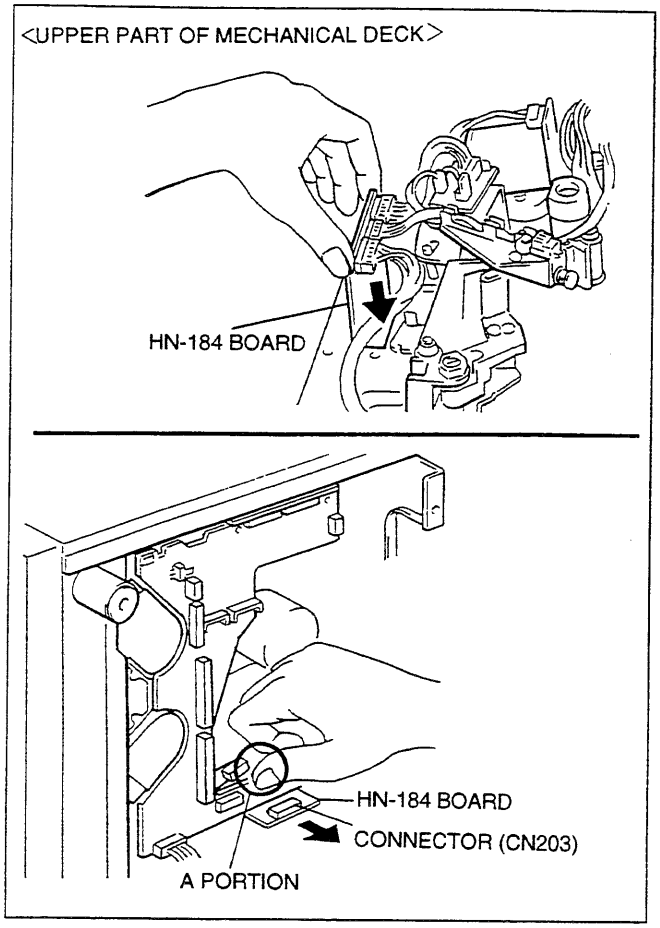
12. Disconnect nine connectors (CN201, CN202, CN204, CN205, CN210, CN211, CN216, CN217 and CN218) on the HN-181 board.



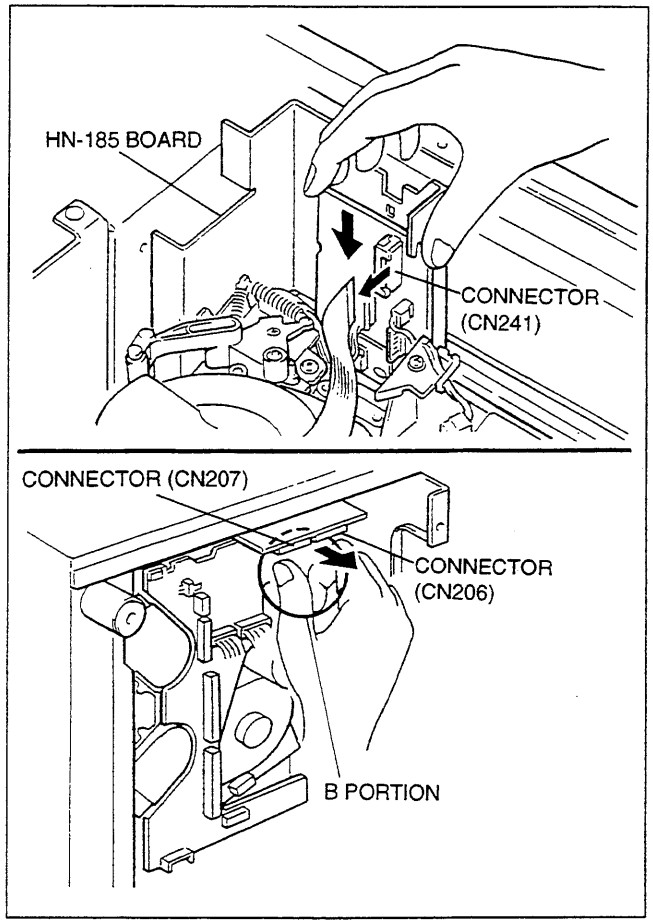
13. Remove two screws which fix HN-184 board and HN-185 board, and remove two HN brackets each.



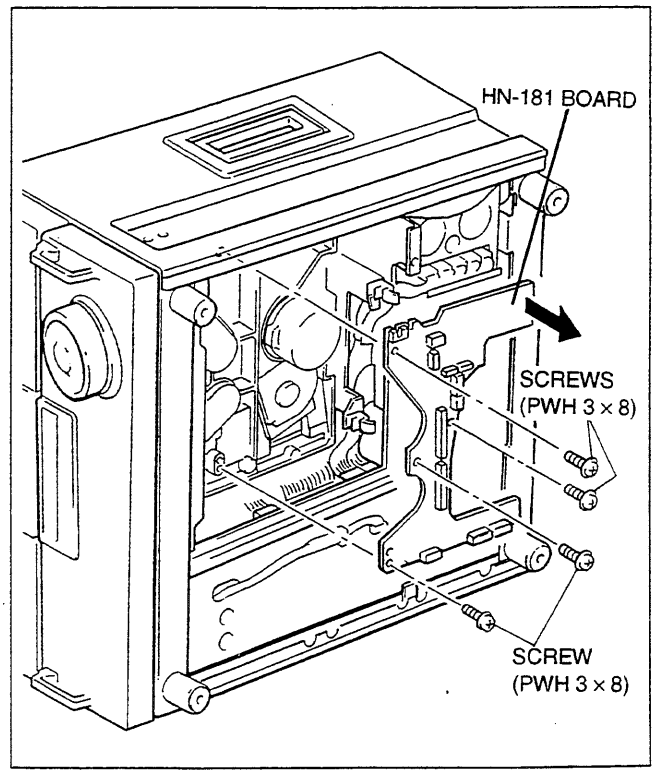
14. Disconnect connector (CN203) with care while holding A portion.



15. Disconnect connector (CN241) on the HN-185 board (to protect flexible card wire from damage).
16. Disconnect two connectors (CN206 and CN207) with care while holding B portion.



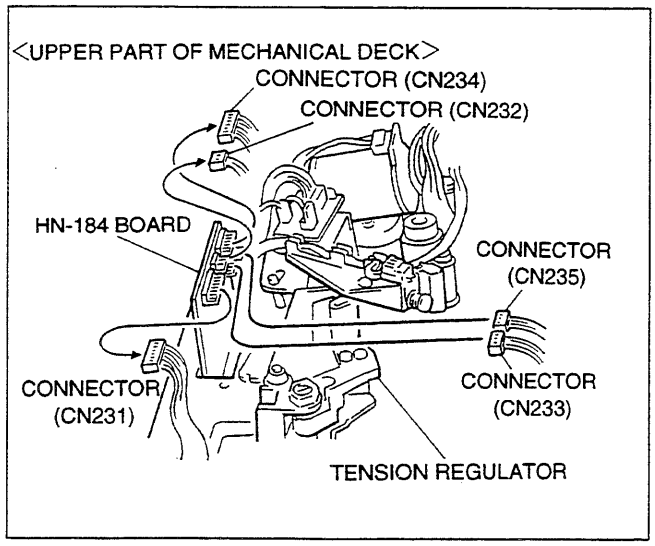
17. Remove four screws, and remove the HN-181 board.



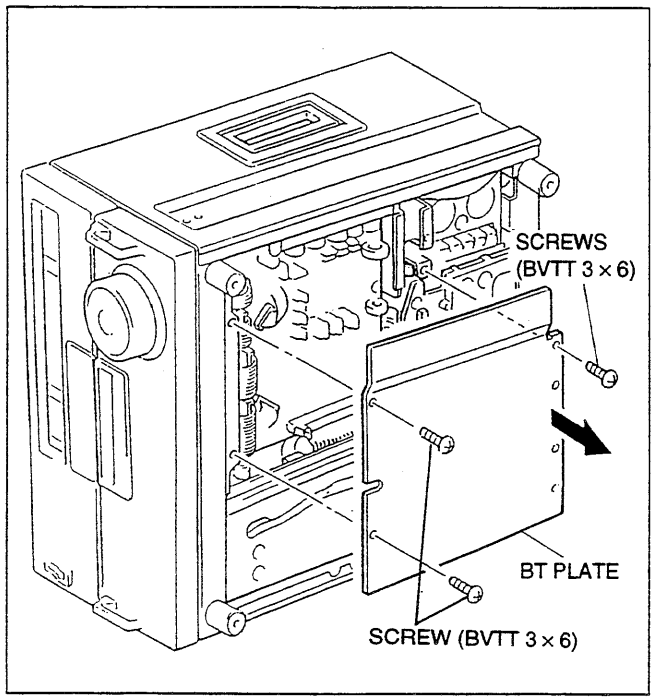
18. Install the HN-181 board in the reverse order of steps 1 through 17.

6-3-14.HN-184 Board

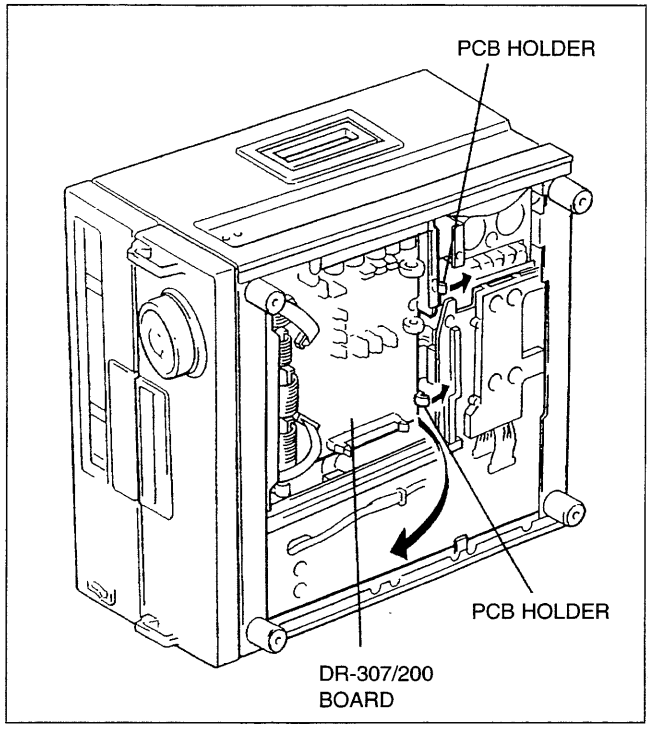
1. Turn off the power.
2. Remove the upper lid.
   (Refer to section 1-2-1.)
3. Remove the MD plate.
   (Refer to section 1-3.)
4. Disconnect five connectors (CN231, CN232, CN233, CN234, CN235).



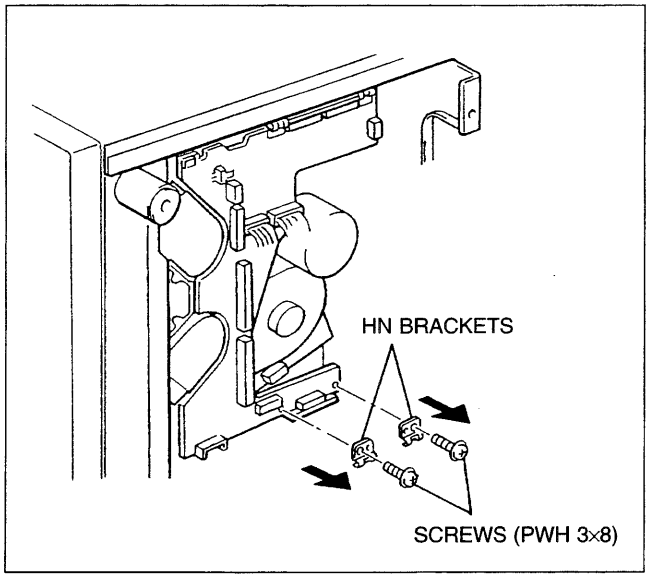
5. Remove the bottom plate.
   (Refer to section 1-2-1.)
6. Remove three screws, and remove the BT plate.



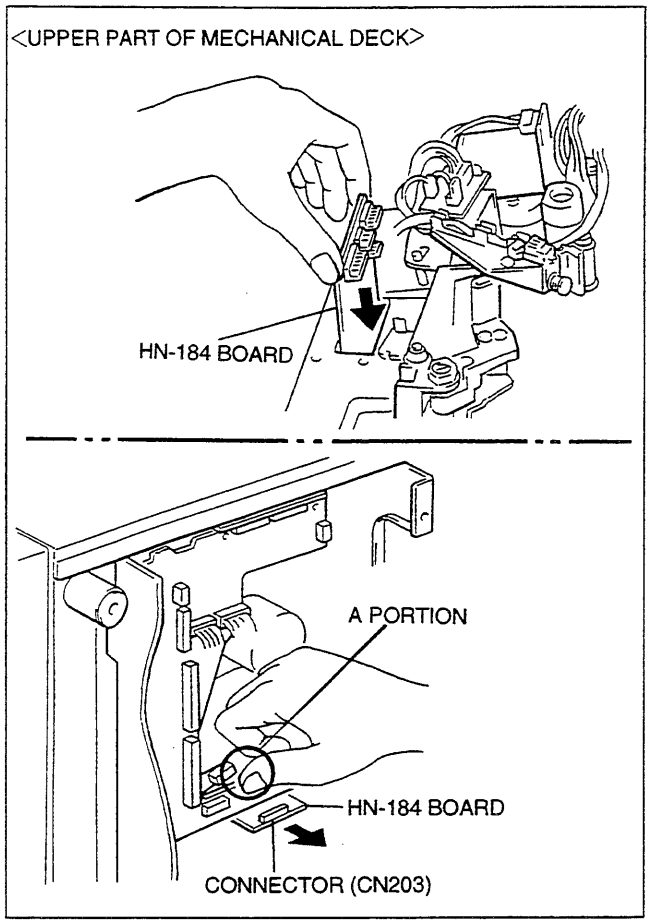
7. Undo the PCB holder, and open the DR-307/200 board.



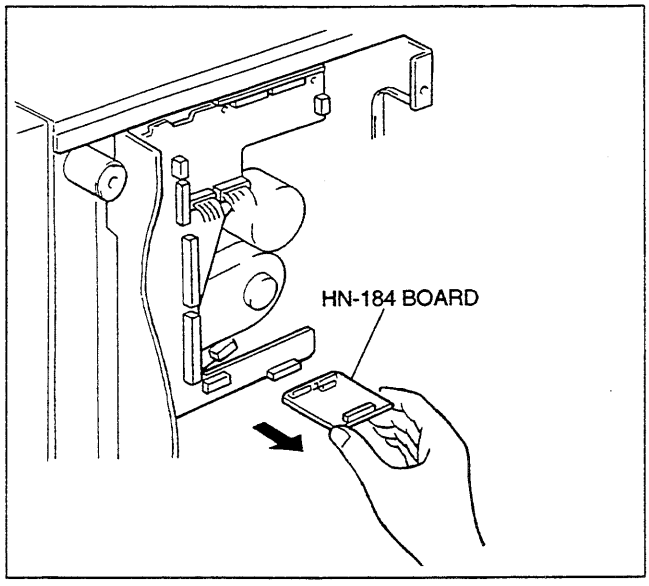
8. Remove two screws, and remove two HN brackets.



9. Disconnect connector (CN203) with care while holding A portion.



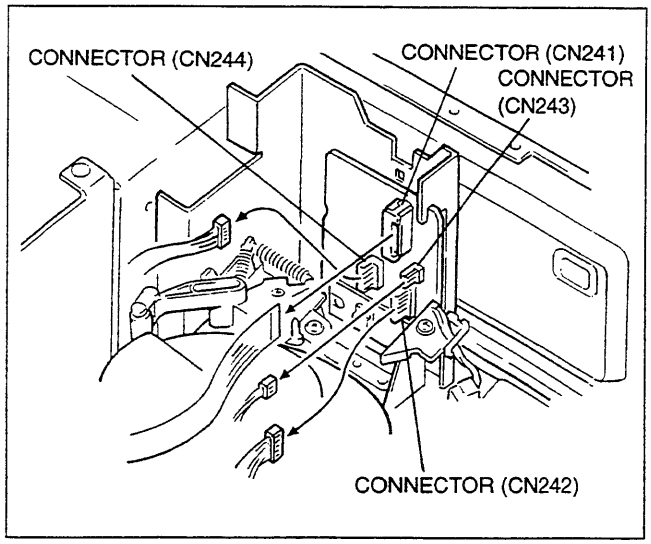
10. Remove the HN-184 board.



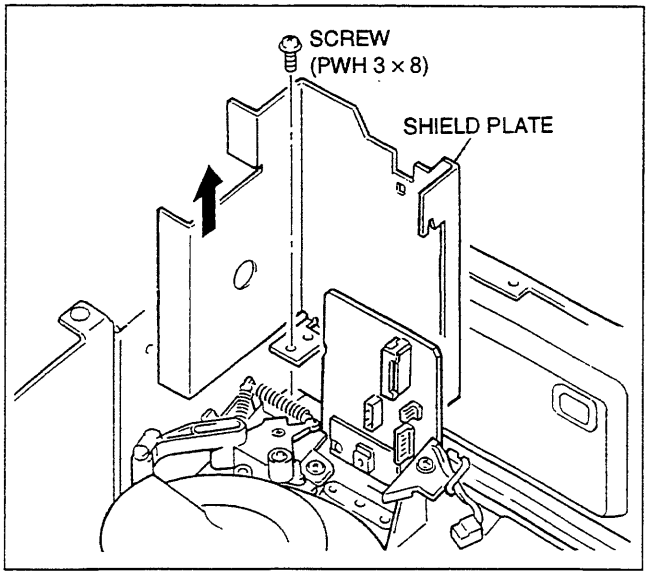
11. Install the HN-184 board in the reverse order of steps 1 through 10.

6-3-15.HN-185 Board

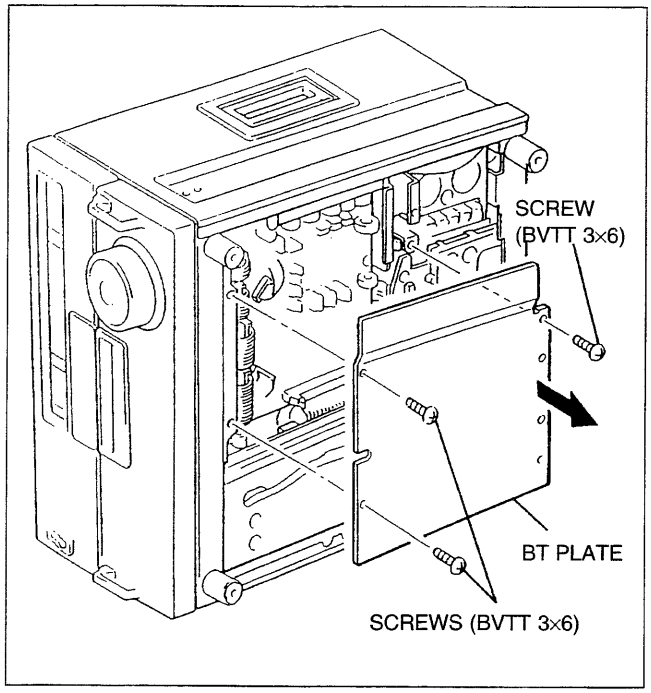
1. Turn off the power.
2. Remove the upper lid.
   (Refer to section 1-2-1.)
3. Remove the MD plate.
   (Refer to section 1-3.)
4. Disconnect four connectors (CN241, CN242, CN243 and CN244).



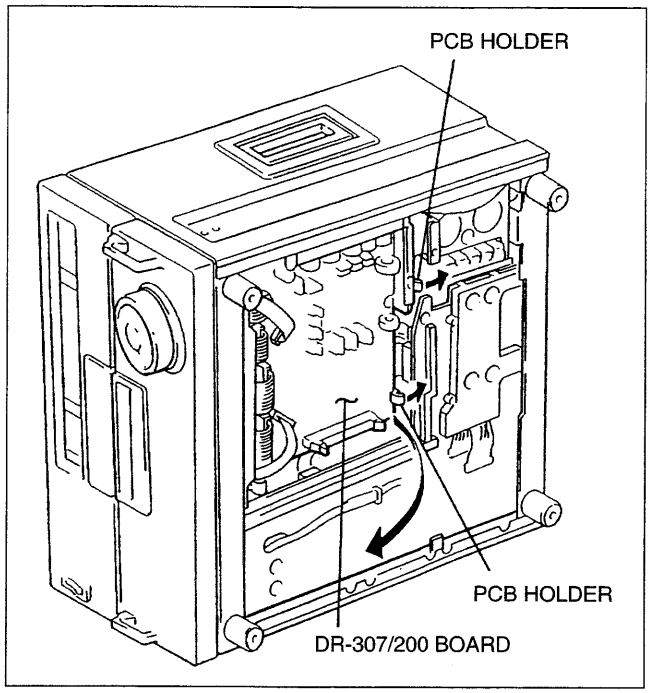
5. Remove a screw, and remove the shield plate.



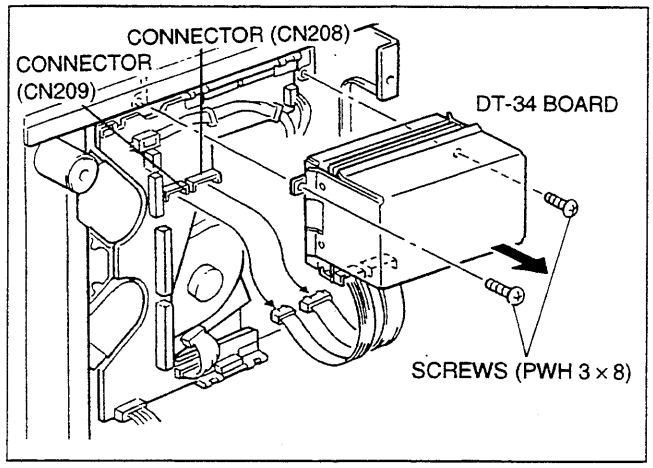
6. Remove the bottom plate.
   (Refer to section 1-2-1.)
7. Remove three screws, and remove the BT plate.



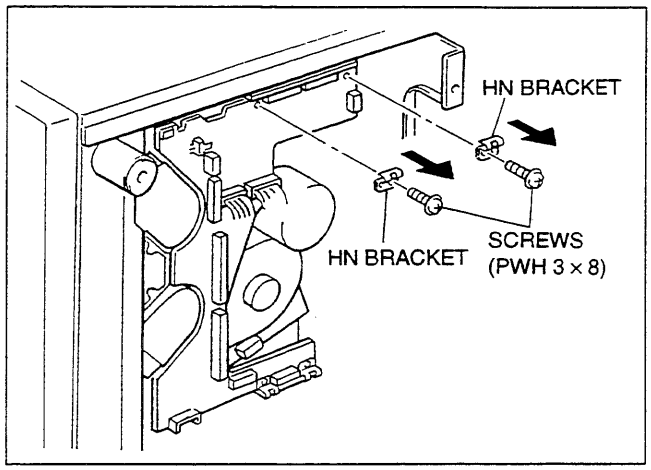
8. Undo the PCB holder, and open the DR-307/200 board.



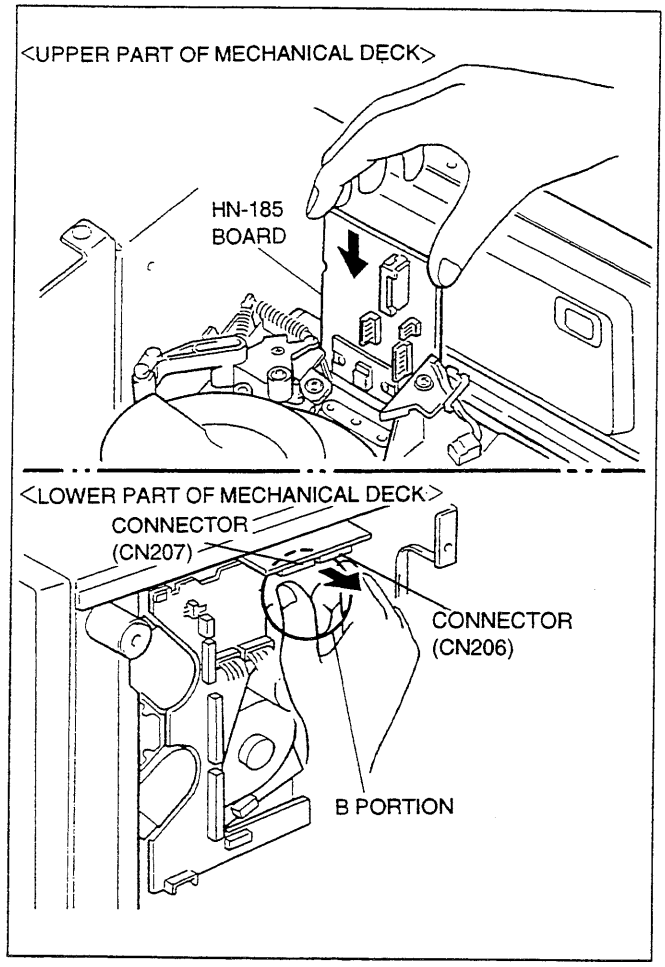
9. Remove two screws, and remove the DT-34 board, then disconnect two connectors (CN208 and CN209).



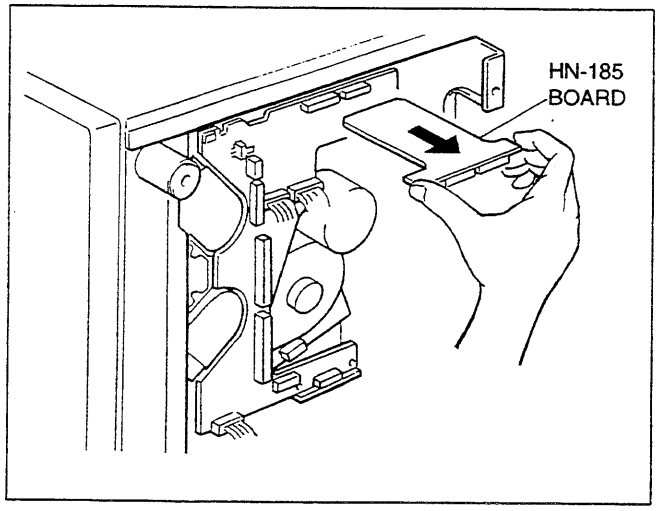
10. Remove two screws and two HN brackets.



11. Disconnect two connectors (CN206 and CN207) with care while holding B portion.



12. Remove the HN-185 board.



13. Install the HN-185 board in the reverse order of steps 1 through 12.

6-4. ADJUSTMENT AND CHECK AFTER DIGITAL BOARD REPLACEMENT

After each digital board is replaced, perform adjustment and check which are described in following sections.
6-4-1. VPR-1 Board
6-4-2. APR-1 Board
As for DIF-16 and DPR-36 boards, no adjustment is needed after replacing the board. Perform operation check only.

6-4-1. VPR-1 Board

[Item List]

No.	ITEMS	BOARDS	ADJUSTMENTS	NOTES
1	COMPOSITE OUT LEVEL 1/2	VPR-1	A20: VIDEO 1/2	COMPOSITE 1
		VPR-1	CHECK	COMPOSITE 2
	3	VPR-1	A20: VIDEO 3	COMPOSITE 3
	DATA SAVE		A2F: NV-RAM CONTROL	
2	COMPONENT OUT LEVEL Y	VPR-1	A20: Y OUTPUT	COMPONENT Y
	R-Y	VPR-1	A20: R-Y OUTPUT	COMPONENT R-Y
	B-Y	VPR-1	A20: B-Y OUTPUT	COMPONENT B-Y
	DATA SAVE		A2F: NV-RAM CONTROL	
3	COMPONENT OUT PHASE	VPR-1	CHECK	COMPONENT
4	REF CF PULSE	VPR-1	CHECK	TP1001
5	REF SCH DET	VPR-1	CHECK	TP1002
6	INT 4FSC FREQ	VPR-1	A20: INT 4FSC FREQ	TP1003
7	PB CLOCK PHASE	VPR-1	A20: PB CK27 DL	DATA "F0"

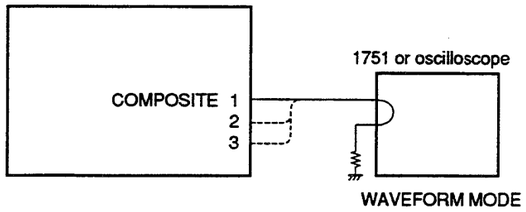
[Equipment]

- Oscilloscope (TEKTRONIX 2465B or equivalent)
- Analog composite signal generator (TEKTRONIX 1411 or equivalent)
  (TEKTRONIX TSG-271 or equivalent)
- Frequency Counter
- PAL Waveform/Vector Monitor (TEKTRONIX 1751 or equivalent)
- Component Waveform Monitor (TEKTRONIX WFM300A or equivalent)

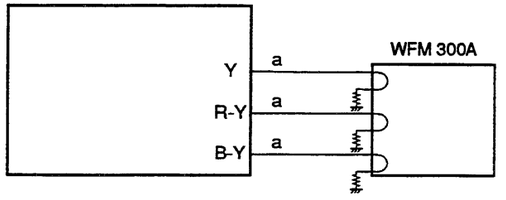
6-4-1. VPR-1 Board

[Connection]

Connection 1

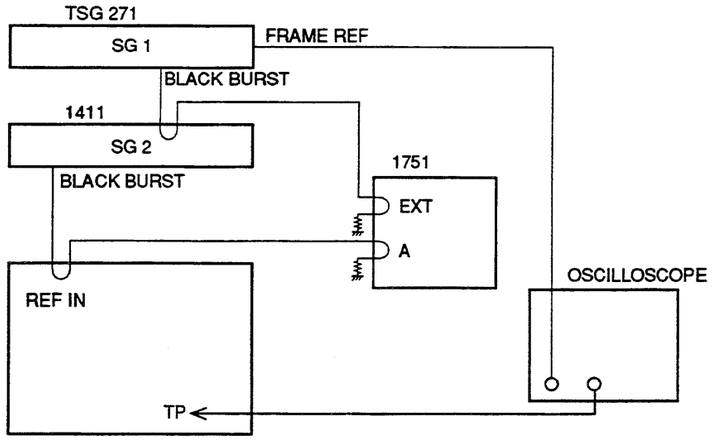


Connection 2



a: Same length cables

Connection 3



How to operate the maintenance mode

Push ⑧ S300(DIAG/ADJUST 1) (M-1) on the SS-52 board to enter the maintenance mode.

How to enter the next menu:

Press the ⑥ JOG button once. (Enters JOG mode.)
Turn the ⑦ search dial to move the * mark to a desired item.
Press the ③ SET button.

How to exit the current menu or the maintenance mode:

Press the ② MENU button.

How to operate a tape (e.g. PLAY) in the manual adjustment or other items:

Press the ③ SET button to exit the maintenance mode temporarily. (A tape can be operated in this condition.)
Press the ② MENU button to return to the maintenance mode.

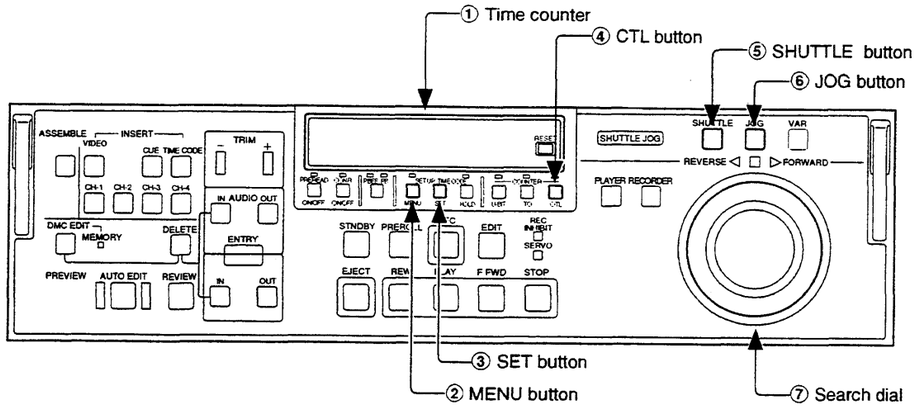
How to change the data (adjust the level) manually:

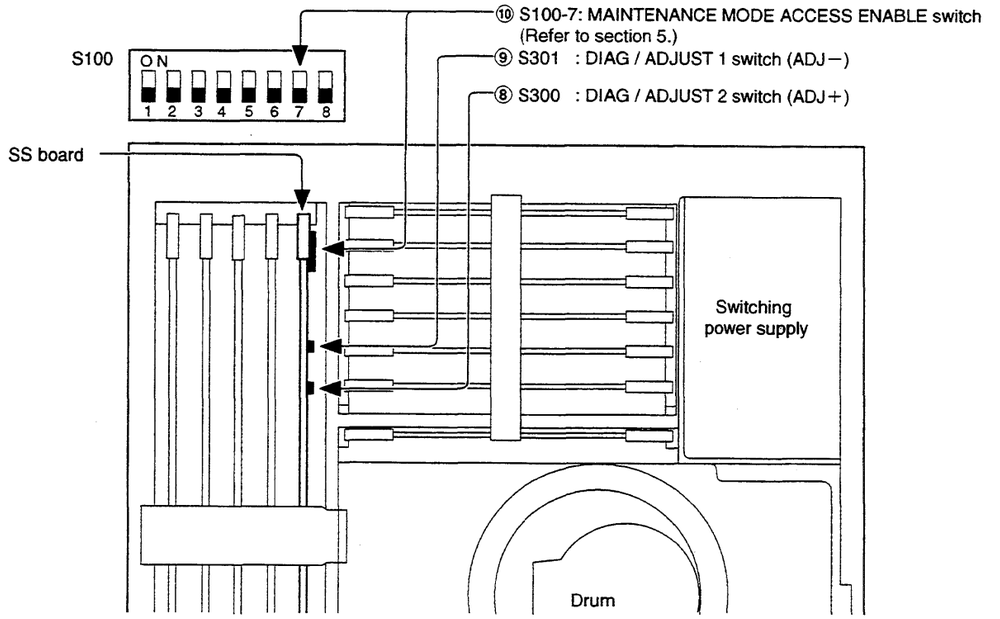
Turn the ⑦ search dial to move the * mark to the item wishing to be adjusted.
Turn the ⑦ search dial while pressing the ⑥ JOG button.

How to save the data:

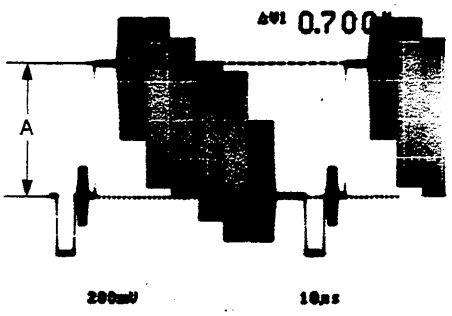
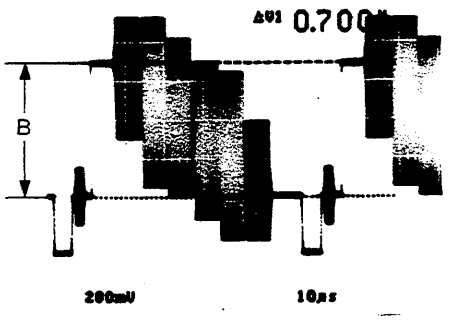
Turn the ⑦ search dial to move the * mark to "A?F: NV-RAM CONTROL".
Press the ③ SET button.
Turn the ⑦ search dial to move the * mark to "SAVE ALL ADJUST DATA".
Press the ③ SET button.

⑧			
⑦ ③	•Enter "C21 : VIDEO TEST SG" menu in the "C2 : AUDIO/VIDEO CHECK" in the maintenance mode.		
⑦ ③			
⑥ ⑦	•Select "100% Color Bars".		
②		A20: VPR VR 0	
②			
⑦ ③	•Enter "A20 : VPR VR0" menu in the "A2 : AUDIO/VIDEO ADJUST	VIDEO 1/2 LEVEL	⑦
	Step 1	↓	
		Level Adjustment	⑥ ⑦
	Step 2		
	Step 3	VIDEO 03 LEVEL	⑦
		↓	
		Level Adjustment	⑥ ⑦
		↓	
		MENU	②
	Step4	A2F : NV-RAM CONTROL	⑦
		SAVE ALL ADJUST DATA	
⑦ ③	•Enter "A2F : NV-RAM CONTROL	SET	③
	•Save adjustment data.	↓	
	•Exit the maintenance mode.	MENU	②
		⋮ Press several times.	⋮
		MENU	②

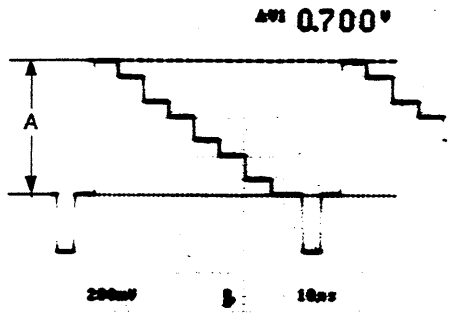
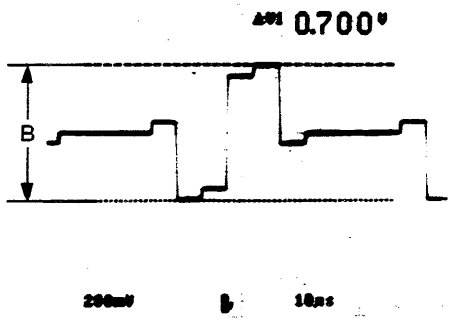
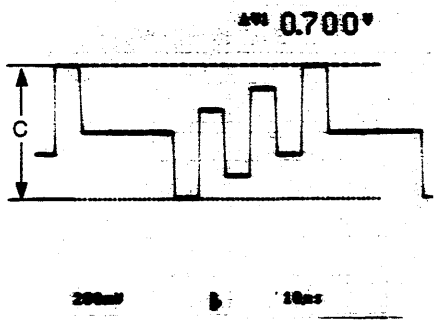




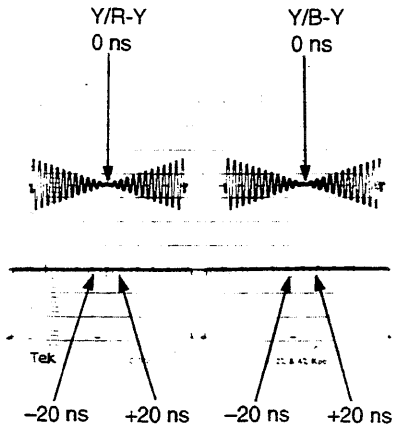
1. Composite Video Output Level Adjustment

Preparations for adjustment	Specifications	Adjustments
• Enter "C21: VIDEO TEST SG" menu in the "C2: AUDIO/VIDEO CHECK" in the maintenance mode. • Select "100% Color Bars". • Enter "A20: VPR VR 0" menu in the "A2: AUDIO/VIDEO ADJUST" **Step 1** • Connect the waveform monitor to COMPOSITE 1 OUT connector. (Refer to Connection 1.)	COMPOSITE 1/2 OUT  A = 700 ±7 mV p-p	A20: VPR VR 0 VIDEO 1/2 LEVEL ↓ Level Adjustment
Step 2 • Connect the waveform monitor to COMPOSITE 2 OUT connector.		Level Check
Step 3 • Connect the waveform monitor to COMPOSITE 3 OUT connector.	COMPOSITE 3 OUT  B = 700 ±7 mV p-p	VIDEO 3 LEVEL ↓ Level Adjustment ↓ MENU
Step 4 • Enter "A2F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A2F:NV-RAM CONTROL SAVE ALL ADJUST DATA SET ↓ MENU ⋮ Press several times. MENU

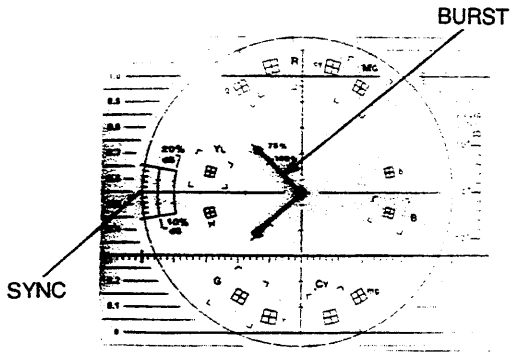
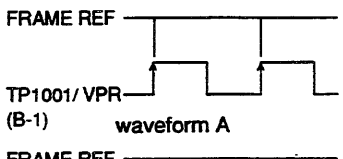
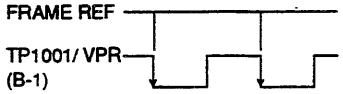
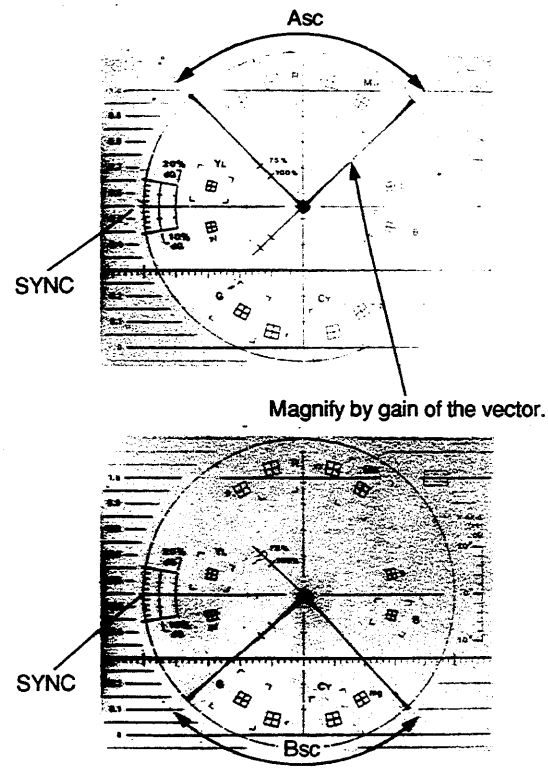
2. Component Video Output Level Adjustment

Preparations for adjustment	Specifications	Adjustments
Connection 2 • Enter "C21: VIDEO TEST SG" menu in the "C2: AUDIO/VIDEO CHECK" in the maintenance mode. • Select "100% Color Bars". • Enter "A20:VPR VR 0" menu in the "A2:AUDIO/VIDEO ADJUST" **Step 1** • Connect the waveform monitor as Connection 2. • Adjust so that levels of Y, R-Y and B-Y meet the specifications.	 A = 700 ±7 mV p-p  B = 700 ±7 mV p-p  C = 700 ±7 mV p-p	A20: VPR VR 0 Y OUTPUT LEVEL ↓ Level Adjustment ↓ R-Y OUTPUT LEVEL ↓ Level Adjustment ↓ B-Y OUTPUT LEVEL ↓ Level Adjustment ↓ [MENU]
Step 2 • Enter "A2F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A2F:NV-RAM CONTROL SAVE ALL ADJUST DATA [SET] ↓ [MENU] ⋮ Press several times. [MENU]

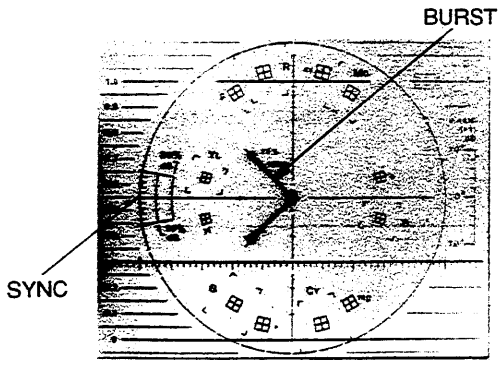
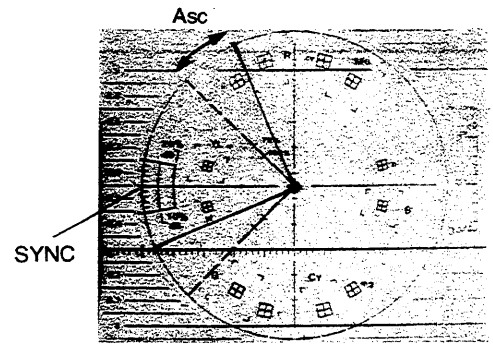
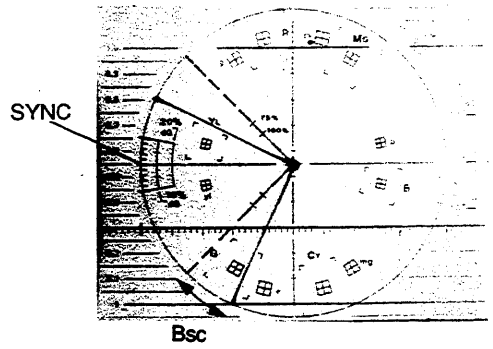
3. Component Video Output Phase Check

Preparations for adjustment	Specifications	Adjustments
Connection 2 • Enter "C21: VIDEO TEST SG" menu in the "C2: AUDIO/VIDEO CHECK" in the maintenance mode. • Select the "BOWTIE".	waveform monitor  Set the BOWTIE DIP point (cross points of the Y/R-Y and Y/B-Y) on the center marker. 0 ±10 ns	Check

4. REF CF Pulse Check

Preparations for adjustment	Specifications	Adjustments
Connection 4 **Step 1** • Measure the output of the SG 2 (1411) with the SCH meter (1751).	 SCH = 0°	1411 SC PHASE VR
Step 2 • Observe FRAME REF of the TSG271A and TP1001 on the VPR-1 board with the oscilloscope. • Turn the SC PHASE VR of the 1411 clockwise slowly from the standard point. When the waveform of the oscilloscope changes A to B, the phase of the burst is referred to as Asc. • Turn the SC PHASE VR of the 1411 counterclockwise slowly from the standard point. When the waveform of the oscilloscope changes A to B, the phase of the burst is referred to as Bsc.  waveform A  waveform B	 | Asc - Bsc | ≦ 10°	Check
Step 3 When the specification is not met: • Enter "A20:VPR VR 0" menu in the "A2:AUDIO VIDEO ADJUST" in the maintenance mode.		A20:VPR VR 0 REF 1st FLD DET ↓ Phase Adjsutment ↓ MENU
Step 4 • Enter "A2F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A2F:NV-RAM CONTROL SAVE ALL ADJUST DATA SET ↓ MENU ⋮ Press several times. MENU

5. REF SCH DET Check

Preparations for adjustment	Specifications	Adjustments
Connection 4 **Step 1** • Measure the output of the SG 2 (1411) with the SCH meter (1751).	 SCH = 0°	1411 SC PHASE VR
Step 2 • Observe TP1002 on the VPR-1 board with the oscilloscope. • Turn the SC PHASE VR of the 1411 clockwise slowly from the standard point. When the waveform of the oscilloscope changes A to B, the phase of the burst is referred to as Asc. • Turn the SC PHASE VR of the 1411 counterclockwise slowly from the standard point. When the waveform of the oscilloscope changes A to B, the phase of the burst is referred to as Bsc. TP1002/VPR1 (B, C-2) ——— +5V ——— GND waveform A TP1002/VPR1 (B, C-2) ---------- ——— GND waveform B	 Magnify by gain of the vector.  | Asc - Bsc | ≦ 10°	Check
Step 3 When the specification is not met: • Enter "A20:VPR VR 0" menu in the "A2:AUDIO VIDEO ADJUST" in the maintenance mode.		A20:VPR VR 0 REF SCH DET ↓ Phase Adjustment ↓ [MENU]
Step 4 • Enter "A2F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A2F:NV-RAM CONTROL SAVE ALL ADJUST DATA [SET] ↓ [MENU] ⋮ Press several times. [MENU]

6. INT 4Fsc Frequency Adjustment

Preparations for adjustment	Specifications	Adjustments
Step 1 • Disconnect the REF IN of the unit. • Connect the frequency counter to TP1003 on the VPR-1 board. • Enter "A20:VPR VR 0" menu in the "A2:AUDIO/VIDEO ADJUST" in the maintenance mode.	TP1003/VPR-1(B-1) 17,734,476 ± 50 Hz	A20: VPR VR 0 INT 4Fsc FREQ ↓ Frequency Adjustment ↓ [MENU]
Step 2 • Enter "A2F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A2F:NV-RAM CONTROL SAVE ALL ADJUST DATA [SET] ↓ [MENU] ⋮ Press several times. [MENU]

7. PB Clock Phase Adjustment

Preparations for adjustment	Specifications	Adjustments
Step 1 • Enter "A20:VPR VR 0" menu in the "A2:AUDIO/VIDEO ADJUST" in the maintenance mode.	DATA "F0"	A20: VPR VR 0 PB CK27 DL ↓ Data Setting ↓ [MENU]
Step 2 • Enter "A2F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A2F:NV-RAM CONTROL SAVE ALL ADJUST DATA [SET] ↓ [MENU] ⋮ Press several times. [MENU]

6-4-2. APR-1 Board

[Equipment]

- Audio Signal Generator (TEKTRONIX SG505-option 02 or equivalent)
- Audio Analyzer (TEKTRONIX AA501A-option 02 or equivalent)
  Note: Audio analyzer should be filtered through 80 kHz L.P.F unless otherwise specified.
- Alignment tape CR8-1A PS
  (Part No.8-960-098-45)

TIME min.: sec.	AUDIO TRACK
0 : 00	1 kHz, 0 VU
2 : 55	Blank
3 : 00	10 kHz, -10 VU
4 : 55	Blank
5 : 00	1 kHz, -20 VU
5 : 55	Blank
6 : 00	40 Hz, 7,10,15 kHz, -20 VU*2
7 : 55	Blank
8 : 00	1 kHz, 0 VU CTL TRACK 1 kHz,0 vu
10 : 00	

- Alignment tape CR8-1B PS
  (Part No.8-960-096-86)

TIME min.: sec.	AUDIO TRACK	VIDEO TRACK	CTL TRACK
0 : 00	1 kHz, 0 VU *1	Black Burst	CTL
3 : 00	15 kHz, 0 VU	Black Burst	CTL
5 : 00	1 kHz, -20 VU	Black Burst	CTL
6 : 00	40 Hz, -20 VU*2	Black Burst	CTL
6 : 30	7 kHz, -20 VU*2		
7 : 00	10 kHz, -20 VU*2		
7:30	15 kHz, -20 VU*2		
8 : 00	1 kHz, 0 VU	—	1 kHz sine wave
10 : 00			

*1. When this tape is reproduced in the audio reference level check or adjustment, the output level (0 dB) should be corrected according to the correction value as follows.
Example: Correction Value = –0.5 dB
Output level = 0 dB – 0.5 dB = –0.5 dB

*2. When this tape is reproduced in the audio frequency response check or adjustment, the output level should be corrected according to the correction value.

• Alignment tape CR5-1B PS (Part No.8-960-096-91)

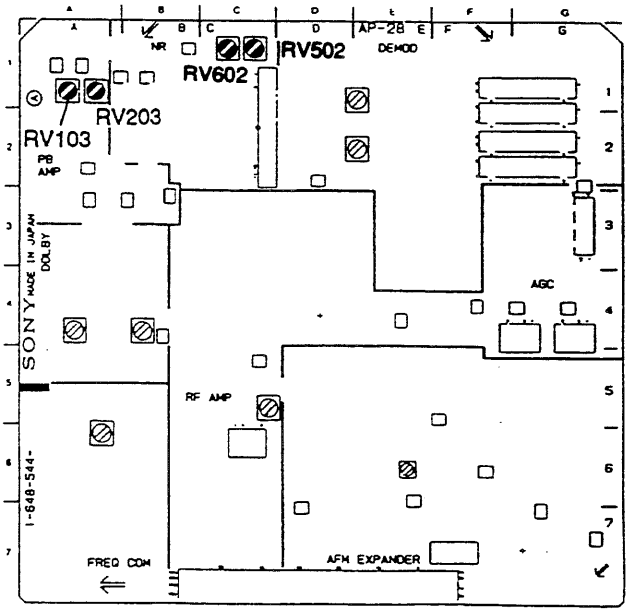
TIME min.:sec.	VIDEO TRACK	AFM	CTL
0 : 00	RF Sweep	No Signal	CTL
2 : 00	60% H Sweep (CTDM)		
5 : 00	Pulse & Bar (CTDM)		
8 : 00	60% Multi Burst		
11 : 00	Pulse & Bar		
14 : 00	100% Color Bars	400 Hz SINE WAVE 25 kHz DEVIATION	
16 : 30		75 kHz DEVIATION	
17 : 00	50% Bowtie & 10T	No Signal	
19 : 00	Line 17 Signal		
22 : 00	Quad Phase		
24 : 00	Flat Field		
26 : 00	100% Color Bars with Dropout		
28 : 00	Composite H Sweep with VISC		
30 : 00			

1. LAU PB Level Adjustment (For DVW-A510P/CA510P)

Preparations for adjustment	Specifications	Adjustments
• Play back the 1 kHz, 0 VU signal portion (0:00-2:55) of the alignment tape CR8-1B PS.	ANALOG AUDIO OUTPUT CH1 and CH2 +4.0 ±0.1 dBu (terminated by 600 Ω)	CH1: ⊘RV103/AP-28(A-1) CH2: ⊘RV203/AP-28(A-1)

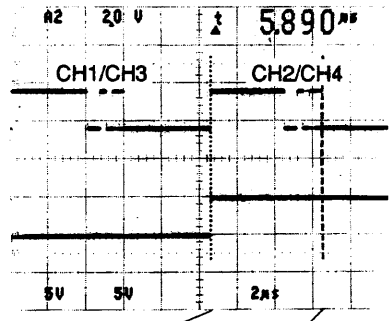
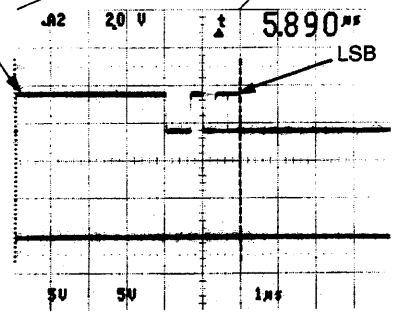
2. AFM PB Level Adjustment (For DVW-A510P/CA510P)

Preparations for adjustment	Specifications	Adjustments
• Do not extend the AP-28 board. • Play back the color bars signal portion (14:00-16:00) of the alignment tape CR5-1B PS.	ANALOG AUDIO OUTPUT CH3 and CH4 +4.0 ±0.1 dBu (terminated by 600 Ω)	CH3: ⊘RV502/AP-28(C-1) CH4: ⊘RV602/AP-28(C-1)



3. Offset Level Check (Board suffix No. 11, 12 or 21)

* More than 20 minutes should elapse after turning the power on, when this check is performed.

Preparations for adjustment	Specifications	Adjustments
• Eject the cassette tape. • Connect CH1 and CH2 of the oscilloscope to TP1300(or TP1301) and TP1302 on the APR-1 board. **Step 1** • Check that lower 8 bits situate between Fig.B and Fig.C.	TP1300/ TP1301 FS: TP1302 	Check
Step 2 When specification is not met • Adjust so that waveform of Fig.A appears.	MSB  Fig. A	TP1300 CH1: ⊘RV103/APR-1(R-3) CH2: ⊘RV203/APR-1(M-3) TP1301 CH3: ⊘RV303/APR-1(K-3) CH4: ⊘RV403/APR-1(G-3)

MSB LSB

Bit	18		8	7	6	5	4	3	2	1
Fig B	H		H	L	H	H	×	×	×	×
Fig A	H		H	H	L	L	×	×	×	×
Fig C	H		H	H	H	H	H	×	×	×

×:Do not care

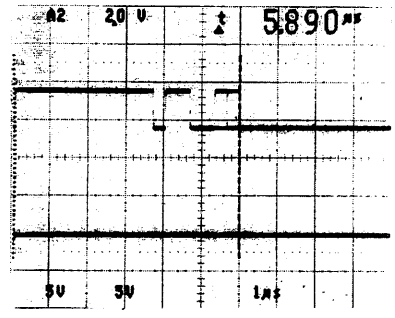


Fig. B

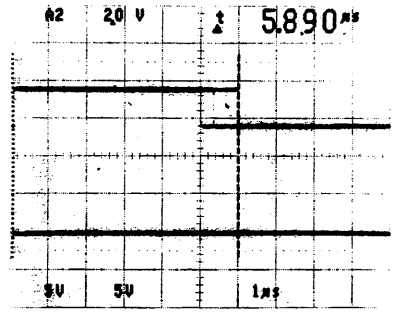
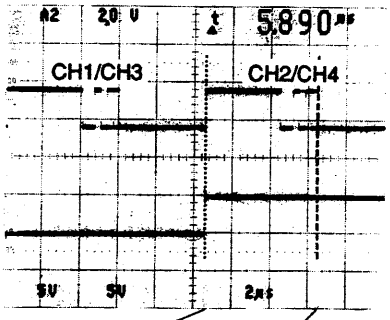
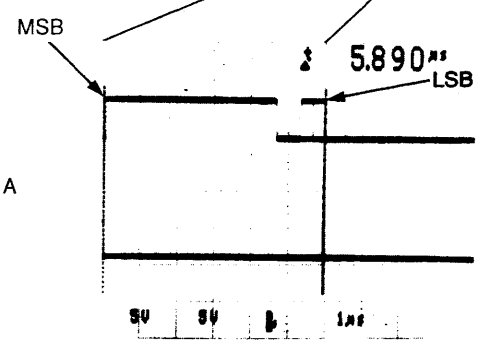


Fig. C

TRIG: TP1302/APR-1 (C-4)

3. Offset Level Check (Board suffix No. 16 and later)

* More than 20 minutes should elapse after turning the power on, when this check is performed.

Preparations for adjustment	Specifications	Adjustments
• Eject the cassette tape. • Connect CH1 and CH2 of the oscilloscope to TP1300(or TP1301) and TP1302 on the APR-1 board. **Step 1** • Check that lower 8 bits situate between Fig.B and Fig.C.	TP1300/ TP1301 FS: TP1302 	Check
Step 2 When specification is not met • Adjust so that waveform of Fig.A appears.	 Fig. A	TP1300 CH1: ⊘RV103/APR-1(P-3) CH2: ⊘RV203/APR-1(M-3) TP1301 CH3: ⊘RV303/APR-1(J-3) CH4: ⊘RV403/APR-1(H-3)

MSB LSB

Bit	18		8	7	6	5	4	3	2	1
Fig B	H		H	H	H	L	H	L	×	×
Fig A	H		H	H	H	H	L	L	×	×
Fig C	H		H	H	H	H	H	L	×	×

×:Do not care

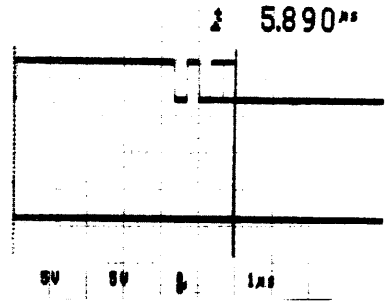


Fig. B

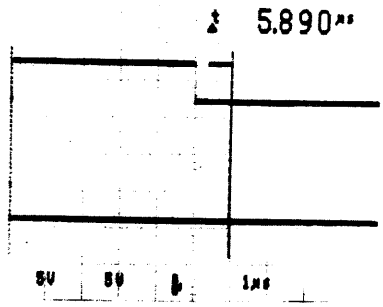
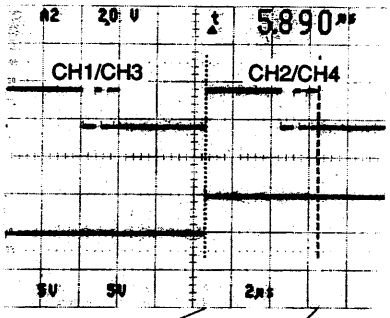
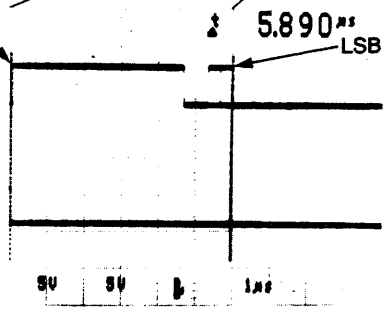


Fig. C

TRIG: TP1302/APR-1 (C-4)

3. Offset Level Check (Board suffix No. 13, 14, 22 or 23)

* More than 20 minutes should elapse after turning the power on, when this check is performed.

Preparations for adjustment	Specifications	Adjustments
• Eject the cassette tape. • Connect CH1 and CH2 of the oscilloscope to TP1300(or TP1301) and TP1302 on the APR-1 board. **Step 1** • Check that lower 8 bits situate between Fig.B and Fig.C.	TP1300/ TP1301 FS: TP1302 	Check
Step 2 When specification is not met • Adjust so that waveform of Fig.A appears.	MSB LSB Fig. A 	TP1300 CH1: ⊘RV103/APR-1(R-3) CH2: ⊘RV203/APR-1(M-3) TP1301 CH3: ⊘RV303/APR-1(K-3) CH4: ⊘RV403/APR-1(G-3)

MSB LSB

Bit	18		8	7	6	5	4	3	2	1
Fig B	H		H	H	H	L	H	L	×	×
Fig A	H		H	H	H	H	L	L	×	×
Fig C	H		H	H	H	H	H	L	×	×

×:Do not care

Fig. B

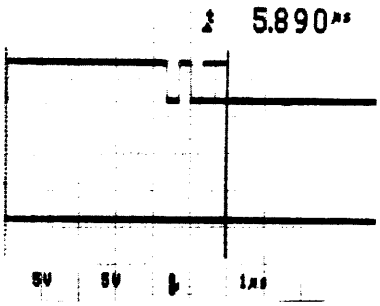
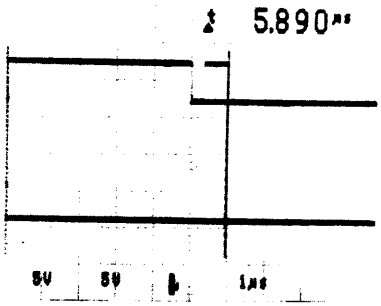


Fig. C



TRIG: TP1302/APR-1 (C-4)

6-5. ADJUSTMENT AFTER TBC-23 BOARD REPLACEMENT

When the TBC-23 board had been replaced, be sure to perform adjustment in accordance with the board suffix number.
When make a board replacement, ask to Sony service personnel.

SECTION 7
PERIODIC MAINTENANCE AND INSPECTION

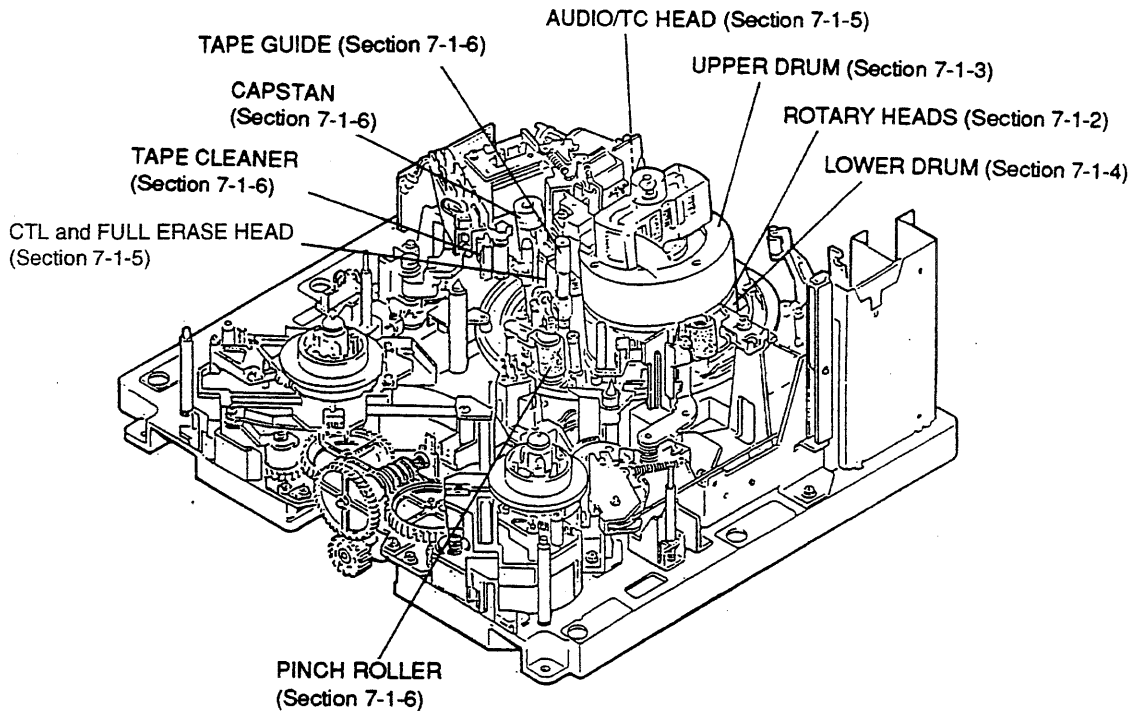
7-1. CLEANING

To make the most of the functions, fully realize the performance of this unit, and to lengthen the life of the unit and tape, clean the components often.

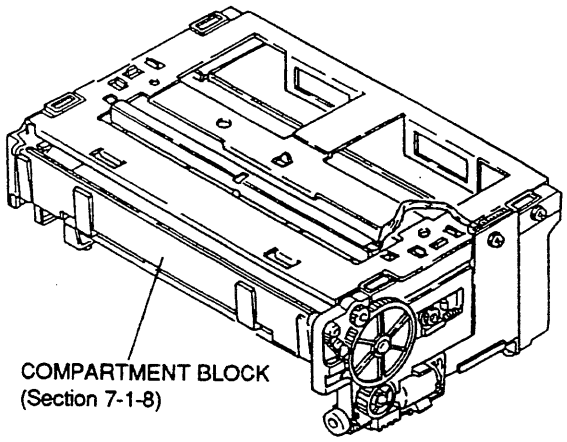
7-1-1. General Information for Cleaning

1. Index

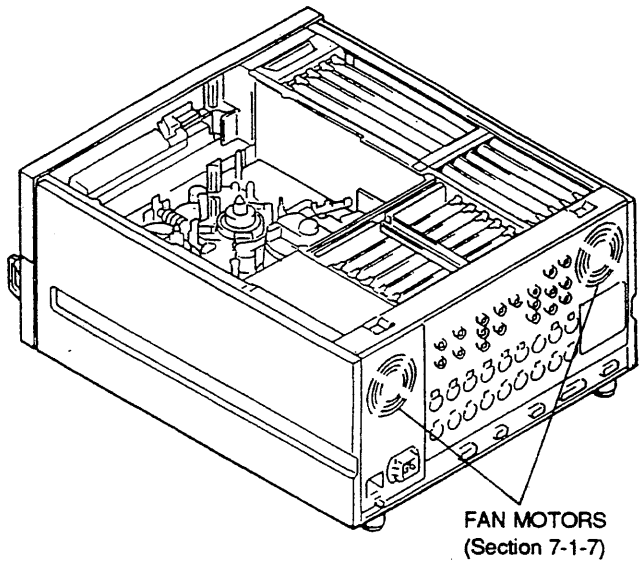
〈**Mechanical Deck Block**〉



〈**Cassette Compartment**〉



〈**Unit**〉



2. Cautions

- Turn the power off before cleaning.
- Each block in the mechanical deck consists of a precision part and is adjusted precisely. Be careful not to damage each part and to apply an excessive force during cleaning.
- Do not touch the greased portions during cleaning. If grease attaches to a cleaning cloth, replace the cleaning cloth by new one. If a cleaning cloth smeared with grease is used, grease may attach to the places where it should not.
- Do not insert a cassette tape before a cleaning fluid completely evaporates after cleaning.

3. Preparation

(1) Turn the power off.
(2) Remove the upper lid. (Refer to Section 1-2-1.)
(3) Remove the sound insulation plate (MD). (Refer to Section 1-3.)
(4) Remove the cassette compartment. (Refer to Section 1-2-2.)

7-1-2. Rotary Heads Cleaning

Caution
The rotary heads are the part that can be damaged easily. Be careful not to damage the rotary heads during cleaning.

Tools
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Caution
Do not use a cotton swab to clean the rotary heads.

Procedures
1. Loosen the two screws and remove the upper drum cover.

   Note: These screws cannot be removed because of stoppers.

2. Hold the cleaning cloth moistened with cleaning fluid keeping it from becoming wrinkled. And press the cleaning cloth slightly against the rotary heads.

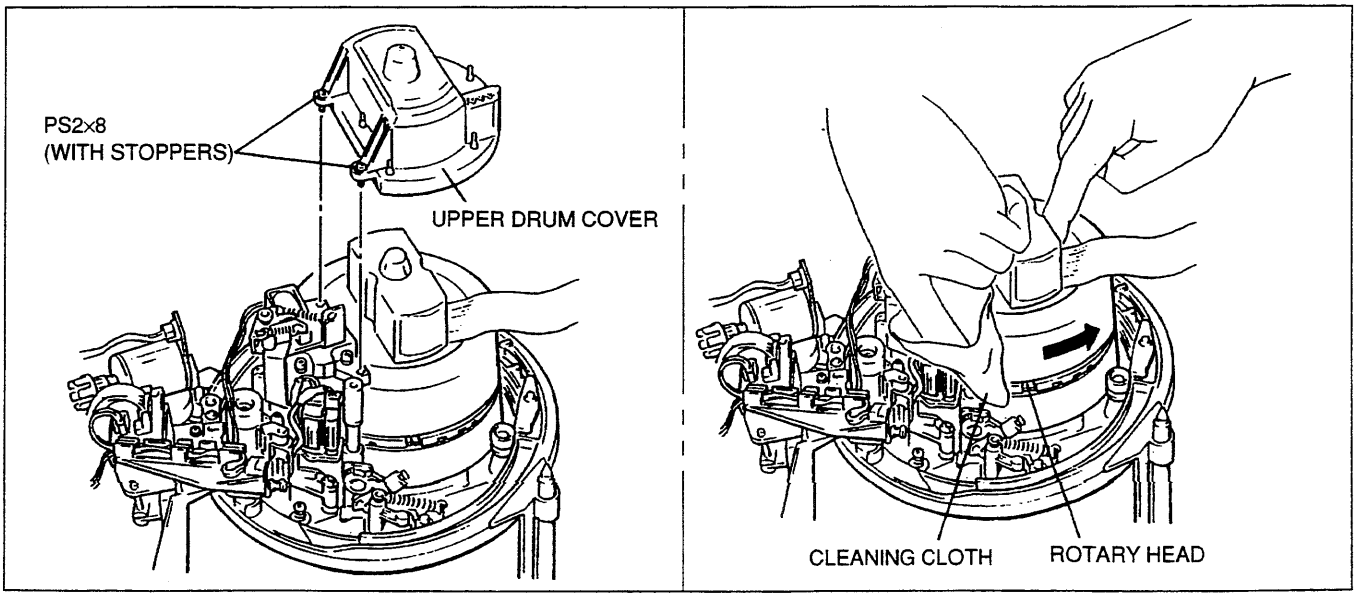
3. Rotate the inner drum slowly counterclockwise two or three turns and clean the rotary heads with the cleaning cloth held.

   Caution
   Be sure to rotate the inner drum counterclockwise and clean the rotary heads along the circumference. Do not rotate the inner drum in the direction opposite to the specified direction (clockwise) or clean it in the vertical direction. This may damage the rotary heads and the brush/slip ring assembly.

4. After cleaning, wipe it with a dry cleaning cloth two or three times.

5. Tighten the two screws while pressing the upper drum cover towards the drum support direction.

   Tightening torque: 14.7×10^{-2} N•m (1.5 kgf•cm)



Rotary Heads Cleaning

7-1-3. Upper Drum's Tape Running Surface Cleaning

Caution

Be careful not to damage the upper drum during cleaning. Pay careful attention when cleaning the edge portion below the upper drum because it is located near the rotary heads.

Tools

- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Procedures

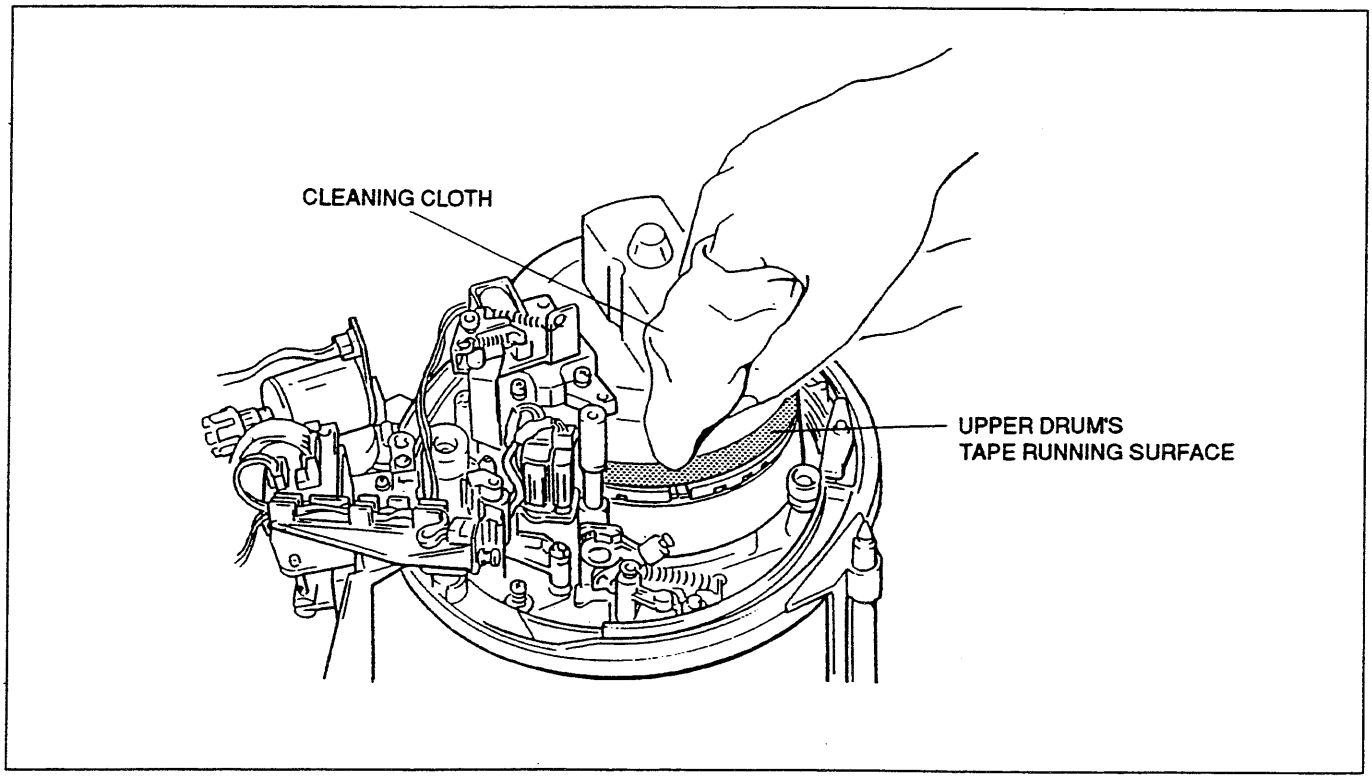
1. Press the cleaning cloth moistened with a cleaning fluid slightly against the upper drum's tape running surface (shaded portion in the figure).

2. Clean the upper drum's tape running surface along the circumference two or three times.

   Caution

   Pay careful attention when cleaning the edge portion below the upper drum.

3. After cleaning, wipe it with a dry cleaning cloth two or three times.



Upper Drum's Tape Running Surface Cleaning

7-1-4. Lower Drum's Tape Running Surface and Lead Surface Cleaning

Caution

Be careful not to damage the lower drum (specially lead surface) during cleaning. Pay careful attention when cleaning the edge portion above the lower drum because it is located near the rotary heads.

Tools

- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01
- Skewer or an equivalent (A metallic skewer cannot be used.)

Procedures

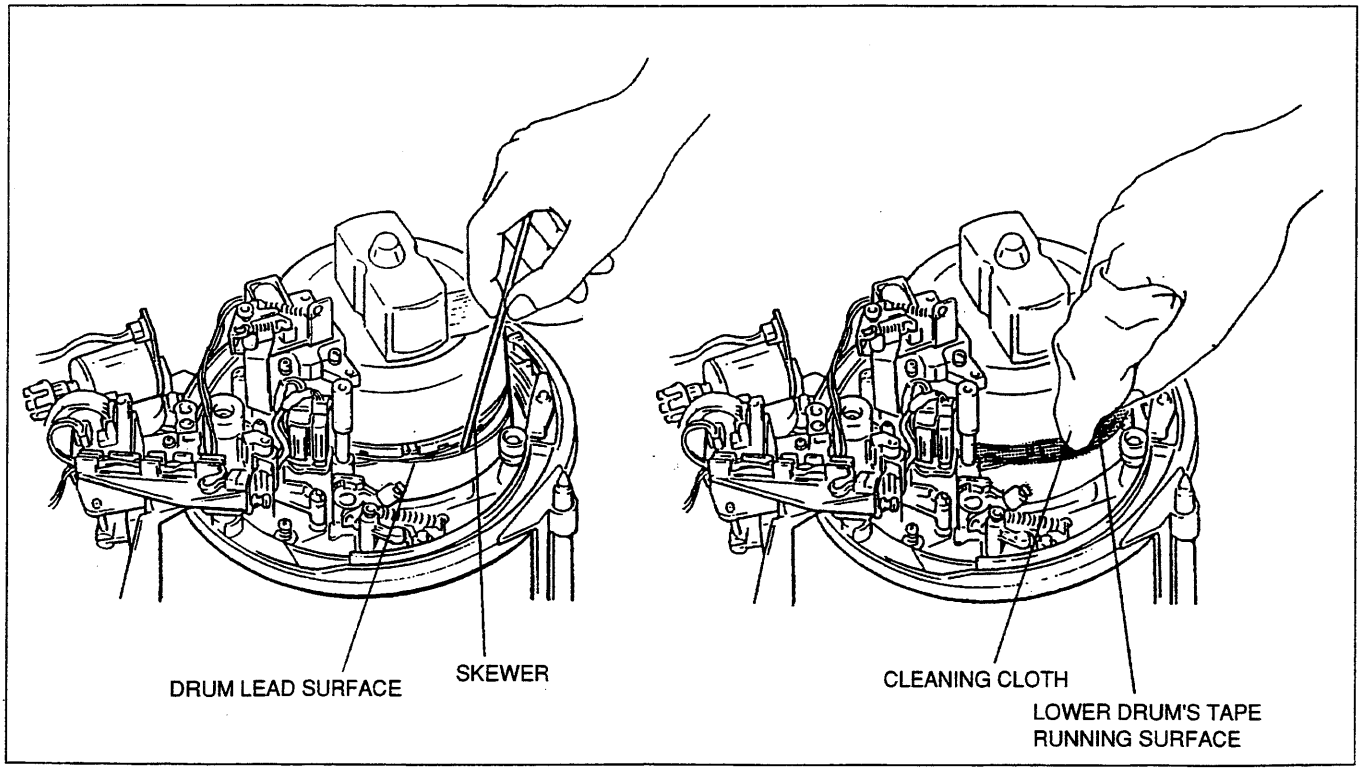
1. As shown in the figure, put a skewer (or an equivalent) along the drum lead surface and remove the magnetic powder.

   Caution

   1. Do not use a metallic skewer instead of the skewer. This may damage the tape running surface.
   2. Tracking may be badly influenced when magnetic powder attaches to the drum lead surface. Remove the magnetic powder completely during cleaning.

2. Clean the drum lead surface and lower drum's tape running surface (shaded portion in the figure) with a cleaning cloth moistened with a cleaning fluid.

3. After cleaning, wipe it with a dry cleaning cloth two or three times.



Lower Drum's Tape Running Surface and Lead Surface Cleaning

7-1-5. Stationary Heads Cleaning

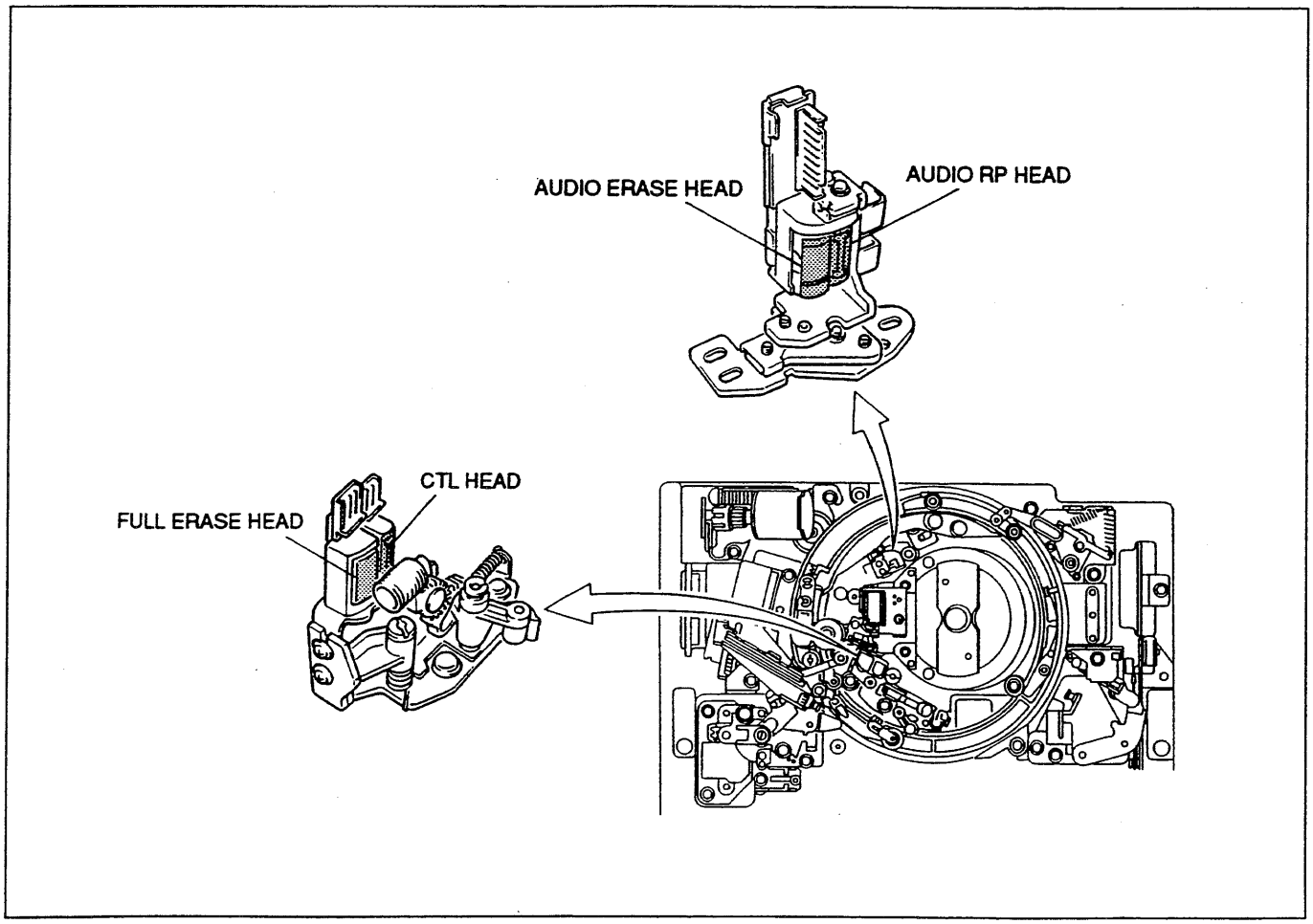
Cautions
- Be careful not to damage the head surface when cleaning the stationary heads.
- The full erase head is not installed in a player.

Tools
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Procedures
1. Clean the tape running surfaces of the audio/TC head, CTL head, and full erase head in the vertical direction with a cleaning cloth moistened with a cleaning fluid.

   Caution
   An error may occur in the recording or playback when magnetic powder attaches to the head gap portion of the audio/TC head, CTL head, and full erase head. Remove the magnetic powder completely during cleaning.

2. After cleaning, wipe it with a dry cleaning cloth two or three times.



Stationary Heads Cleaning

7-1-6. Tape Running System and Tape Cleaner Cleaning

Warning
The tape cleaner has a sharp edge. Do not touch the edge with bare hands. Pay careful attention when cleaning the tape cleaner.

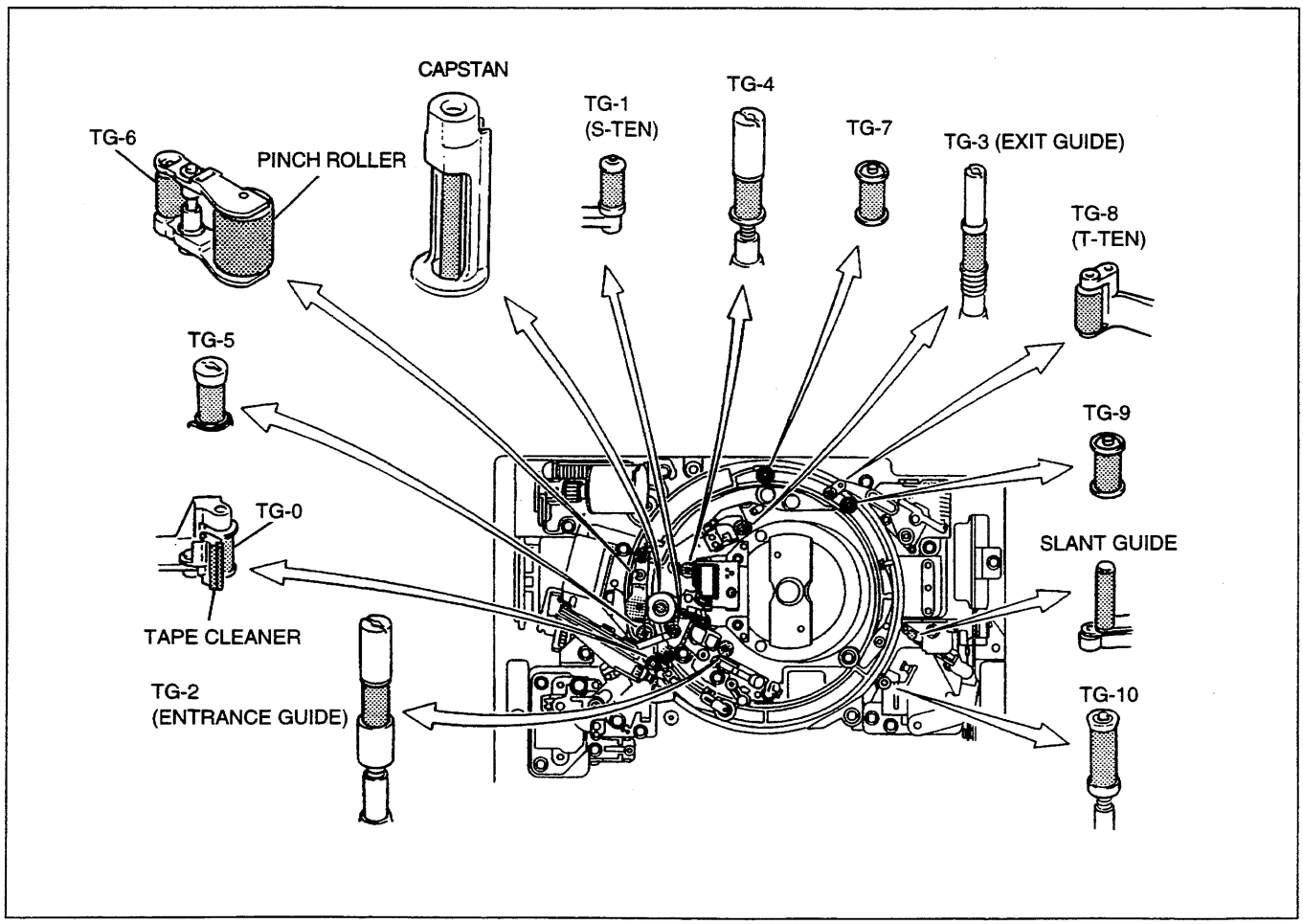
Tools
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Procedures
1. Pass a piece of paper approximately this manual's paper thick through the clearance of the tape cleaner from top to bottom four or five times.
   At this time, do not move the paper from bottom to top.

2. Clean the tape running surfaces (shaded portions in the figure) of each guide with cleaning cloth moistened with a cleaning fluid.

3. After cleaning, clean it with a dry cleaning cloth two or three times.

   Warning
   Do not touch the edge portion of the tape cleaner with bare hands.



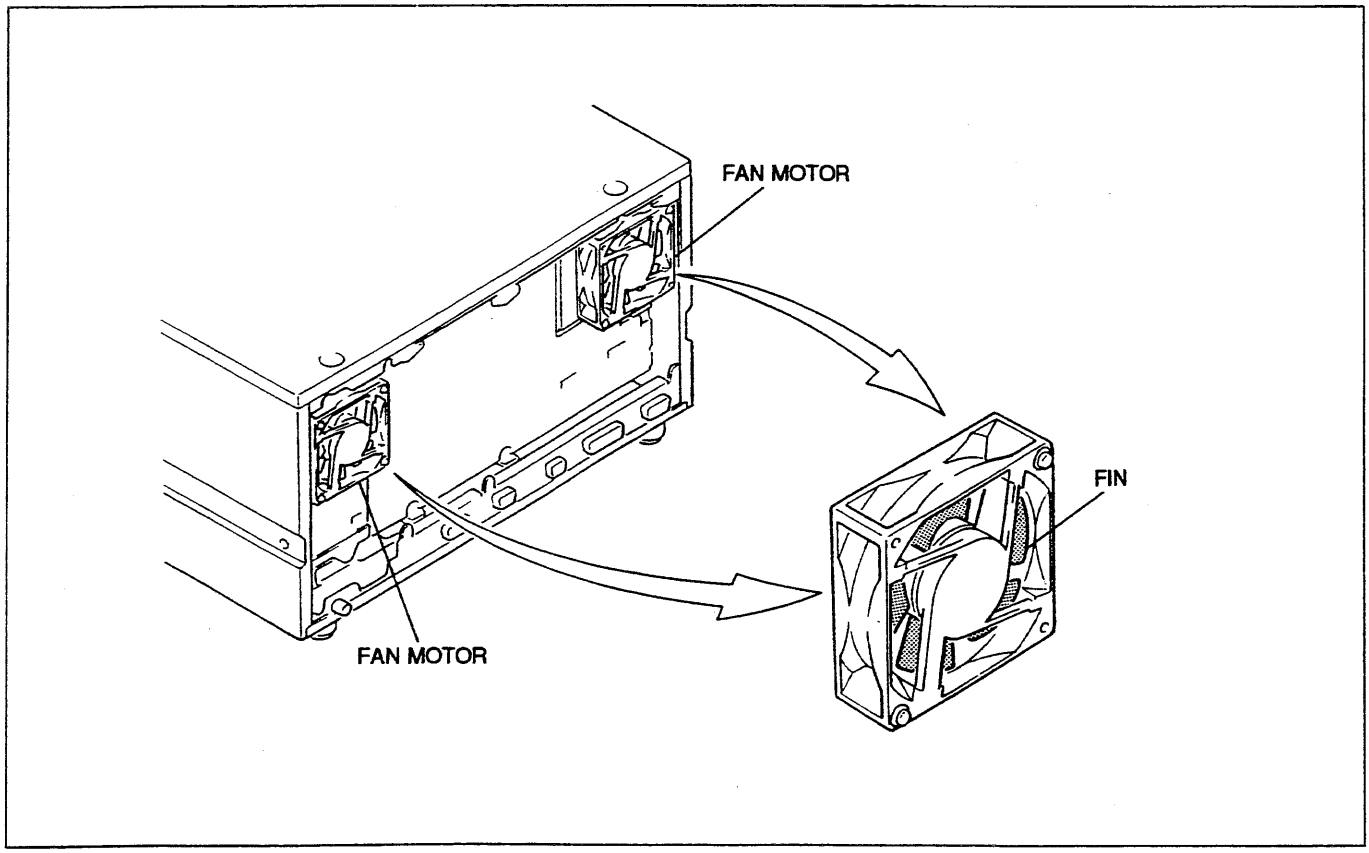
Tape Running System and Tape Cleaner Cleaning

7-1-7. Fan Motor Cleaning

Caution
The temperature in the unit increases when dust attaches to the fan motor and when the air flow is disturbed. This may badly influence the performance and life of the unit. Clean the fan motor on the rear panel periodically because it accumulates dust easily.

Tools
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01
- Vacuum cleaner

Procedures
1. Remove the power panel. (Refer to Section 1-2-1.)
2. Remove the connector panel. (Refer to Section 1-2-3.)
3. Remove the dust on the fan motors using a vacuum cleaner.
4. Clean the fin (shaded portion in the figure) with cleaning cloth moistened with cleaning fluid.
5. Install the connector panel. (Refer to Section 1-2-3.)
6. Install the power panel. (Refer to Section 1-2-1.)



Fan Motor Cleaning

7-1-8. Cassette Compartment Cleaning

Cautions

- Be careful not to apply an excessive force to the compartment or the mirror when cleaning the cassette compartment.
- Do not clean the door and the mirror with alcohol. This may cause a crack.

Tools

- Cloth (or Gauze)
- Vacuum cleaner

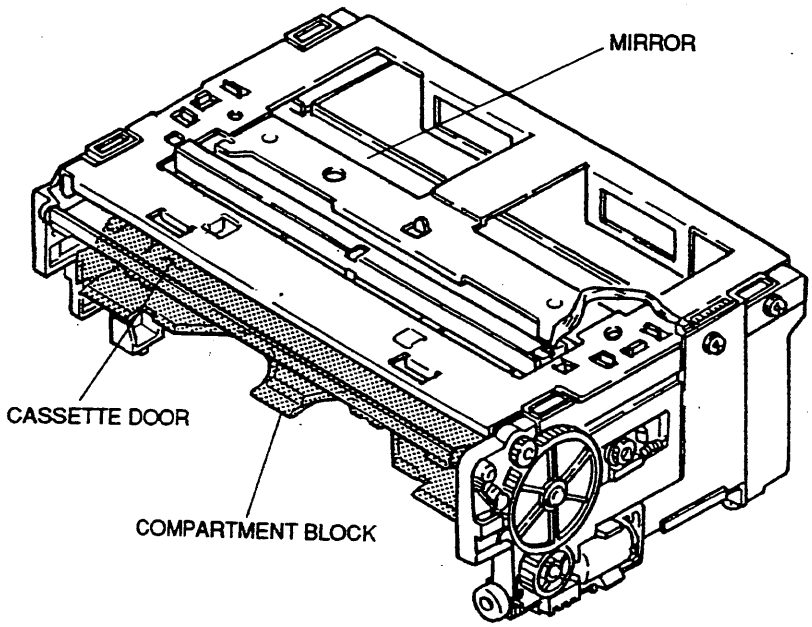
Procedures

1. Remove the cassette compartment from the unit. (Refer to Section 1-2-2.)

2. Remove the dust on the cassette compartment from the cassette insertion inlet using a vacuum cleaner.

3. Clean the compartment (shaded portion in the figure) with a dry cloth (or gauze).

   Caution
   Do not apply an excessive force to the compartment block.



Cassette Compartment Cleaning

7-2. PERIODIC CHECK

To make the most of the functions, fully realize performance of the unit, lengthen the life of the unit and tape, a periodic check is recommended.

7-2-1. Hours Meter

This unit can display an hours meter on the time counter display of the upper control panel or on the monitor connected to this unit. Perform a periodic check with this hours meter as a reference.

1. **Display procedure**
   Refer to Section 1-10-2 in Installation Manual.

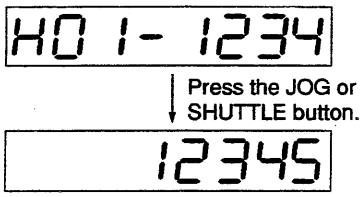
2. **Contents of display**

SET-UP MENU	DESCRIPTION	TIME COUNTER DISPLAY	MONITOR DISPLAY
H01: OPERATION HOURS	Accumulated hours when the power of the unit is on	Display the time by ten hours. (Note)	Display the time by an hour.
H02: DRUM RUNNING HOURS	Accumulated hours when the drum rotates in the threading end state	Display the time by ten hours. (Note)	Display the time by an hour.
H03: TAPE RUNNING HOURS	Accumulated hours when the tape runs in the F. FWD, REW, PLAY, SEARCH, REC and EDIT modes (not including STILL mode)	Display the time by ten hours. (Note)	Display the time by an hour.
H04: THREADING COUNTER	Accumulated number of threading and unthreading times	Display the number by ten times. (Note)	Display the actual number

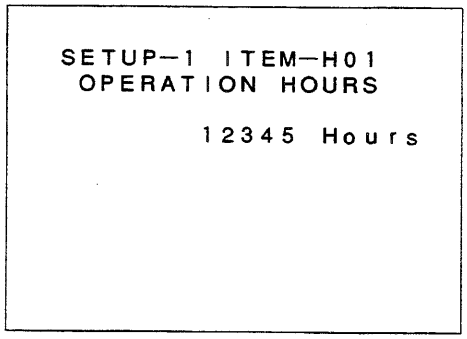
(Note) While pressing the JOG or SHUTTLE button on the lower control panel, display the time by an hour (or display the actual number).

〈**Example**〉
In a case of the total hours that the power of the unit has been turned on is 12,345 hours:

- Time Counter Display



- Monitor Display



7-2-2. Periodic Check List

The replacement time shown in the table below is not the guarantee term of parts. Use this table as guidelines for maintenance and inspection. The replacement time of parts varies depending on the operating environment and conditions of the unit.

To maintain the steady performance, it is recommended to clean the tape running system and perform the RF system automatic adjustment every the following hours as a guide.

- every 50 hours (H02): Cleaning by cleaning tape (Refer to Section 1-11-1.)
- every 200 hours (H02): Perform the cleaning as the following procedure.
  1. Cleaning by cleaning tape (Refer to Section 1-11-1.)
  2. Cleaning by cleaning cloth (Refer to Section 7-1-2 through 7-1-6.)
- every 500 hours (H02): Execute the following automatic adjustment. (Refer to Section 5-8.)
  A12: ADV EQUALIZER

Note: The part marked with "↓" in the table is replaced simultaneously with when the part in the column below its mark is replaced. ☆ : Replace the part. ◇ : Perform check (adjustment).

No.	Item	Menu No.	Inspection Hours (h)						Replacement Parts		
			1000	2000	3000	4000	5000	6000	Part Name	Part No.	Q'ty
Drum Block											
1	Inner Drum Assembly (Note 1)	H02	☆	☆	↓	☆	☆	↓	INNER DRUM ASSY DJR-06A-R: DVW-A510P DJR-08A-R: DVW-510P	 A-8260-747- A-8260-749-	 1 1
2	Brush/Slip Ring Assembly	H02	—	—	↓	—	—	↓	SR13 ASSY (RP), BRUSH: DVW-A510P SR9 ASSY (RP), BRUSH: DVW-510P	A-8267-571- A-8267-572-	1 1
3	Drum Assembly (Note 1)	H02	—	—	☆	—	—	☆	DRUM ASSY DJH-06A-R: DVW-A510P DJH-08A-R: DVW-510P	 A-8260-743- A-8260-745-	 1 1
Cleaners											
4	Cleaning Roller (Note 4)	H02	☆	☆	↓	☆	☆	↓	ROLLER ASSY, V CLEANING	X-3167-281-	1
5	Rotary Head Cleaner Assembly	H02	—	—	☆	—	—	☆	CLEANER ASSY, VIDEO HEAD	A-8267-398-	1
6	AT Head Cleaner	H02	☆	☆	☆	☆	☆	☆	ARM ASSY, CL	X-3167-053-	1
Tape Running System											
7	Pinch Roller	H03	☆	☆	☆	☆	☆	☆	ARM ASSY, PINCH	X-3167-054-	1
8	Audio/TC Head (Note 2)	H03	—	—	◇	—	—	☆	HEAD, AUDIO PS244-2103J	8-825-779-02	1
9	CTL Head	H03	—	—	☆	—	—	☆	HEAD, CTL PS244-21B	8-825-554-83 8-825-554-84	1 1
10	Capstan Motor	H03	—	—	—	—	—	☆	MOTOR, DC SP37AA	1-698-179-12	1
Driving System											
11	Pinch Solenoid (Note 3)	H03	—	—	—	—	—	☆	SOLENOID, PLUNGER	1-454-338-00	1
		H04	Replace when used 200,000 times								
12	Brake Lining	H03	—	—	☆	—	—	☆	LINING ASSY	X-3717-205-	2
13	Reel Motor Assembly	H03	—	—	☆	—	—	☆	S Side: RM (PC) ASSY: DVW-A510P RM ASSY: DVW-510P T Side: RM (TPC) ASSY: DVW-A510P RM ASSY: DVW-510P	A-8267-964- A-8267-774- A-8310-086- A-6737-207-	1 1 1 1
Others											
14	Fan Motor	H01	Replace when used 10,000 H						FAN, DC	1-541-431-41	2
15	Filter of the Upper Drum Cover	H02	☆	☆	☆	☆	☆	☆	FILTER	3-182-649-	1

(Note 1) In an environmental condition of high humidity and excessive dust to operate the unit, it may cause in shortening the life of the heads.
Therefore, it is recommended to use the unit in an air-conditioned place at middle tempareture and humidity of the specifications, and lesser dust circumstances. In addition, the tapes should be kept in the same conditions.

(Note 2) ◇: Adjust the audio frequency response. (Refer to Section 8-7.)

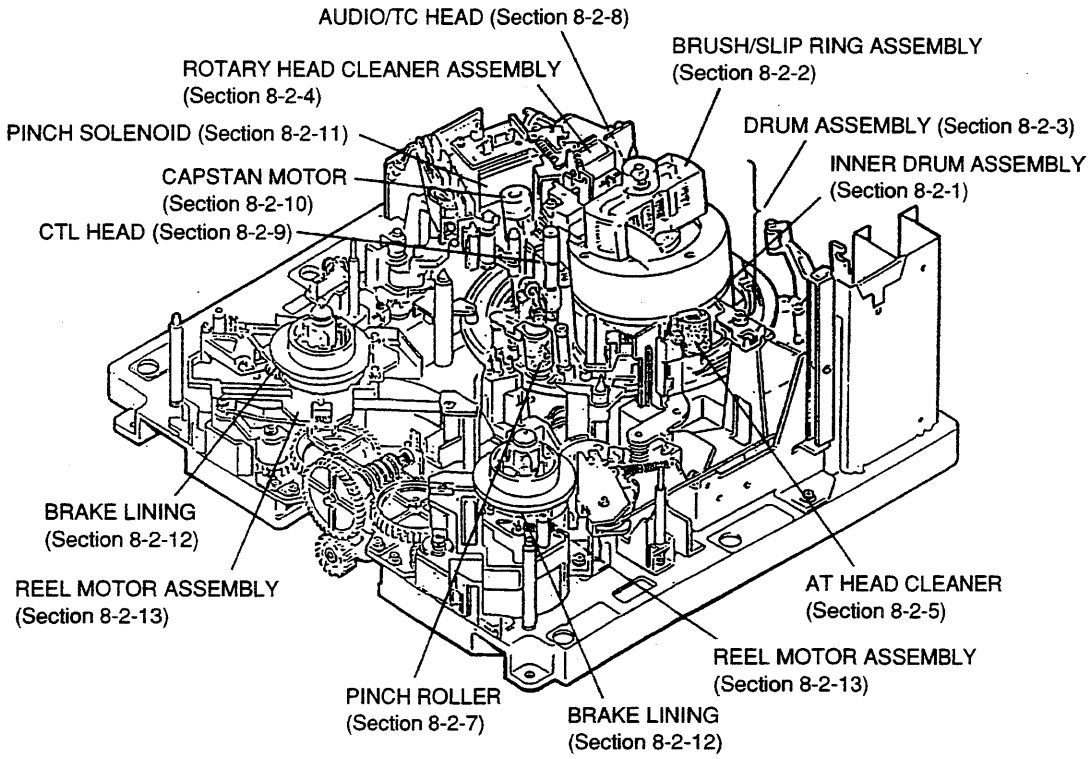
(Note 3) Replace the pinch solenoid when the replacement time or count is reached whichever is earlier.

(Note 4) It is recommended to replace the CR spacer (3-182-765-) at the same time.

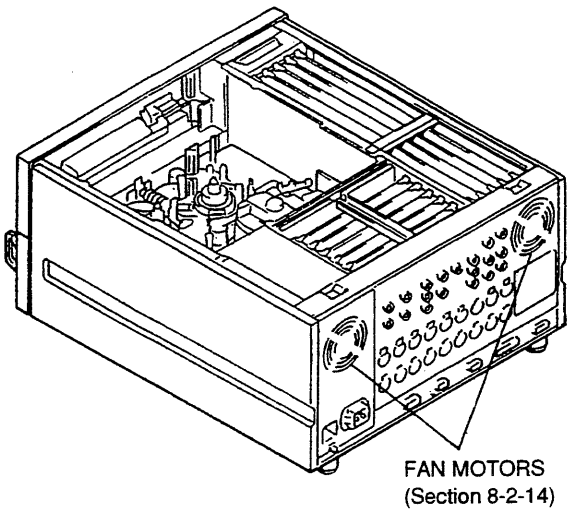
7-2-2. Periodic Check List

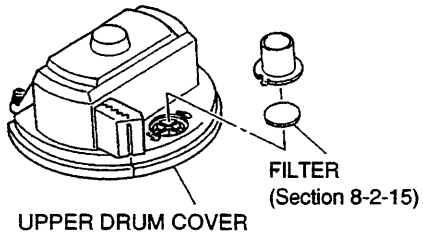
〈**Mechanical Deck Block**〉

	Procedure
	Refer to Section 8-2-1.
	Refer to Section 8-2-2.
	Refer to Section 8-2-3.
	Refer to Section 8-2-4.
	Refer to Section 8-2-4.
	Refer to Section 8-2-5.
	Refer to Section 8-2-7.
	Refer to Section 8-2-8.
	Refer to Section 8-2-9.
	Not Replacement
	Refer to Section 8-2-10.
	Refer to Section 8-2-11.
	Refer to Section 8-2-12.
	Refer to Section 8-2-13.
	Refer to Section 8-2-14.
	Refer to Section 8-2-15.



〈**Unit**〉





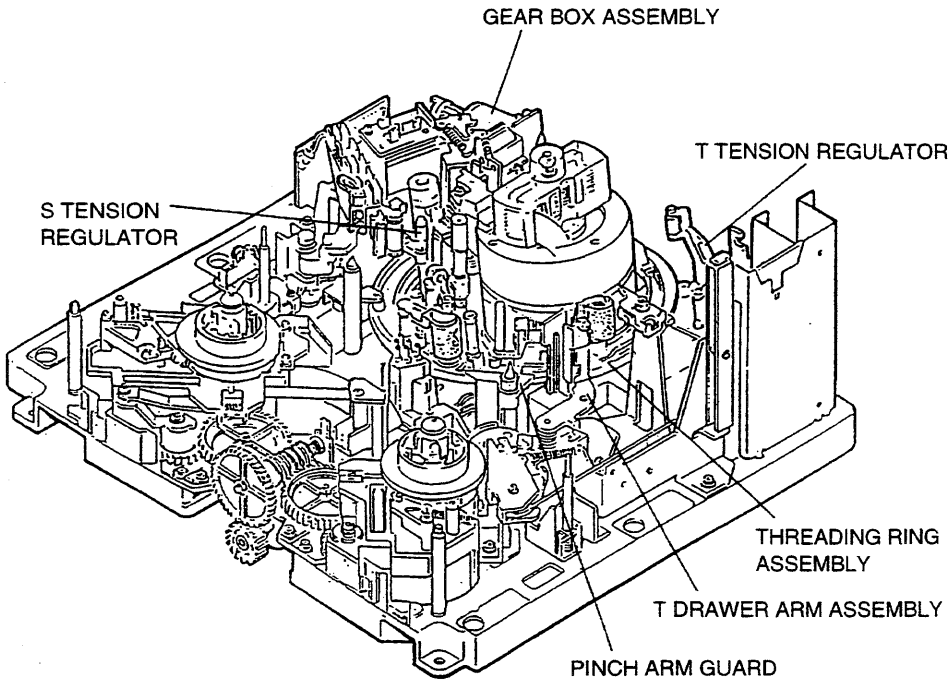
Note: Replace the parts shown in the table below periodically when the threading/ unthreading operation is repeated frequently.

No.	Item	Menu No.	Inspection Time	Replacement Parts		
				Part Name	Part No.	Q'ty
16	Brake Solenoid	H04	Replace when used 200,000 times	PLUNGER SOLENOID	1-454-417-31	2
17	S Tension Regulator Assembly			REGULATOR ASSY, TENSION	A-8267-795-	1
18	T Tension Regulator Assembly			T-TEN ASSY	A-8267-423-	1
19	T Drawer Arm Assembly			DRAWER ASSY, T	A-8267-381-	1
20	Gear Box Assembly			BOX ASSY, GEAR	A-8267-424-	1
21	Threading Ring Assembly			RING ASSY, THREADING	A-8267-395-	1
22	Ring Roller			ROLLER, RING ROLLER, RING B	3-180-677- 3-180-679-	2 1
23	Pinch Arm Guard			GUARD, PINCH ARM	3-180-853-	1
24	CL Guide Rail			RAIL, CL GUIDE	3-180-874-	1
25	Cassette Compartment Assembly			CASSETTE COMPARTMENT ASSY	A-8267-589-	1

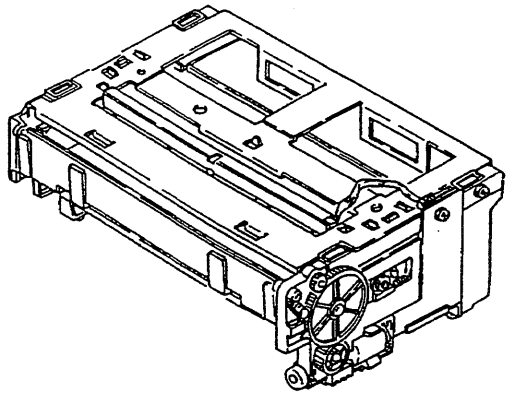
(Note 5) Maintenance Manual Part 2 is distributed separately. If you wish to obtain one, please consult with Sony's service organization.

	Procedure
	Refer to Volume 1 of MAINTENANCE MANUAL Part 2 (Note 5)
	Refer to Section 9-2-2. (Exploded view)
	Refer to Section 9-2-2. (Exploded view)
	Refer to Section 1-2-2.

〈 **Mechanical Deck Block** 〉



〈 **Cassette Compartment** 〉



CASSETTE COMPARTMENT ASSEMBLY

SECTION 8
REPLACEMENT OF PERIODIC MAINTENANCE PARTS

8-1. GENERAL INFORMATION FOR PARTS REPLACEMENT AND ADJUSTMENT

8-1-1. Basic Knowledge

1. Tape Cleaner

Never touch the edge of the tape cleaner with bare hands.
It is in danger of cutting your finger because the tape cleaner has a sharp edge.
Pay careful attention when replacing or adjusting the peripheral parts.

2. Tools

- Clean the surface of the tool with a cleaning cloth moistened with cleaning fluid before use it.
  - Cleaning cloth: 3-184-527-01
  - Cleaning fluid: 9-919-573-01
- Be careful not to damage the tool. If the flawed tool is used, adjustment cannot be performed correctly.

8-1-2. Threading End Mode and Unthreading End Mode

1. Threading End Mode

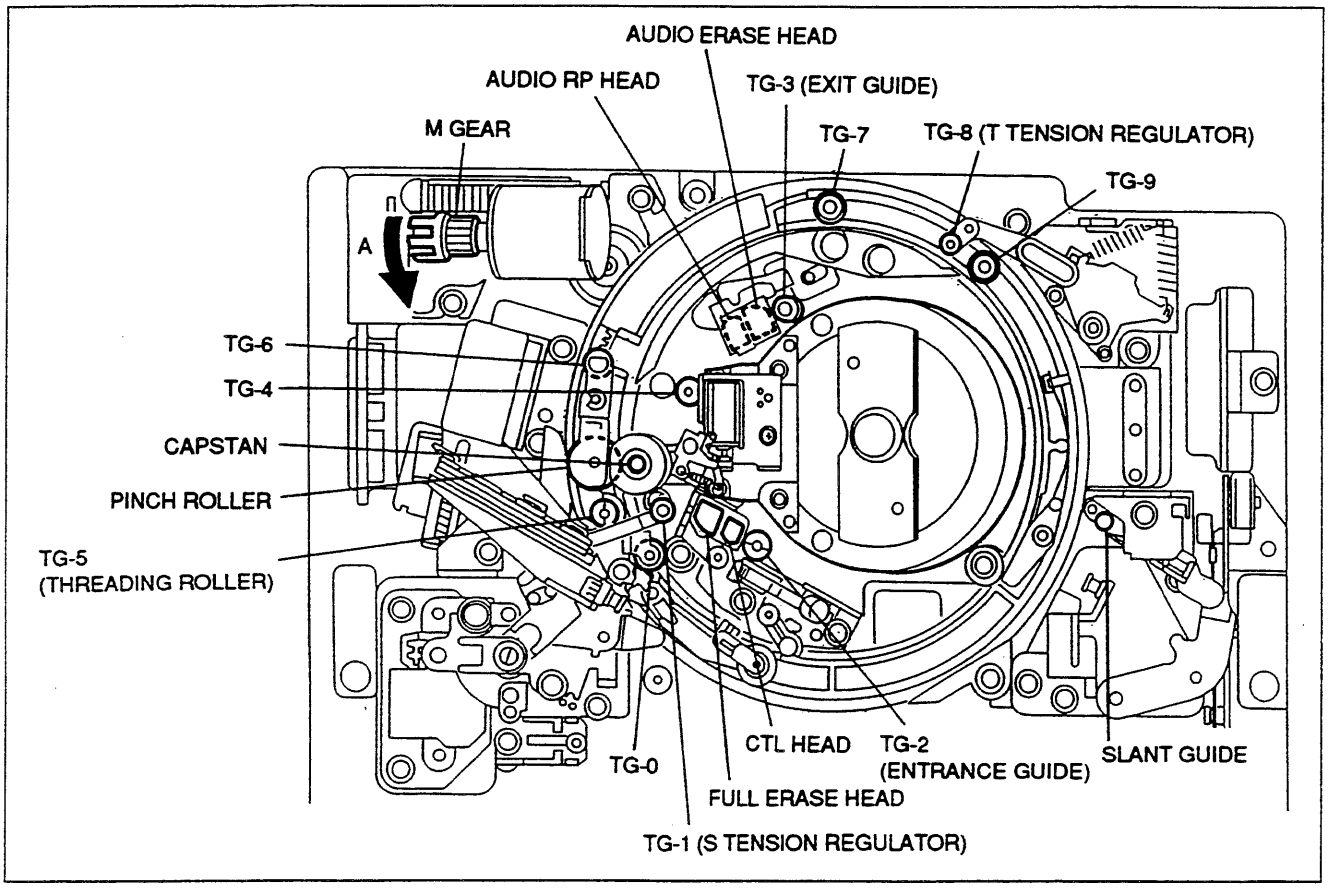
Threading end mode means that the threading ring rotates in the counterclockwise direction, then stops.

There are three ways of putting the unit into the threading end mode without installing the cassette compartment.

Method ①: Turn the power on.

Method ②: Press the STOP button in power on state.

Method ③: Turn the M gear of the gear box assembly in the direction of the arrow A.



Threading End Mode

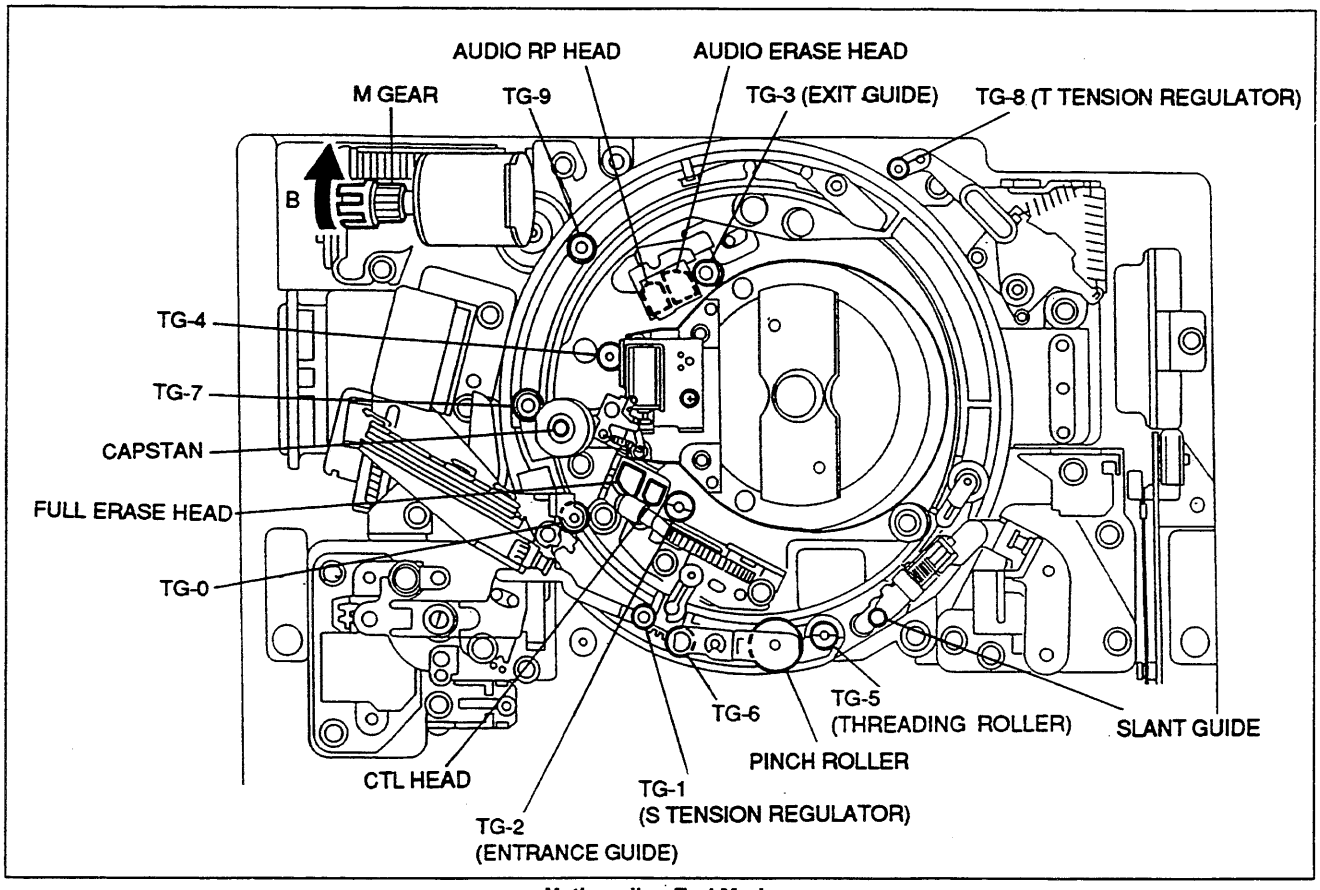
2. Unthreading End Mode

Unthreading end mode means that the threading ring rotates in the clockwise direction, then stops. (It is same state with EJECT completion mode.)

There are two ways of putting the unit into the unthreading end mode without installing the cassette compartment.

Method ①: Press the EJECT button in threading end mode.

Method ②: Turn the M gear of the gear box assembly in the direction of the arrow B.



Unthreading End Mode

8-1-3. L Cassette Position and S Cassette Position

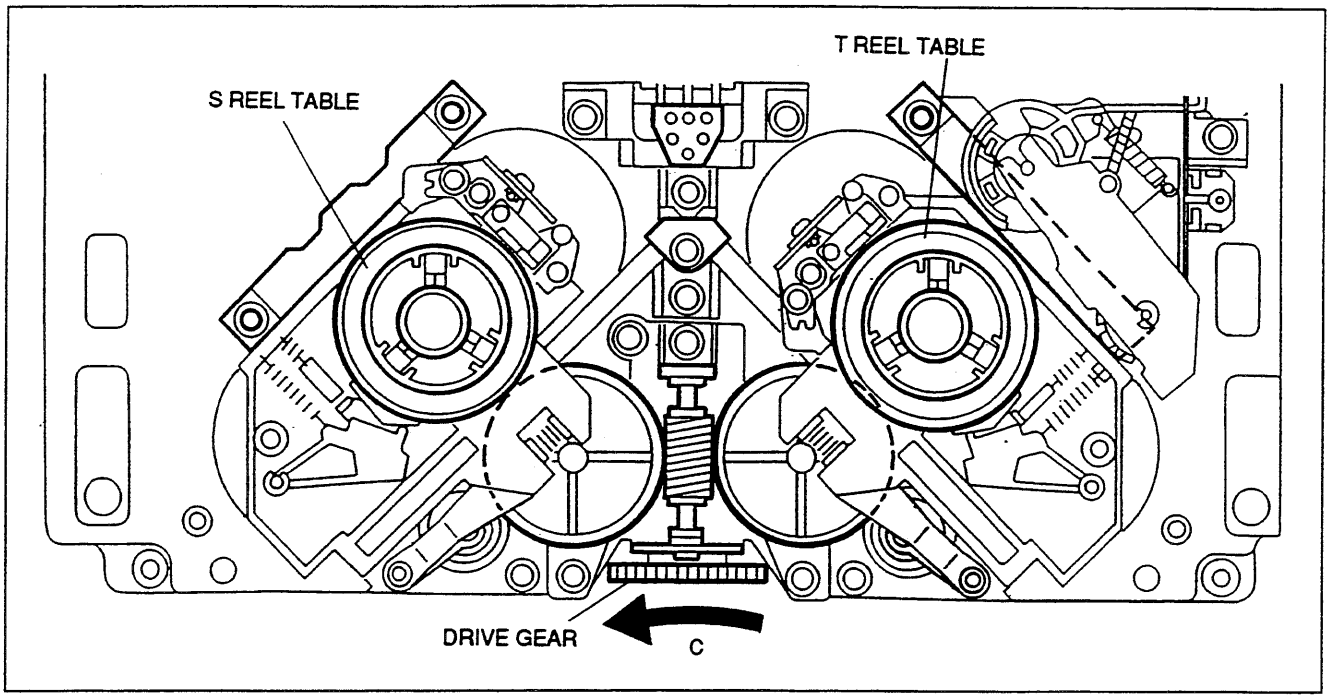
1. L Cassette Position

L cassette position means that the reel tables are in the position of L cassette tape.

There are two ways of putting the reel tables into the L cassette position without installing the cassette compartment.

Method ①: Press the switch S700 (C-1/side A) on the SS-52 board in power on state.

Method ②: Turn the drive gear in the direction of the arrow C.



L Cassette Position

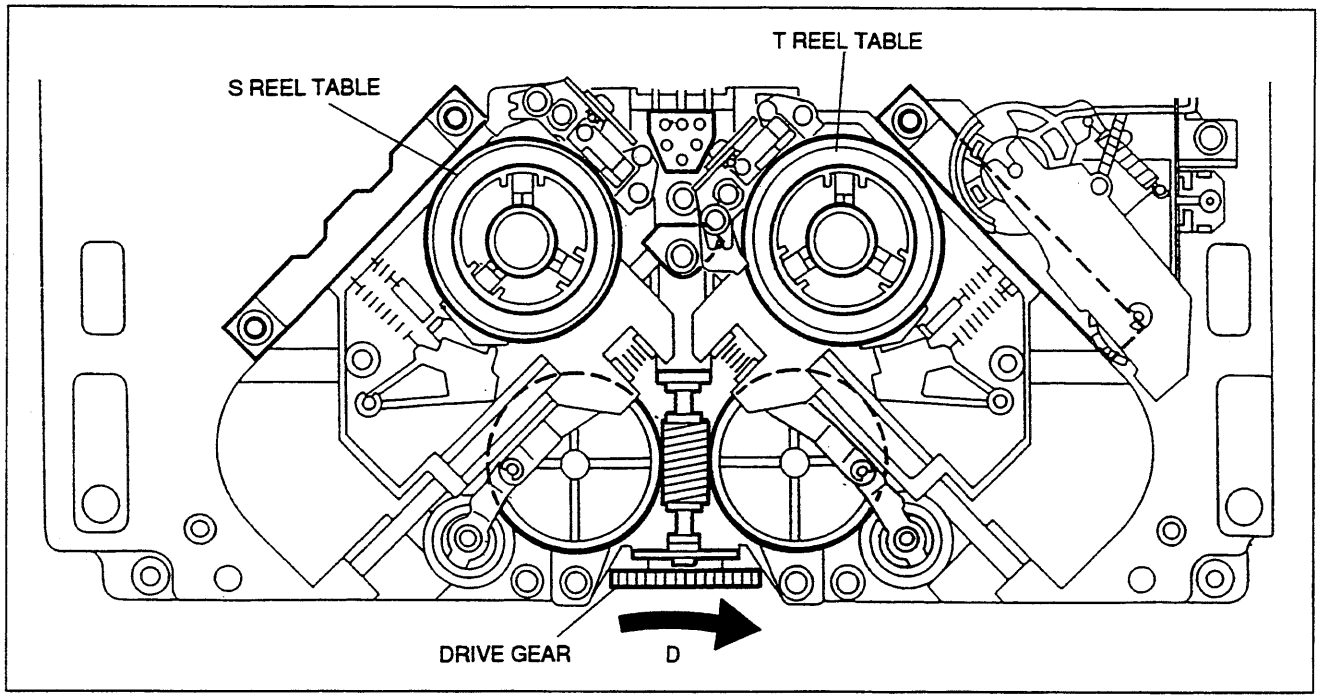
2. S Cassette Position

S cassette position means that the reel tables are in the position of S cassette tape.

There are two ways of putting the reel tables into the S cassette position without installing the cassette compartment.

Method ①: Press the switch S700 (C-1/side A) on the SS-52 board in power on state.

Method ②: Turn the drive gear in the direction of the arrow D.

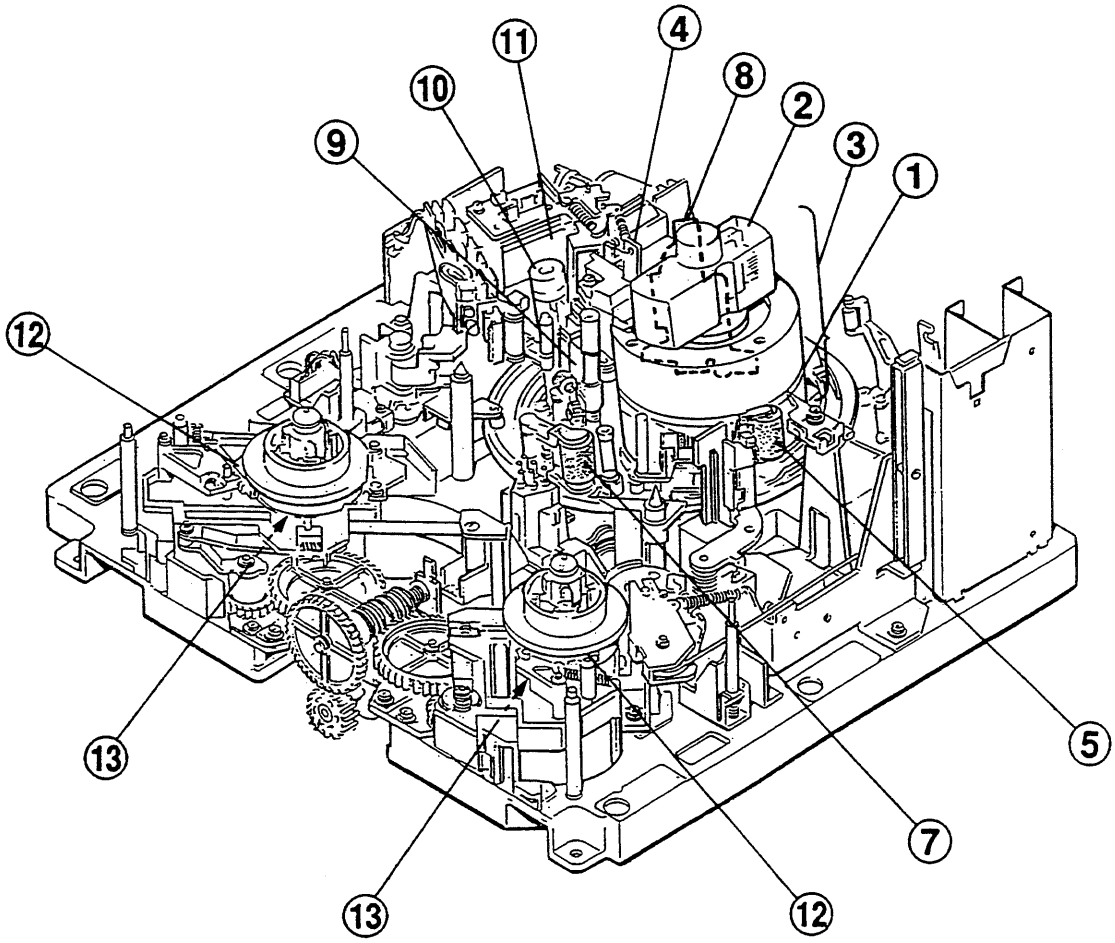


S Cassette Position

8-2. PARTS REPLACEMENT

1. Index

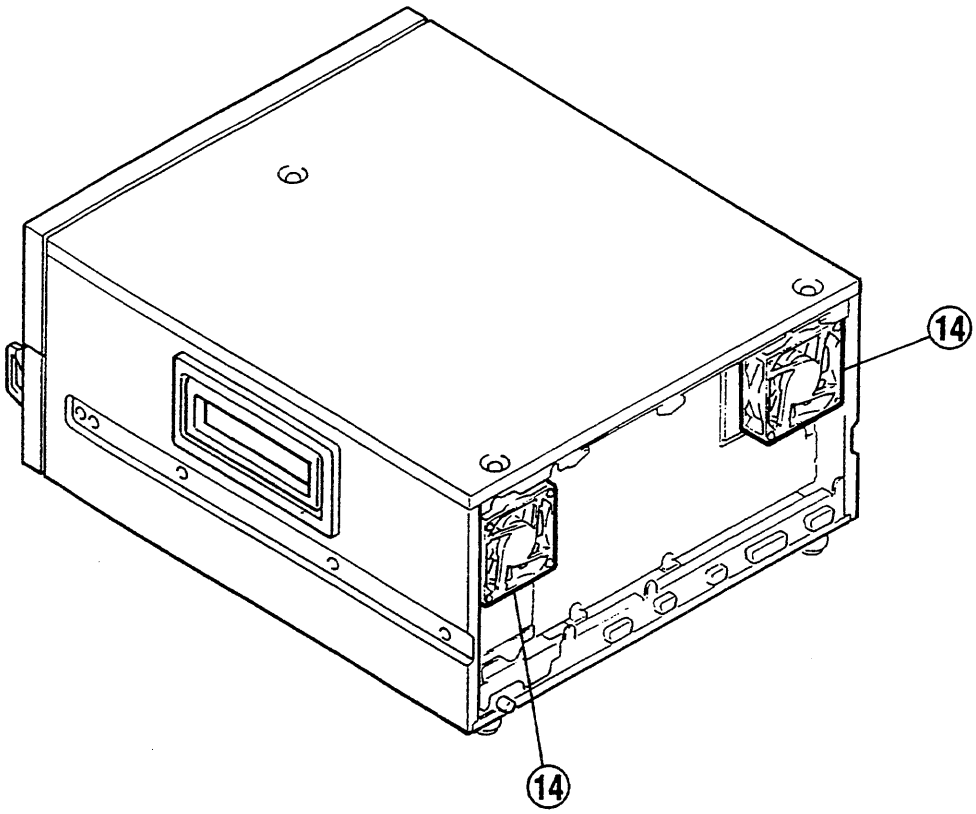
〈Mechanical Deck Block〉



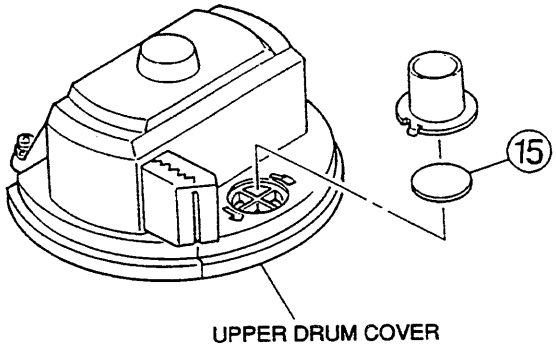
No.	Part Name	Page
1	Inner Drum Assembly	8-10
2	Brush/slip ring Assembly	8-24
3	Drum Assembly	8-26
4	Rotary Head Cleaner Assembly	8-32
5	AT Head Cleaner	8-34
7	Pinch Roller	8-38

No.	Part Name	Page
8	Audio/TC Head	8-40
9	CTL Head	8-44
10	Capstan Motor	8-48
11	Pinch Solenoid	8-52
12	Brake Lining	8-58
13	Reel Motor Assembly	8-60

〈Overall Block〉



No.	Part Name	Page
14	Fan Motor	8-69



No.	Part Name	Page
15	Filter	8-70

2. Note

(1) Grease and Oil

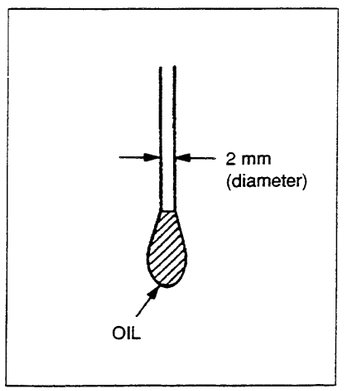
- Please use only the specified grease and oil.
  If the different grease or oil is used, major malfunctions may be caused due to differences in viscosity and ingredients.
  And if the grease or oil is used that has been mixed with dust, major malfunctions may be caused.
  Please use the following grease and oil.

  - Grease (SGL-505): 7-662-010-04
  - Oil: 7-661-018-18

- Smear just enough grease to create a thin film on the surface of the part.
  Any grease that adheres to other surrounding parts must be wipe with gauze or soft cloth.

- A drop of oil is defined as follows:
  About the amount that will adhere to the end of a stick 2 mm in diameter, as shown in the figure.

- Do not use the grease and oil except for specified portions.



Oil

(2) Stop Washer

It should not be used the stop washer once and again.

- Stop washer (d=2.3 mm): 3-669-596-00

3. Preparation

(1) When replacing parts on the upper surface of the mechanical deck

- except DVW-CA510P/CA510

① Turn the power off.
② Remove the upper lid. (Refer to Section 1-2-1.)
③ Remove the plate MD. (Refer to Section 1-3.)
④ Remove the cassette compartment. (Refer to Section 1-2-2.)

- DVW-CA510P/CA510

① Turn the power off.
② Remove the upper lid. (Refer to Section 1-3-1.)
③ Remove the ejector assembly. (Refer to Section 1-4 .)
④ Remove the cassette compartment. (Refer to Section 1-3-2.)

(2) When replacing parts on the bottom surface of the mechanical deck

- except DVW-CA510P/CA510

① Turn the power off.
② Remove the upper lid. (Refer to Section 1-2-1.)
③ Remove the plate MD. (Refer to Section 1-3.)
④ Remove the cassette compartment. (Refer to Section 1-2-2.)
⑤ Remove the bottom plate. (Refer to Section 1-2-1.)
⑥ Remove the plate BT.

- DVW-CA510P/CA510

① Turn the power off.
② Remove the upper lid. (Refer to Section 1-3-1.)
③ Remove the ejector assembly. (Refer to Section 1-4.)
④ Remove the cassette compartment. (Refer to Section 1-3-2.)
⑤ Remove the bottom plate. (Refer to Section 1-3-1.)
⑥ Remove the plate BT.

8-2-1. Inner Drum Assembly Replacement

Outline

Replacement
1. Remove the Rotary Head Cleaner Assembly
2. Remove the Upper Drum Cover
3. Disconnect the Flexible Board (CN241/HN-185 Board)
4. Remove the Brush/Slip Ring Assembly
5. Remove the Upper Drum Assembly
6. Remove the Inner Drum Assembly
7. Cleaning (Inner Drum Assembly Mounting Surface, Drum Support Mounting Surface, Lower Drum Flange Surface, Tape Running Surface, Lead Surface, and Contacting Points)
8. Install the Inner Drum Assembly
9. Install the Upper Drum Eccentricity Adjustment Tool
10. Adjust the Inner Drum Eccentricity
11. Remove the Upper Drum Eccentricity Adjustment Tool
12. Cleaning (Height Determining Plate's Lower Surface, Drum Support's Upper Surface, and Upper Drum Contacting Surface)
13. Install the Upper Drum Assembly
14. Cleaning (DR-205 Board's Contacting Points and Brush/Slip Ring Assembly Mounting Surface)
15. Install the Brush/Slip Ring Assembly
16. Connect the Flexible Board (CN241/HN-185 Board)
17. Cleaning (Rotary Heads and Upper Drum's Tape Running Surface)
18. Install the Upper Drum Cover
19. Install the Rotary Head Cleaner Assembly
Adjustment after Replacement
20. Confirm the Tape Running (Refer to Section 8-4-2.)
21. Confirm the Video Tracking (Refer to Section 8-4-3.)
22. Confirm the CTL Head Height (Refer to Section 8-4-4.)
23. Adjust the CTL Head Position (Refer to Section 8-4-5.)
24. Confirm the Audio/TC Head Height (Refer to Section 8-4-6.)
25. Adjust the Audio/TC Head Position (Refer to Section 8-4-9.)
26. Perform the Servo/DT and RF Adjustment (Refer to Section 8-5.)
27. Perform the Adjustment after Drum Replacement (Refer to Section 8-6.)

8-2-1. Inner Drum Assembly Replacement

Note

When the rotary head tip was worn or damaged, replace the inner drum assembly. It cannot be replaced only head tip.

Basic Knowledge

For except the periodic replacement time, replace the inner drum assembly in the following case.
- A correct RF signal waveform cannot be obtained even if the tracking adjustment is performed.

Tools

- Hexagonal wrench driver (2.5 mm): 7-700-766-04
- Torque screwdriver (6 kg•cm)(JB-5251): J-6252-510-A
- Torque screwdriver (12 kg•cm)(JB-5252): J-6252-520-A
- Torque screwdriver's bit (+ 2 mm, l=75 mm): J-6323-420-A
- Torque screwdriver's hexagonal bit (d=2.5 mm, l=120 mm): J-6251-090-A

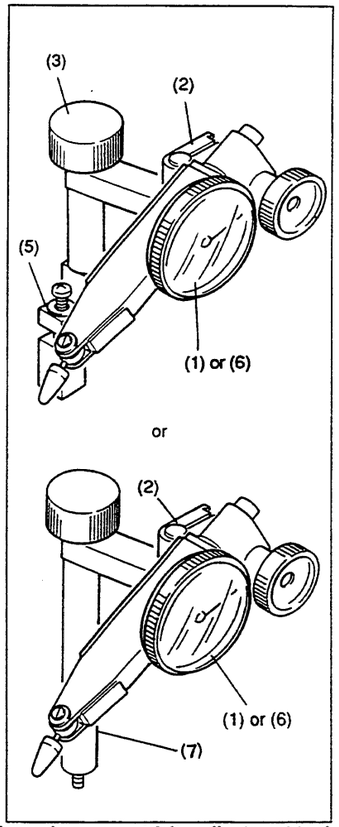
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

- Upper drum eccentricity adjustment tool (1): J-6001-840-A
  or upper drum eccentricity adjustment tool (6): J-6325-530-A
- Upper drum eccentricity adjustment tool (2): J-6001-830-A
- Upper drum eccentricity adjustment tool (3): J-6001-820-A
- Upper drum eccentricity adjustment tool (5): J-6087-000-A

Note1: The eccentricity adjustment tool is named an "upper drum eccentricity adjustment tool" in this case. In this unit, the eccentricity value of the inner drum is measured.

Note2: The upper drum eccentricity adjustment tool is assembled for use as shown in the figure.

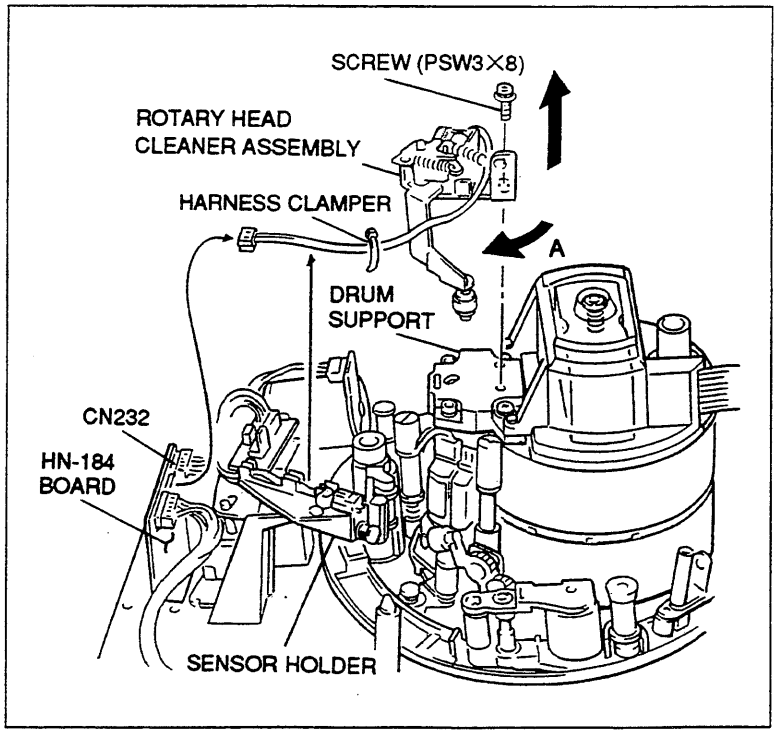
Note3: The following tool is able to use instead of using the upper drum eccentricity adjustment tool (3) and (5).
- Upper drum eccentricity adjustment tool (7): J-6324-030-A



Upper drum eccentricity adjustment tool

Removal

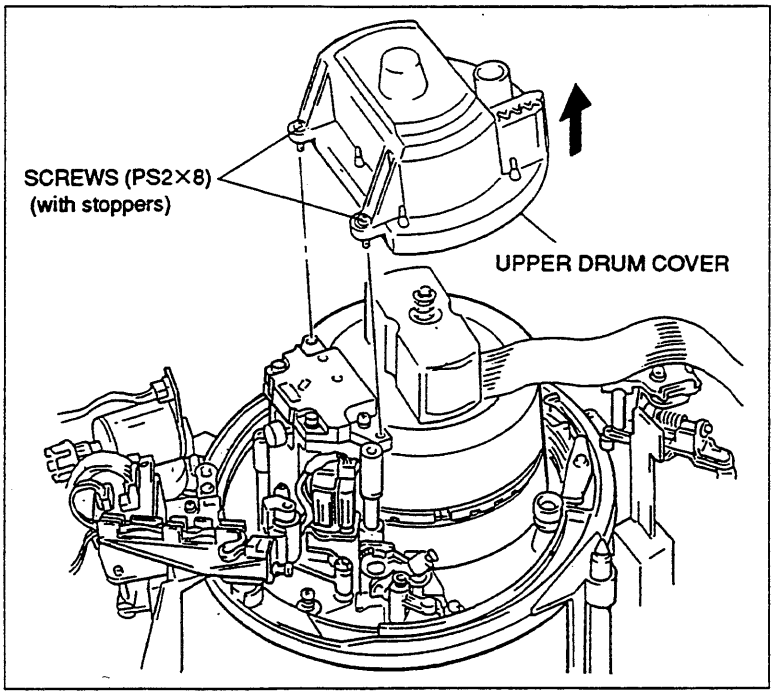
1. **Remove the Rotary Head Cleaner Assembly**
   (1) Disconnect the connector from connector CN232 on the HN-184 board.
   (2) Cut the harness clamper.
   (3) Remove the harness from the sensor holder.
   (4) Remove the screw, shift the rotary head cleaner assembly in the direction indicated by the arrow A, and remove it from the drum support.



Remove the Rotary Head Cleaner Assembly

2. **Remove the Upper Drum Cover**
   Loosen the two screws and remove the upper drum cover.

   Note: These screws cannot be removed because of stoppers.



Remove the Upper Drum Cover

3. Disconnect the Flexible Board

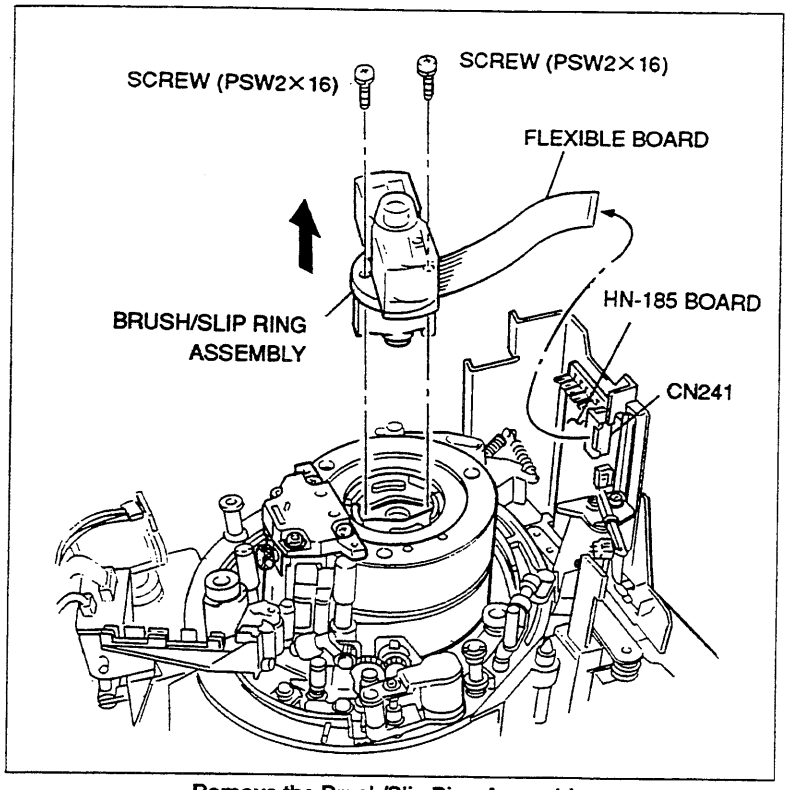
Disconnect the flexible board from connector CN241 on the HN-185 board.

4. Remove the Brush/Slip Ring Assembly

Remove the two screws, then remove the brush/slip ring assembly.

Caution

1. Do not apply excessive force to the brush/slip ring assembly at that time.
2. If the screws remain put into the screw holes of the brush/slip ring assembly, remove them once. When the brush/slip ring assembly is turned upside down, these screws may be dropped into the slip ring cover.



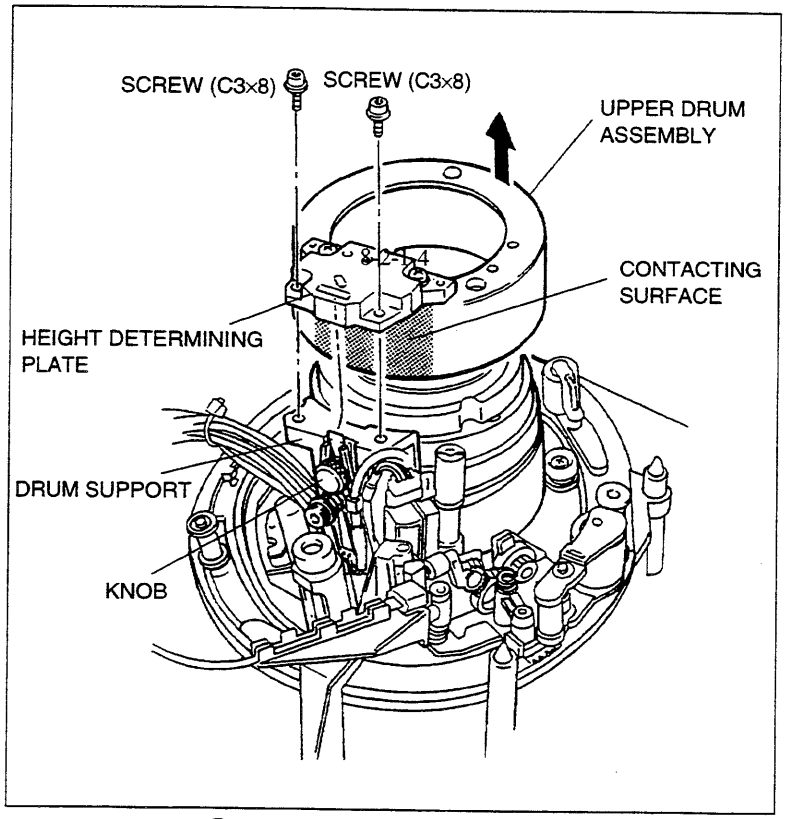
Remove the Brush/Slip Ring Assembly

5. Remove the Upper Drum Assembly

(1) Rotate the knob manually by about seven turns, then loosen.
(2) Remove the two screws using a hexagonal wrench driver.
(3) Raise the upper drum assembly just above, then remove.

Caution

1. Be careful not to damage the tape running surface and the contacting surface (shaded portion in the figure) of the upper drum when removing the upper drum assembly. Also, take care not to damage the lower edge portion of the upper drum.
2. Be sure to put the removed upper drum assembly with the upper surface (on which the height determining plate is installed) down. If not, the edge portion may be damaged.
3. Be careful not to damage the drum support mounting surface and lower drum's upper edge portion after the upper drum assembly was removed.



Remove the Upper Drum Assembly

6. Remove the Inner Drum Assembly

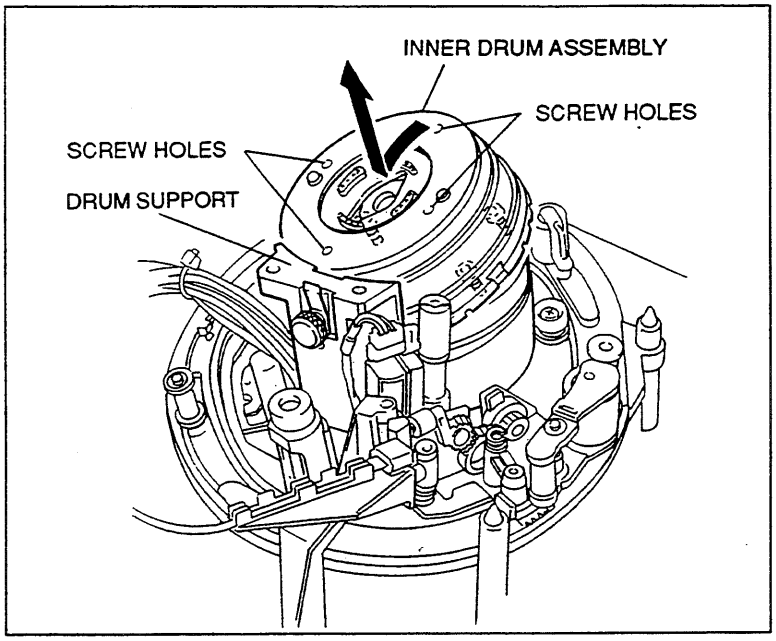
(1) Insert the hexagonal wrench driver from the screw hole and loosen the screw fully.

Note: The inner drum assembly is fixed with the four fixing screws (C3x12) in the screw holes. These screws cannot be removed because of stoppers.

(2) Remove the inner drum assembly while inclining it as shown in the figure.

Caution

Be careful not to damage the upper drum contacting surface of the drum support.



Remove the Inner Drum Assembly

Installation

Caution

The inner drum assembly for repair has an inner drum cover. This cover is provided to protect the rotary heads. Do not remove the inner drum cover until the inner drum assembly has been installed.

7. Cleaning

(1) Clean the portion below with a cleaning cloth moistened with cleaning fluid.
- New inner drum assembly mounting surface (shaded portion shown in the figure)
- Drum support's upper drum mounting surface (shaded portion shown in the figure)
- Lower drum flanges (shaded portion shown in the figure) and edge portion
- Lower drum's tape running surface and lead portion (Refer to Section 7-1-4.)

Caution

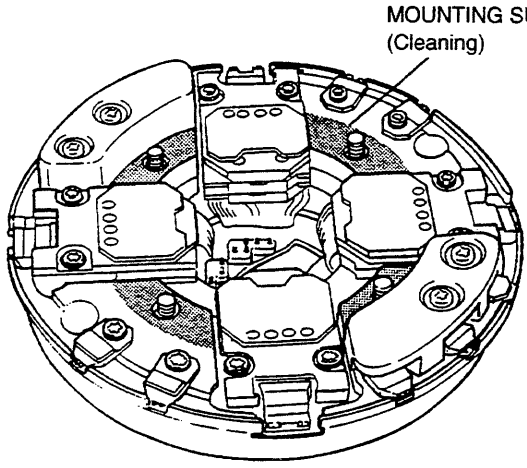
After cleaning, wipe with a dry cleaning cloth.

(2) Wipe the portion below with a dry cleaning cloth.
- Lower drum's contacting points

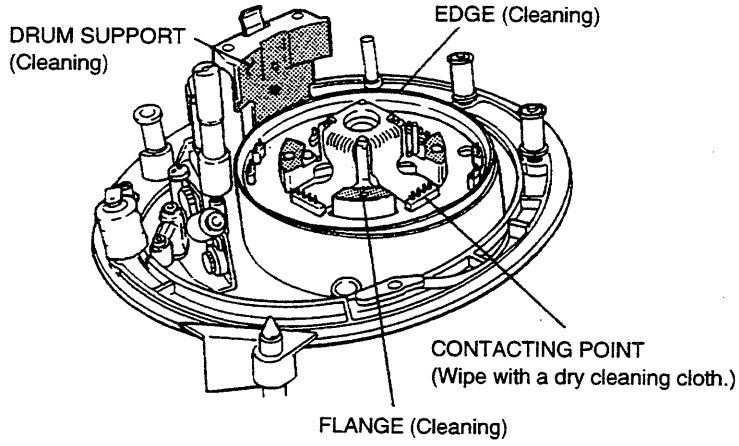
Caution

Do not apply cleaning fluid to the contacting points.

- **Inner Drum Assembly**



- **Lower Drum**



Cleaning

8. Install the Inner Drum Assembly

When installing the inner drum assembly in the unit with an analog playback function, be sure to check the following items.

Before installing the inner drum assembly

- Loosen the knob (a) sufficiently. (Fig. 2)

Caution

Be careful not to drop the knob (a).

- Loosen the screw (b) about 1.5 turns.(Fig. 2)

After installing the inner drum assembly

- Tighten the screw (b) about 1.5 turns.

(1) Place the hole (A) on the positioning pin side on DR-202 board into the center position of the drum support.

Caution

At this time, be careful not to touch the contacting points and flanges.

(2) Align the hole (A) on the positioning pin side on DR-202 board with positioning hole (B) on the inner drum cover. (Fig. 1)

(3) Put the inner drum assembly on the lower drum gently in the slanting direction with care not to touch the drum support. (Fig. 2)

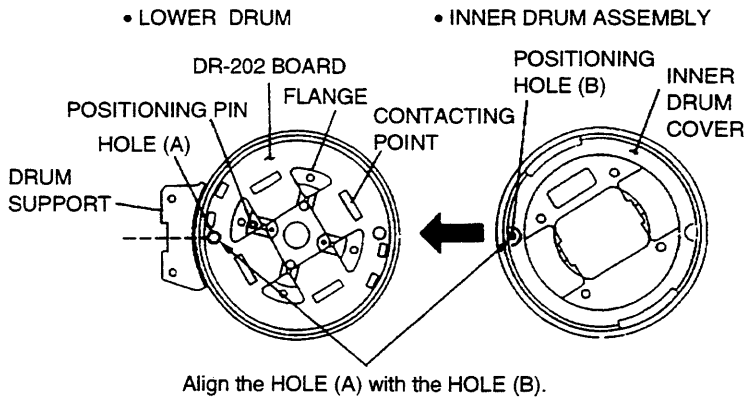
Caution

1. Do not hold the claws of the inner drum cover when installing the inner drum assembly.
2. Be careful not to touch the audio/TC head, peripheral tape guides and drum support when installing the inner drum assembly.
3. Do not turn the inner drum while the inner drum cover is installed.

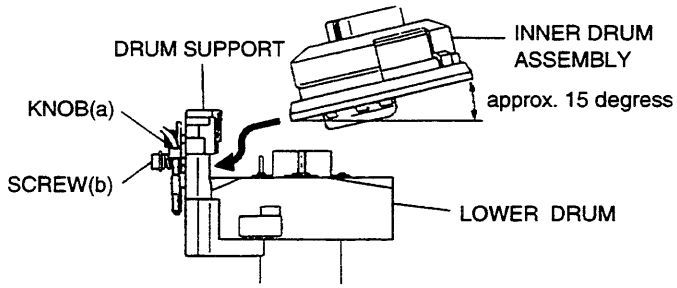
(4) Tighten the four screws (C3×12) tentatively and equally while pushing the inner drum downward.

(5) Press the claws of the inner drum cover in the direction indicated by the arrow and raise the inner drum cover up, then remove it. (Fig. 3)

〈Fig.1〉

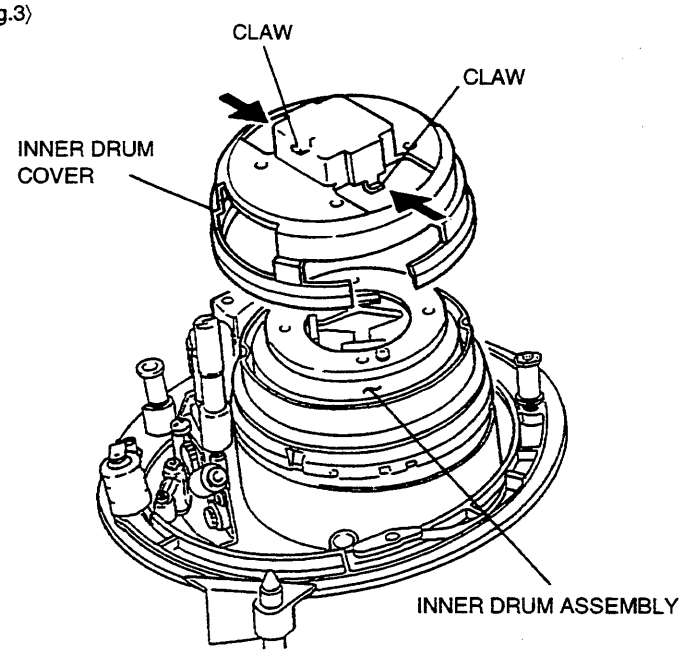


〈Fig.2〉



• **Remove the Inner Drum Cover**

〈Fig.3〉



Install the Inner Drum Assembly

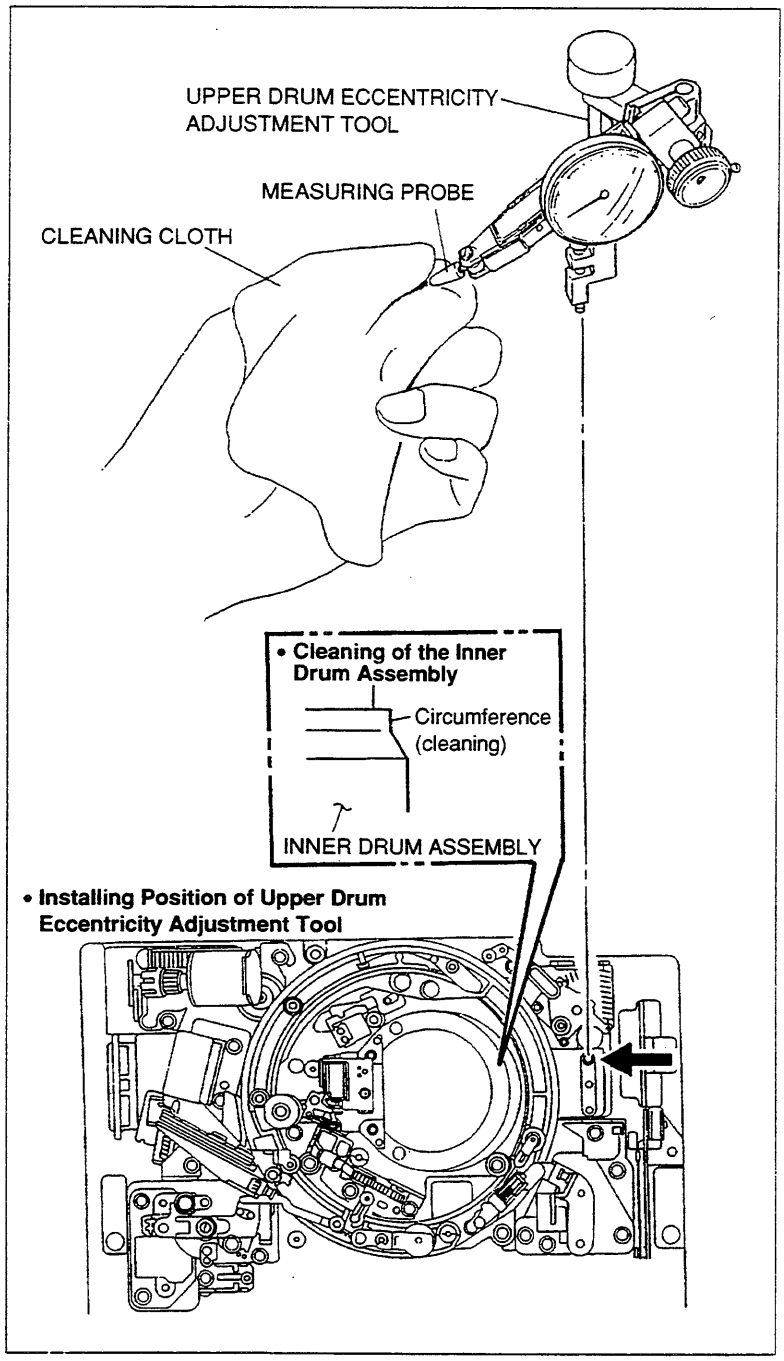
9. Install the Upper Drum Eccentricity Adjustment Tool

(1) Clean the measuring probe and the inner drum portion shown in the figure (the circumference) with a cleaning cloth moistened with cleaning fluid.

Caution

Do not make dirt adhere to the measuring probe during use. This may damage the inner drum.

(2) Install the eccentricity adjustment tool in the chassis shown in the figure.



Install the Upper Drum Eccentricity Adjustment Tool

10. Adjust the Inner Drum Eccentricity

(1) Set the measuring probe of the tool to the inner drum portion shown in the figure.

Caution

Take care that the measuring probe does not touch the rotary heads.

(2) Rotate the inner drum slowly clockwise.

Note: The inner drum is rotated clockwise for measuring the eccentricity value. When the brush/slip ring is installed, do not rotate the inner drum clockwise.

Confirm that the pointer deviation of the gauge satisfies the specification in one complete turn of the inner drum.

If the specification is not satisfied, repeat steps ① to ③ below until it is satisfied.

① Rotate the inner drum slowly clockwise and stop the rotation in the position where the pointer deviation is minimum.
② Push the board cover in the position opposite to the measuring probe by 180 degrees toward the direction of the arrow so that the pointer deviation is 1/2 of the maximum value.
③ Confirm that the specification is satisfied.

Note: When the pointer does not move even if the board cover is pushed by finger, tighten the four screws fixing the inner drum a little loosely. When the pointer moves immediately, tighten the screws a little firmly.

(3) Tighten the four screws gradually in the order indicated in the board cover.

Tightening torque: 39.2×10^{-2} N•m (4 kgf•cm)

(4) Confirm that the pointer deviation of the gauge satisfies the specification.

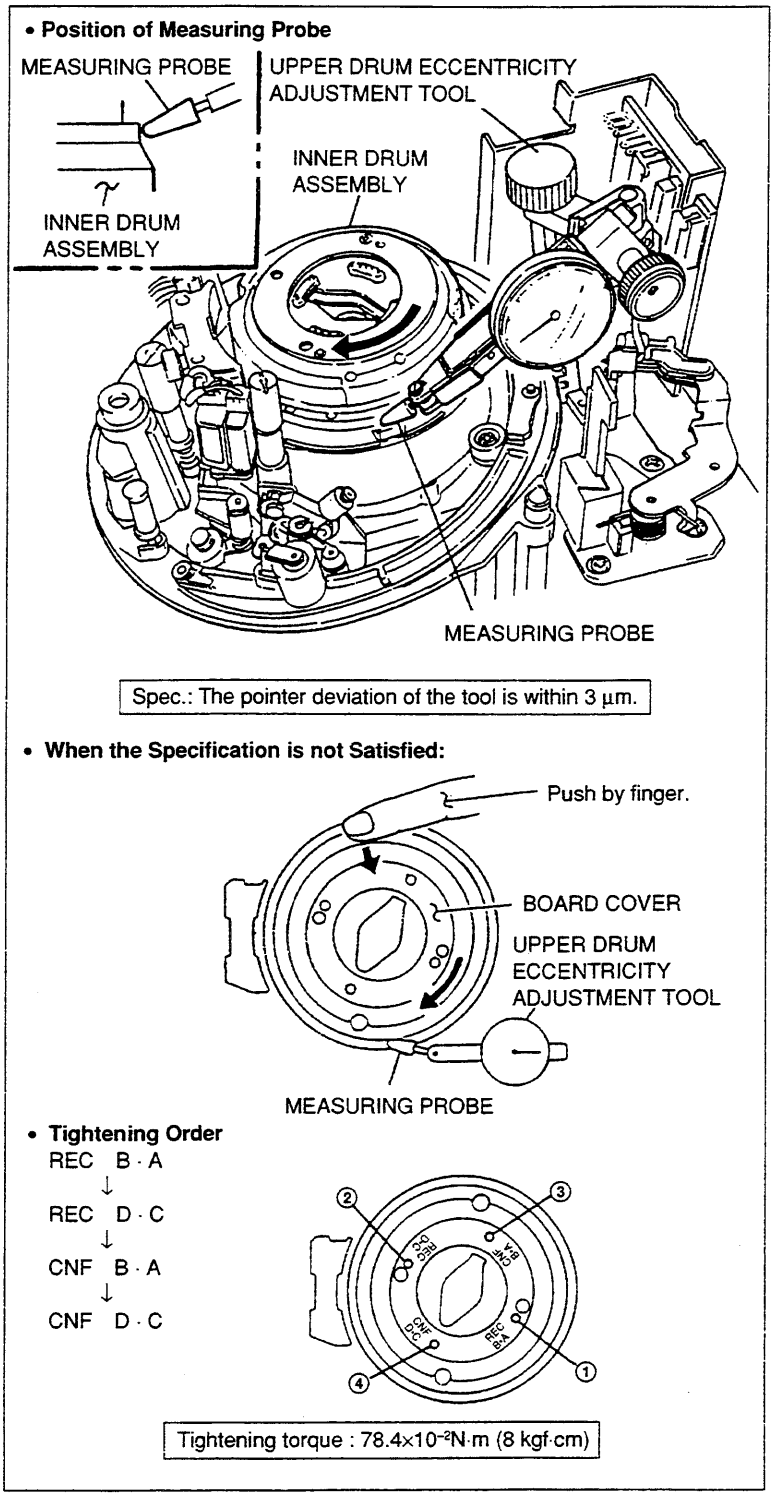
If the specification is not satisfied, loosen the four screws once. Then perform steps ① to ③ above.

(5) Tighten the four screws gradually in the order indicated in the board cover.

Tightening torque: 78.4×10^{-2} N•m (8 kgf•cm)

(6) Confirm again that the pointer deviation of the gauge satisfies the specification.

11. Remove the Upper Drum Eccentricity Adjustment Tool



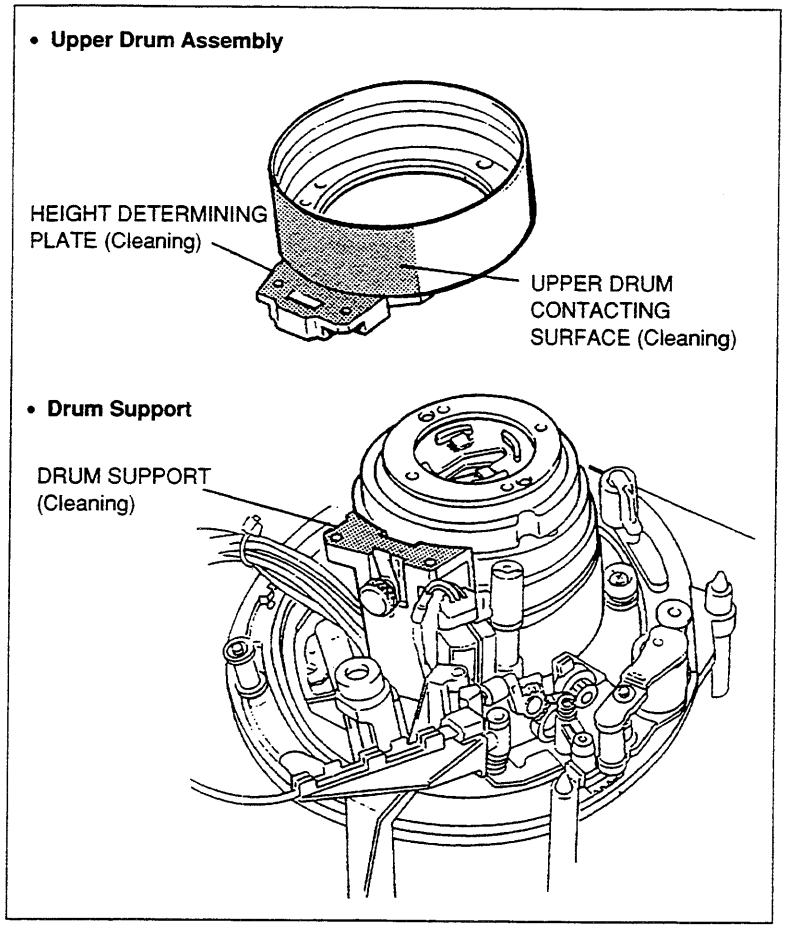
Adjust the Inner Drum Eccentricity

12. Cleaning

Clean the lower surface (shaded portion in the figure) of the height determining plate, the upper surface of the drum support (shaded portion in the figure), and the upper drum contacting surface with a cleaning cloth moistened with cleaning fluid.

Caution

After cleaning, wipe with a dry cleaning cloth.



Cleaning

13. Install the Upper Drum Assembly

(1) Install the upper drum assembly slowly so that the leaf spring is put into the hole of the height determining plate.

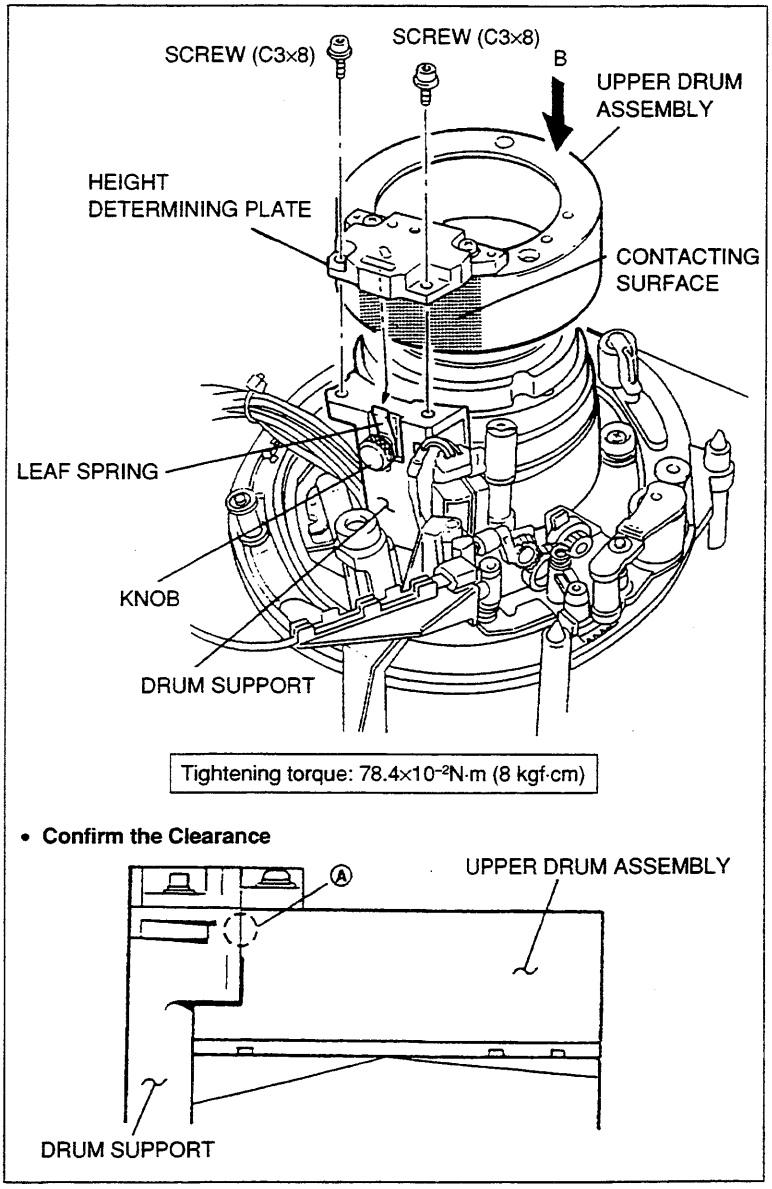
Caution

Take care that the tape running surface and the contacting surface (shaded portion in the figure) of the upper drum does not strike against the drum support. Also, be careful not to damage the lower edge portion of the upper drum.

(2) Tighten the two screws each by three turns.
(3) Tighten the knob. At that time, confirm that the portion B of the upper drum assembly somewhat rises to the surface.
(4) Tighten the two screws alternately and gradually.

Tightening torque: 78.4×10^{-2} N•m
(8 kgf•cm)

(5) Confirm that there is no clearance between the drum support and the upper drum assembly (A portion in the figure, both of left and right sides) as visual.



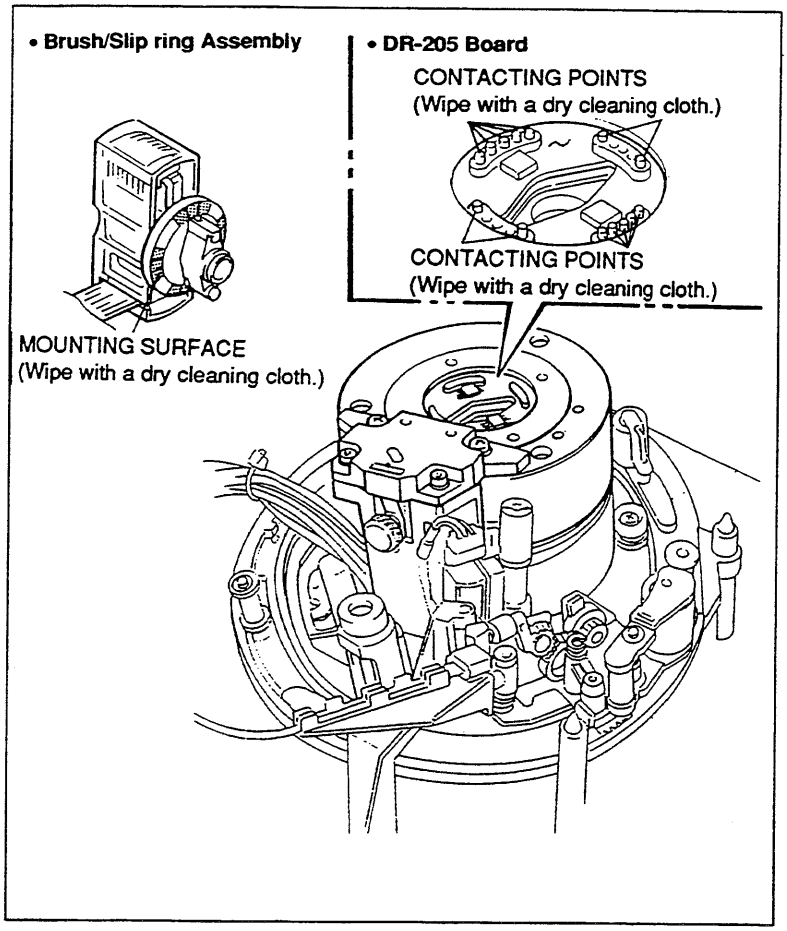
Install the Upper Drum Assembly

14. Cleaning

Wipe the brush/slip ring assembly mounting surface (shaded portion in the figure) and the DR-205 board contacting points with a dry cleaning cloth.

Caution

1. Do not apply cleaning fluid to the contacting points.
2. If the screws remain put into the screw holes of the brush/slip ring assembly, remove them once. When the brush/slip ring assembly is turned upside down, these screws may be dropped into the slip ring cover.



Cleaning

15. Install the Brush/Slip Ring Assembly

(1) Install the brush/slip ring assembly in the direction shown in the figure.

(2) Tighten the two screws alternately and gradually while pushing both sides of the flange equally from above.

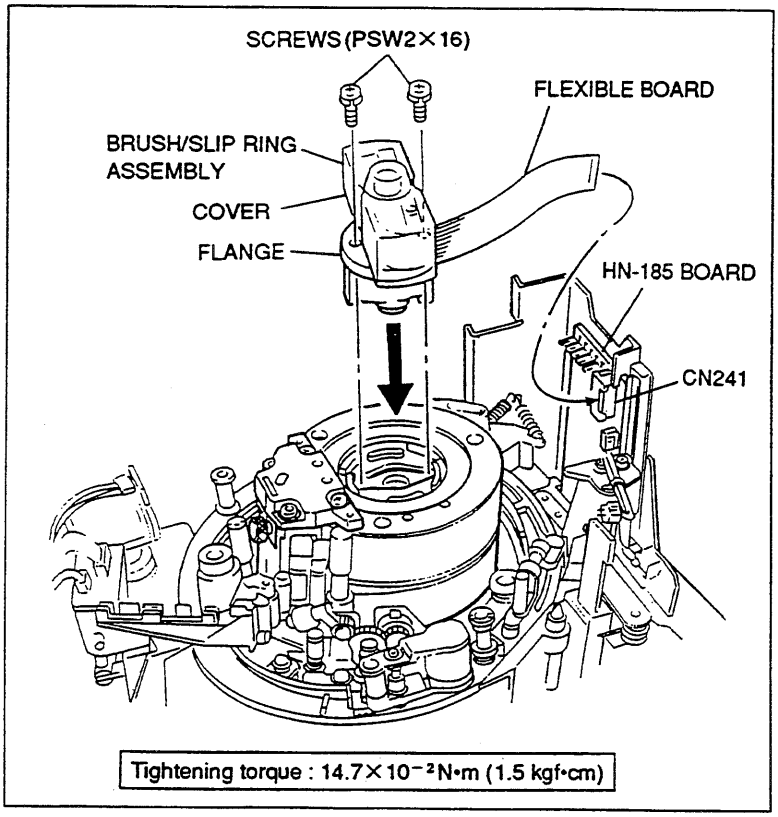
Tightening torque: 14.7×10^{-2} N•m
(1.5 kgf•cm)

Caution

Never apply excessive force to the cover.

16. Connect the Flexible Board

Connect the flexible board into connector CN241 on the HN-185 board.



Install the Brush/Slip Ring Assembly

17. Cleaning

Clean the portion below.

(1) Rotary heads (Refer to Section 7-1-2.)

(2) Upper drum's tape running surface (Refer to Section 7-1-3.)

Caution

After cleaning, wipe with a dry cleaning cloth.

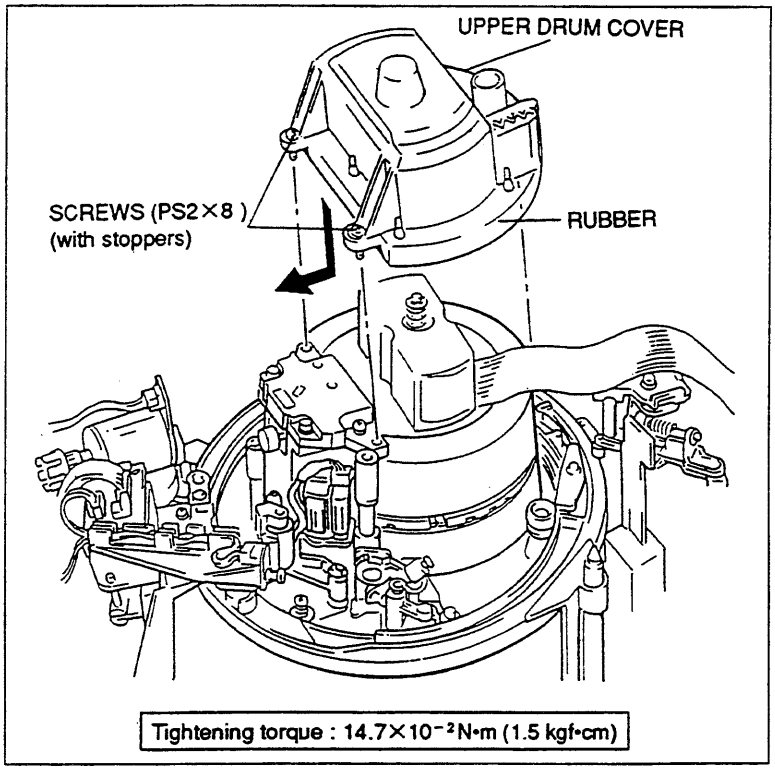
18. Install the Upper Drum Cover

(1) Tighten the two screws while pushing the upper drum cover in the direction of the drum support.

Tightening torque: 14.7×10^{-2} N•m (1.5 kgf•cm)

(2) Confirm that the rubber of the upper drum cover does not turn over.

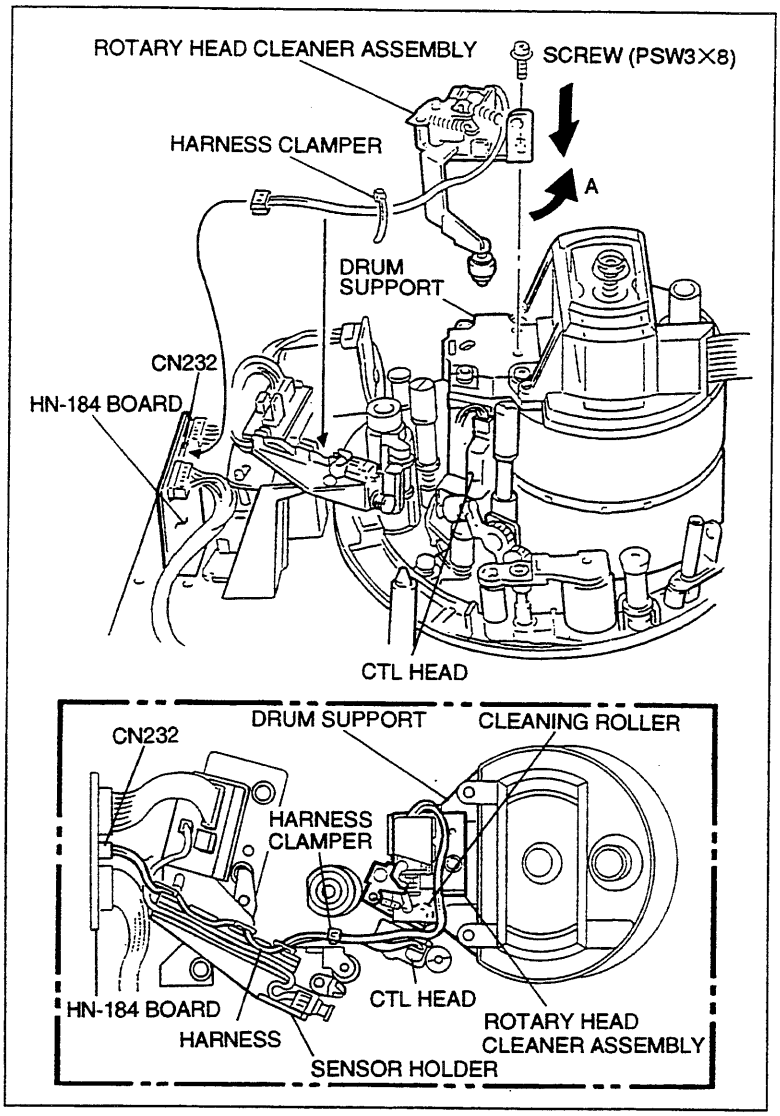
(3) Confirm that the no clearance between the upper drum cover and the upper drum.



Install the Upper Drum Cover

19. Install the Rotary Head Cleaner Assembly

(1) Insert the cleaning roller from the clearance between the drum support and CTL head as shown in the figure.
(2) Align the two pins of the rotary head cleaner assembly with the two holes of the drum support.
(3) Tighten the screw while moving the rotary head cleaner assembly in the direction indicated by the arrow A.
(4) Fix the harness to the sensor holder position shown in the figure.
(5) Connect a connector into connector CN232 on the HN-184 board.
(6) Bind the rotary head cleaner harness with the harness clamper (or the equivalent).



Install the Rotary Head Cleaner Assembly

8-2-1. Inner Drum Assembly Replacement

Adjustment after Replacement

20. Confirm the Tape Running
Refer to Section 8-4-2.

21. Confirm the Video Tracking
Refer to Section 8-4-3.

22. Confirm the CTL Head Height
Refer to Section 8-4-4.

23. Adjust the CTL Head Position
Refer to Section 8-4-5.

24. Confirm the Audio/TC Head Height
Refer to Section 8-4-6.

25. Adjust the Audio/TC Head Position
Refer to Section 8-4-9.

26. Perform the Servo/DT and RF Adjustment
Refer to Section 8-5.

27. Perform the Adjustment after Drum Replacement
Refer to Section 8-6.

8-2-2. Brush/Slip Ring Assembly Replacement

Outline

Replacement
1. Remove the Upper Drum Cover
2. Disconnect the Flexible Board (CN241/HN-185 Board)
3. Remove the Brush/Slip Ring Assembly
4. Cleaning (DR-205 Board's Contacting Points and Brush/Slip Ring Assembly Mounting Surface)
5. Install the Brush/Slip Ring Assembly
6. Connect the Flexible Board (CN241/HN-185 Board)
7. Install the Upper Drum Cover
Adjustment after Replacement
8. Perform the Servo/DT Check (Refer to Section 5-2.) (C05: DIGITAL DT CHECK, C06: ANALOG DT CHECK)
9. Perform the RF Check (Refer to Section 5-3.) (C1: RF CHECK)

Note

When the brush or slip ring was worn or damaged, replace the brush/slip ring assembly.
It cannot be replaced only brush or slip ring.

Tools

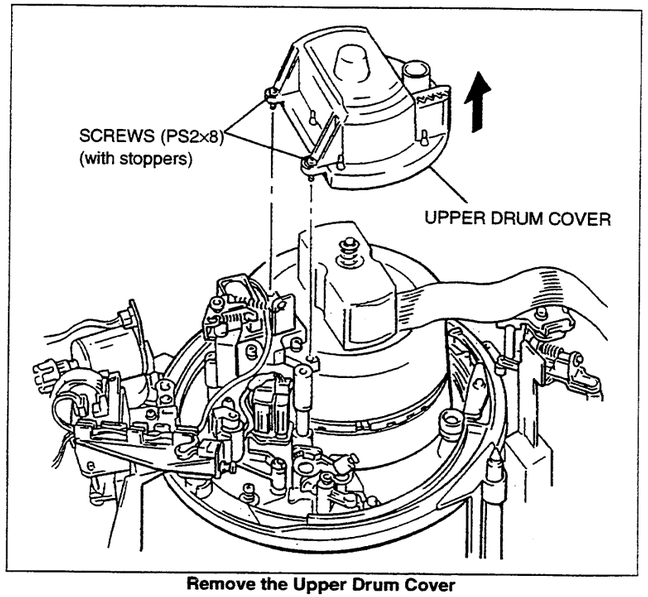
- Torque screwdriver (6 kg•cm) (JB-5251): J-6252-510-A
- Torque screwdriver's bit (+2 mm, l=75 mm): J-6323-420-A

- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Removal

1. **Remove the Upper Drum Cover**
   Loosen the two screws and remove the upper drum cover.

   Note: These screws cannot be removed because of stoppers.



Remove the Upper Drum Cover

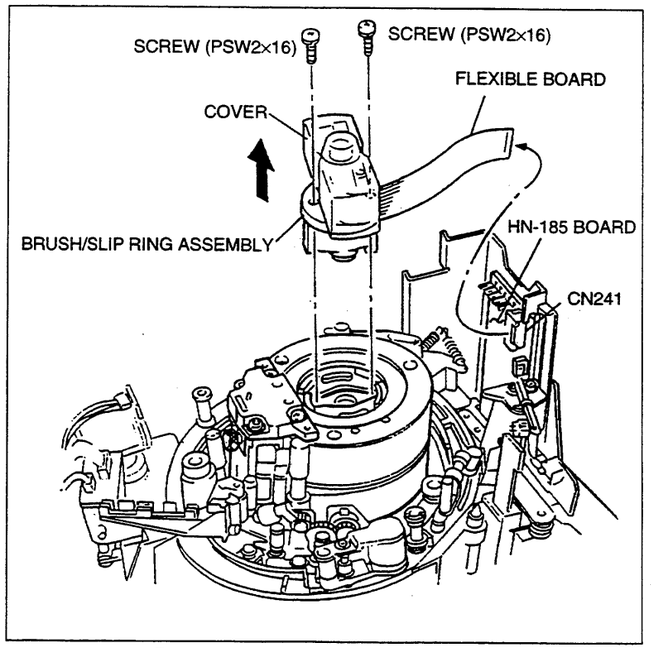
2. **Disconnect the Flexible Board**
   Disconnect the flexible board from connector CN241 on the HN-185 board.

3. **Remove the Brush/Slip Ring Assembly**
   (1) Remove the two screws, then remove the brush/slip ring assembly.

   Caution
   Do not apply excessive force to the brush/slip ring assembly at that time.

   (2) Turn the brush/slip ring assembly upside down, and take out the two screws.

   Caution
   Be careful not to drop the screw into the cover.



Remove the Brush/Slip Ring Assembly

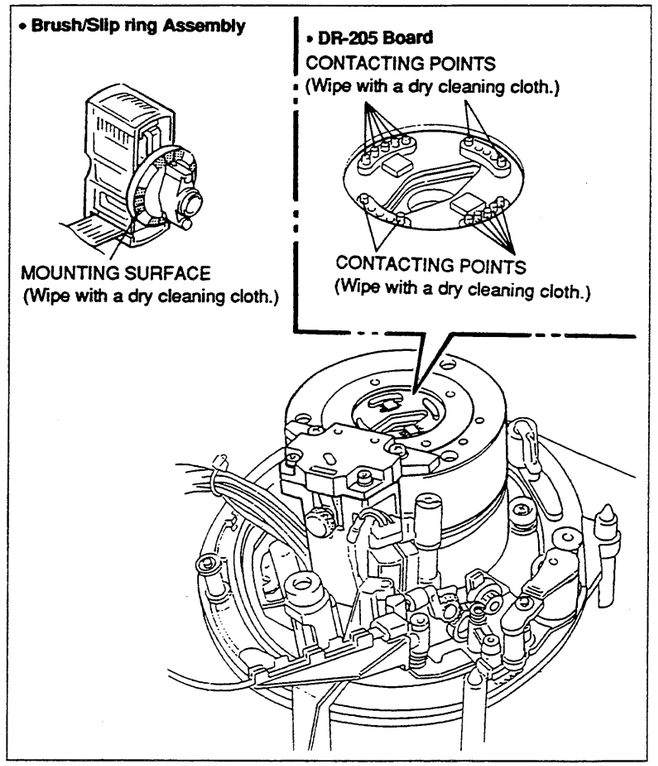
Installation

4. Cleaning

Wipe the brush/slip ring assembly mounting surface (shaded portion in the figure) and the DR-205 board contacting points with a dry cleaning cloth.

Caution

Do not apply cleaning fluid to the contacting points.



Cleaning

5. Install the Brush/Slip Ring Assembly

(1) Insert the two screws taken out in (2) of step 3 into the screw holes of the brush/slip ring assembly.
(2) Install the brush/slip ring assembly in the direction shown in the figure.
(3) Tighten the two screws alternately and gradually while pushing both sides of the flange equally from above.

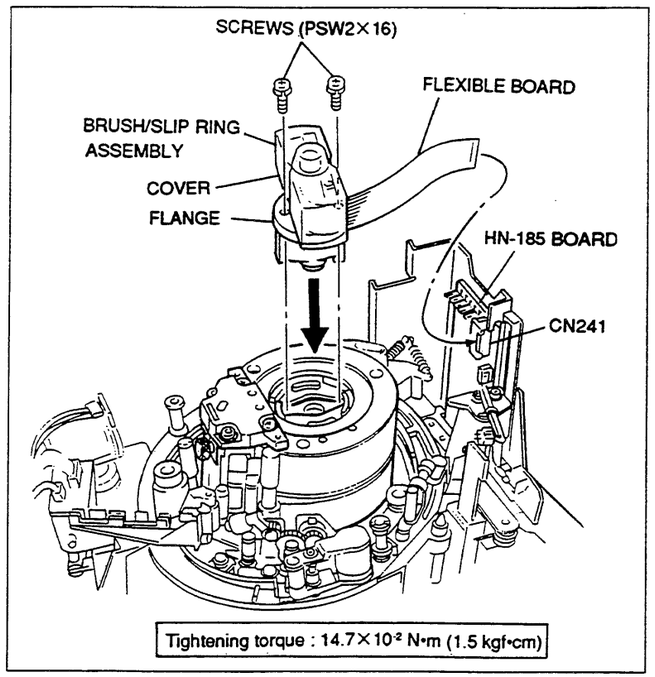
Tightening torque: 14.7×10^{-2} N•m (1.5 kgf•cm)

Caution

Never apply excessive force to the cover.

6. Connect the Flexible Board

Connect the flexible board into connector CN241 on the HN-185 board.



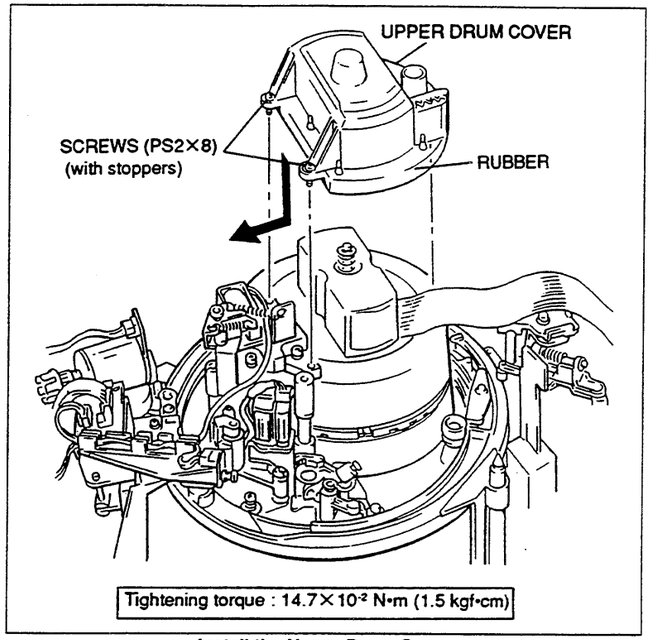
Install the Brush/Slip Ring Assembly

7. Install the Upper Drum Cover

(1) Tighten the two screws while pushing the upper drum cover in the direction of the drum support.

Tightening torque: 14.7×10^{-2} N•m (1.5 kgf•cm)

(2) Confirm that the rubber of the upper drum cover does not turn over.
(3) Confirm that the no clearance between the upper drum cover and the upper drum.



Install the Upper Drum Cover

Adjustment after Replacement

8. Perform the Servo/DT Check

Refer to Section 5-2.
(C05: DIGITAL DT CHECK,
C06: ANALOG DT CHECK)

9. Perform the RF Check

Refer to Section 5-2.
(C1: RF CHECK)

8-2-3. Drum Assembly Replacement

Outline

Replacement
1. Remove the Rotary Head Cleaner Assembly
2. Remove the Upper Drum Cover
3. Disconnect the Flexible Board (CN241/NH-185 Board)
4. Remove the Drum Assembly
5. Cleaning (Drum Assembly Mounting Surfaces and Chassis Mounting Surfaces)
6. Install the Drum Assembly
7. Connect the Flexible Board (CN241/HN-185 Board)
8. Cleaning (Rotary Heads, Upper Drum's Tape Running Surface, and Lower Drum's Tape Running Surface)
9. Install the Upper Drum Cover
10. Install the Rotary Head Cleaner Assembly
Adjustment after Replacement
11. Confirm the Drum Motor Operation (Refer to Section 5-2.) (C015 : DRUM MOTOR)
12. Adjust the Tape Running (Refer to Section 8-4-2.)
13. Adjust the Video Tracking (Refer to Section 8-4-3.)
14. Adjust the CTL Head Height (Refer to Section 8-4-4.)
15. Adjust the CTL Head Position (Refer to Section 8-4-5.)
16. Adjust the Audio/TC Head Height (Refer to Section 8-4-6.)
17. Adjust the Audio/TC Head Azimuth (Refer to Section 8-4-7.)
18. Confirm the Audio/TC Head Head-to-Tape Contact (Refer to Section 8-4-8.)
19. Adjust the Audio/TC Head Position (Refer to Section 8-4-9.)
20. Confirm the Audio Level in REV Mode (Refer to Section 8-4-10.)
21. Confirm the Tape Running (Refer to Section 8-4-2.)
22. Perform the Servo/DT and RF Adjustment (Refer to Section 8-5.)
23. Perform the Adjustment after Drum Replacement (Refer to Section 8-6.)

8-2-3. Drum Assembly Replacement

Note

Be careful not to damage the audio/TC head and peripheral tape guides when removing or installing the drum assembly.

Basic knowledge

For except the periodic replacement time, replace the drum assembly in the following cases.

- The upper or lower drum's tape running surface is damaged and cannot be repaired.
- A correct RF signal waveform cannot be obtained due to the worn upper or lower drum even if the tracking adjustment is performed.
- The VTR performance deteriorates because of the noise or jitter caused by the bearing life.

Tools

- Hexagonal wrench driver (2.5 mm): 7-700-766-04
- Torque screwdriver (6 kg•cm)(JB-5251): J-6252-510-A
- Torque screwdriver (12 kg•cm)(JB-5252): J-6252-520-A
- Torque screwdriver's hexagonal bit (d=2.5 mm, l=120 mm): J-6251-090-A

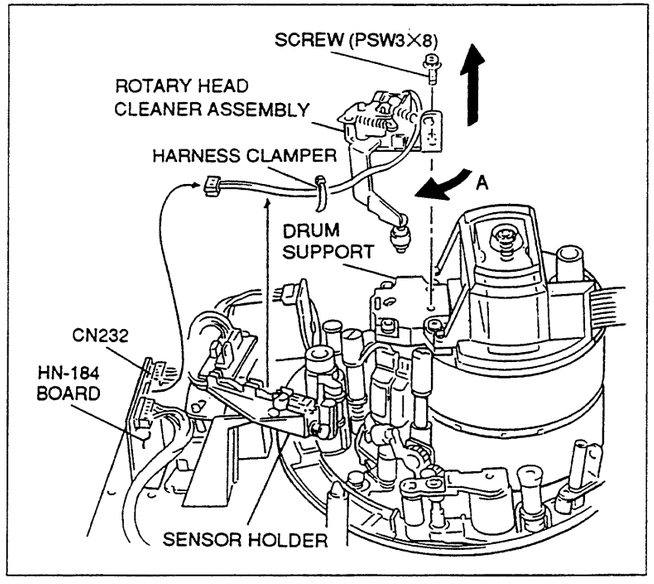
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

8-26

8-2-3. Drum Assembly Replacement

Removal

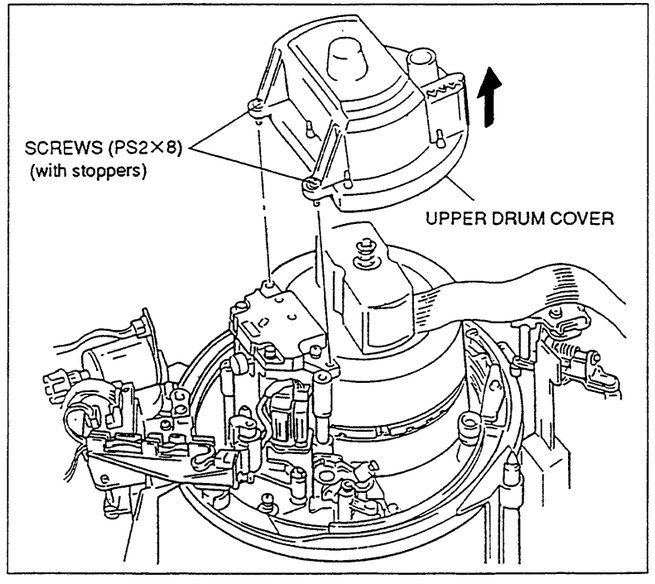
1. **Remove the Rotary Head Cleaner Assembly**
   (1) Disconnect the connector from connector CN232 on the HN-184 board.
   (2) Cut the harness clamper.
   (3) Remove the harness from the sensor holder.
   (4) Remove the screw, shift the rotary head cleaner assembly in the direction indicated by the arrow A, and remove it from the drum support.



Remove the Rotary Head Cleaner Assembly

2. **Remove the Upper Drum Cover**
   Loosen the two screws and remove the upper drum cover.

   Note: These screws cannot be removed because of stoppers.



Remove the Upper Drum Cover

8-27

3. Disconnect the Flexible Board

Disconnect the flexible board from connector CN241 on the HN-185 board.

4. Remove the Drum Assembly

(1) Disconnect the connector on the harness rail.

Caution

Only the unit applied to the following serial number:

- DVW-A500P (EK): S/N 12036 and higher
- DVW-A510P (EK): S/N 10721 and higher
- DVW-CA510P (EK): S/N 10051 and higher
- DVW-A500 (UC): S/N 11288 and higher
- DVW-A510 (UC): S/N 10257 and higher
- DVW-CA510 (UC): S/N 10010 and higher

(2) Rotate the inner drum assembly manually counterclockwise and align mark "⇨" indicated on the board cover with the screw hole of the upper drum assembly.

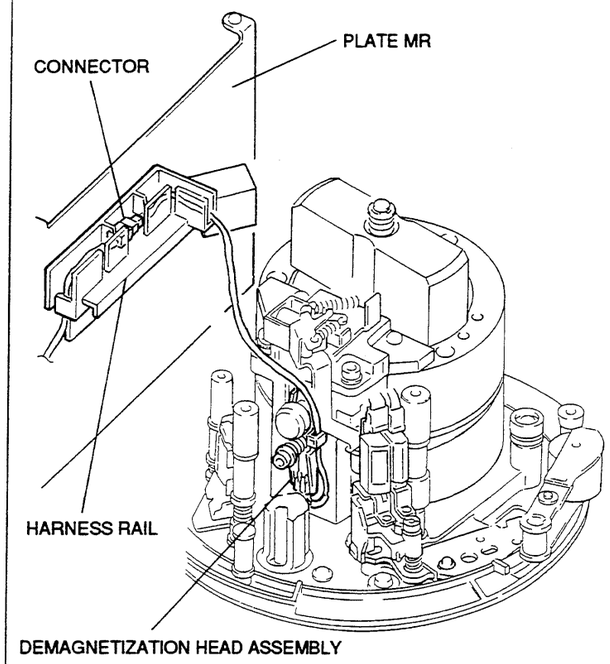
Note: The drum assembly is fixed to the chassis with the three fixing screws (C3×8) in the screw hole. The screw hole of the upper drum assembly coincides with the fixing screw position by aligning it with mark "⇨" on the board cover.

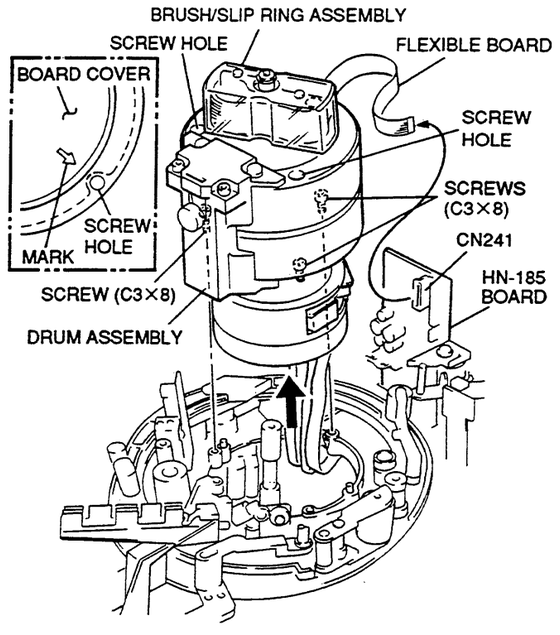
(3) Loosen the screw fully using a hexagonal wrench driver.

Note: These screws cannot be removed because of stoppers.

(4) Loosen other two screws fully in the same way as in steps (2) and (3).

• When removing the connector of the demagnetization head assembly (Only DVW-A500P/A510P/CA510P/A500/A510/CA510)





(5) Raise the drum assembly just above and remove the harness from the harness holder at the bottom.

Caution

Be careful not to raise the drum assembly by holding the brush/slip ring assembly.

(6) Disconnect three connectors CN602, CN610, and CN612 in the state of step (5). The drum assembly can then be removed.

Caution

Be careful not to touch the audio/TC head and peripheral tape guides when removing the drum assembly.

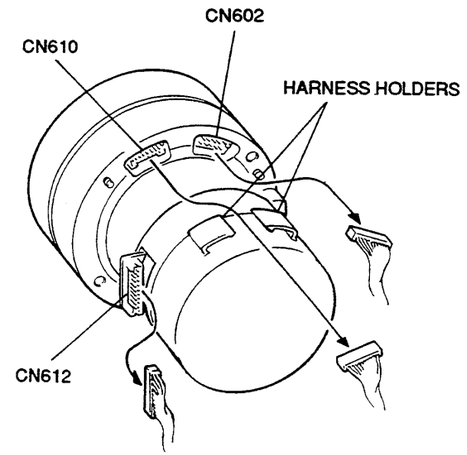
(7) Loosen the hexagonal screw, then remove the demagnetization head assembly from the drum assembly.

Caution

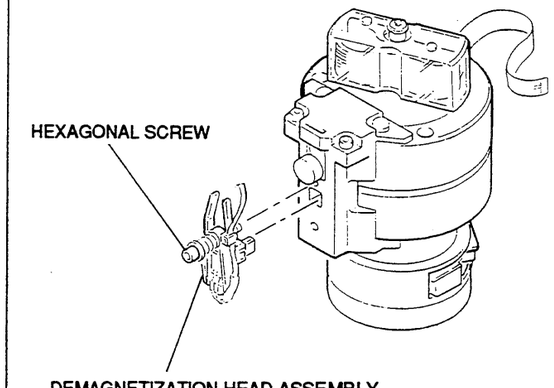
Only the unit applied to the following serial number:

- DVW-A500P (EK): S/N 12036 and higher
- DVW-A510P (EK): S/N 10721 and higher
- DVW-CA510P (EK): S/N 10051 and higher
- DVW-A500 (UC): S/N 11288 and higher
- DVW-A510 (UC): S/N 10257 and higher
- DVW-CA510 (UC): S/N 10010 and higher

• Disconnect the Connectors



• When removing the demagnetization head assembly (Only DVW-A500P/A510P/CA510P/A500/A510/CA510)



Remove the Drum Assembly

8-2-3. Drum Assembly Replacement

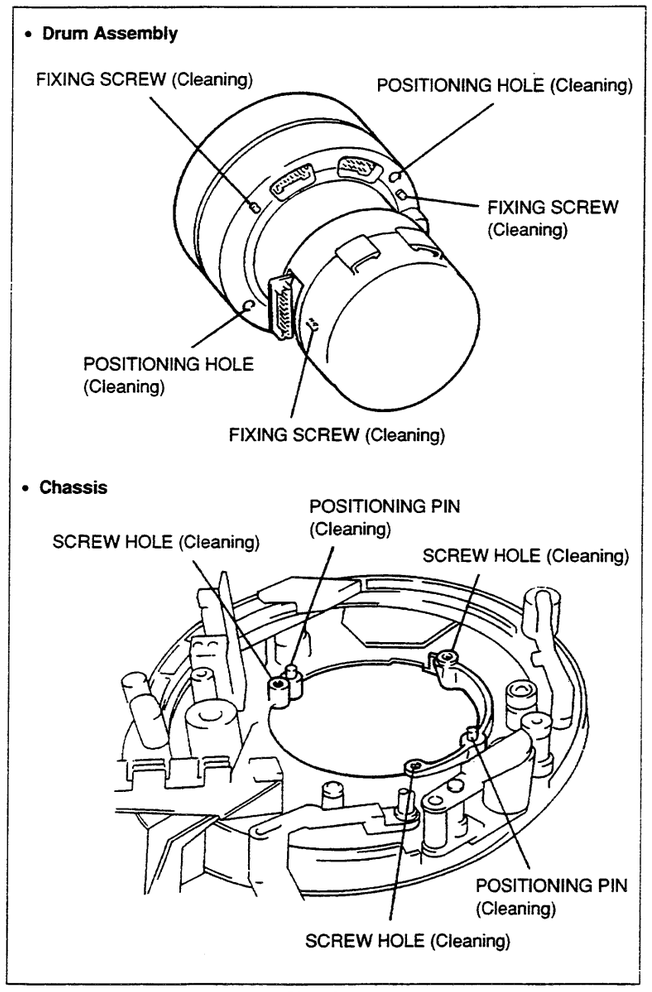
Installation

5. Cleaning

Clean the new drum assembly mounting surfaces and chassis mounting surfaces with a cleaning cloth moistened with cleaning fluid.

Caution

After cleaning, wipe with a dry cleaning cloth.



Cleaning

8-29

6. Install the Drum Assembly

(1) Confirm that there is no clearance between the spacer and the washer. (If clearance exists, tighten the hexagonal screw and the spacer.)
Then insert the demagnetization head into the hole of the drum support, and tighten the hexagonal screw.

Tightening torque: 39.2×10 N•m
(4 kgf•cm)

Caution

Only the unit applied to the following serial number:

- DVW-A500P (EK): S/N 12036 and higher
- DVW-A510P (EK): S/N 10721 and higher
- DVW-CA510P (EK): S/N 10051 and higher
- DVW-A500 (UC): S/N 11288 and higher
- DVW-A510 (UC): S/N 10257 and higher
- DVW-CA510 (UC): S/N 10010 and higher

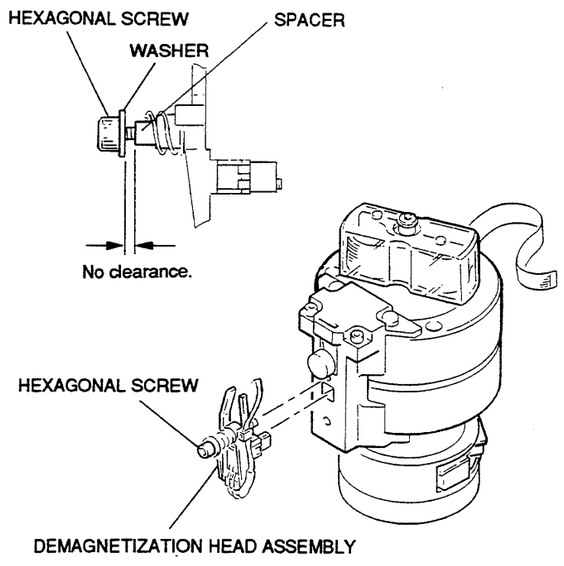
(2) Hold the drum assembly as shown in the figure and connect the three connectors disconnected in (6) of step 4.

Caution

1. Hold the height determining plate and the drum support at that time. Be careful not to hold the upper drum and the brush/slip ring assembly.
2. Pay attention to the direction of the connectors.

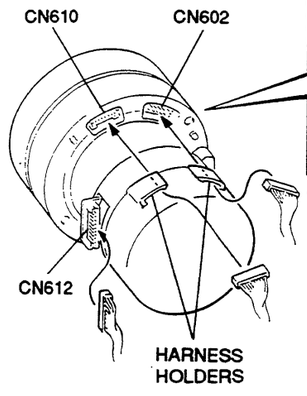
(3) Fix the harness by a harness holder as shown in the figure.

• When installing the demagnetization head assembly (Only DVW-A500P/A510P/CA510P/A500/A510/CA510)

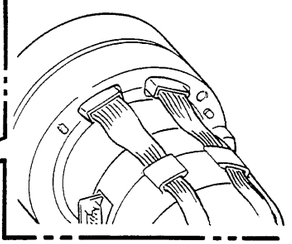


Tightening torque : 39.2×10⁻² N·m(4kgf·cm)

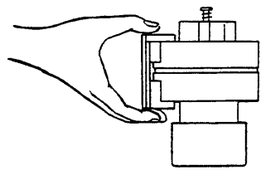
• When connecting the Connectors



• How to fix the Harness



• How to hold the Drum Assembly



(4) Align the two positioning holes of the drum assembly with the two positioning pin of the chassis while passing the harness under the chassis.

Caution

1. Be careful not to touch the audio/TC head and tape guide at that time.
2. Be careful not to put the harness between the lower drum and the chassis.

(5) Confirm that the drum assembly is firmly inserted into the positioning pins.
(6) Rotate the inner drum assembly manually counterclockwise and align the upper drum assembly holes with the fixing screw positions.
(7) Tighten the screw tentatively.
(8) Tighten other two screws tentatively in the same way as in steps (6) and (7).
(9) Tighten the three screws each by two or three turns in the order of counterclockwise.

Tightening torque: 78.4×10⁻² N•m
(8 kgf•cm)

(10) Connect the connector of the demagnetization head assembly into the connector on the harness rail.

Caution

Only the unit applied to the following serial number:

- DVW-A500P (EK): S/N 12036 and higher
- DVW-A510P (EK): S/N 10721 and higher
- DVW-CA510P (EK): S/N 10051 and higher
- DVW-A500 (UC): S/N 11288 and higher
- DVW-A510 (UC): S/N 10257 and higher
- DVW-CA510 (UC): S/N 10010 and higher

7. Connect the Flexible Board

Connect the flexible board into connector CN241 on the HN-185 board, then lock.

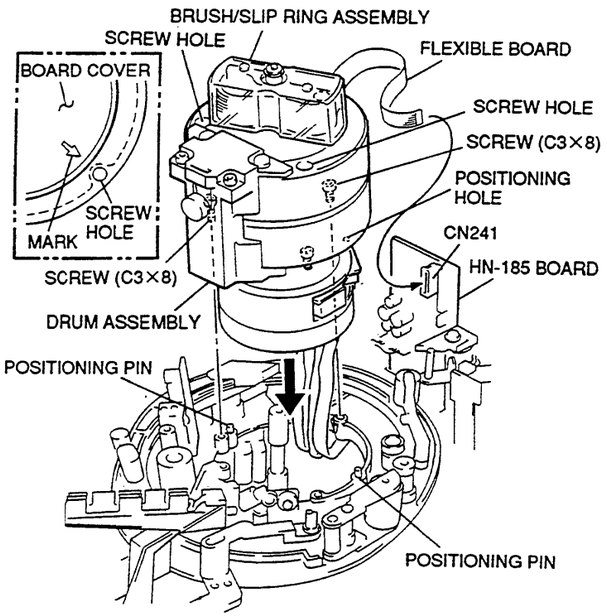
8. Cleaning

Clean the portion below.
(1) Rotary heads (Refer to Section 7-1-2.)
(2) Upper drum's tape running surface (Refer to Section 7-1-3.)
(3) Lower drum's tape running surface (Refer to Section 7-1-4.)

Caution

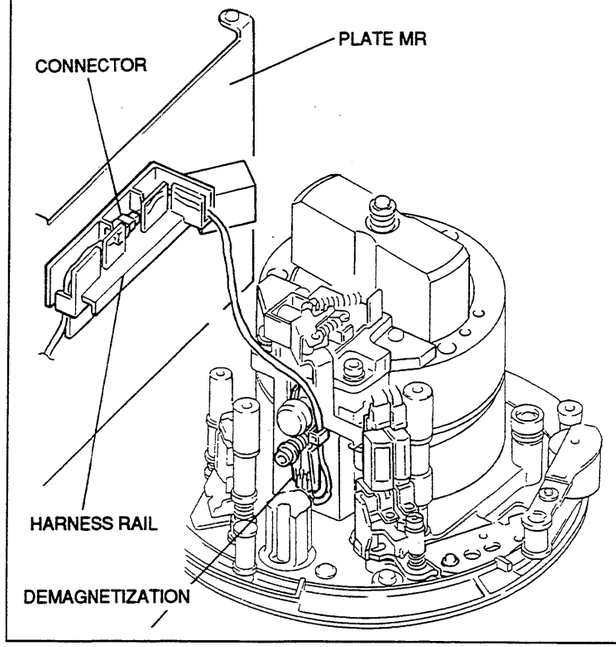
After cleaning, wipe with a dry cleaning cloth.

• When installing the Drum Assembly on the Chassis



Tightening torque : 78.4×10⁻²N·m (8 kgf·cm)

• When installing the connector of the demagnetization head assembly (Only DVW-A500P/A510P/CA510P/A500/A510/CA510)



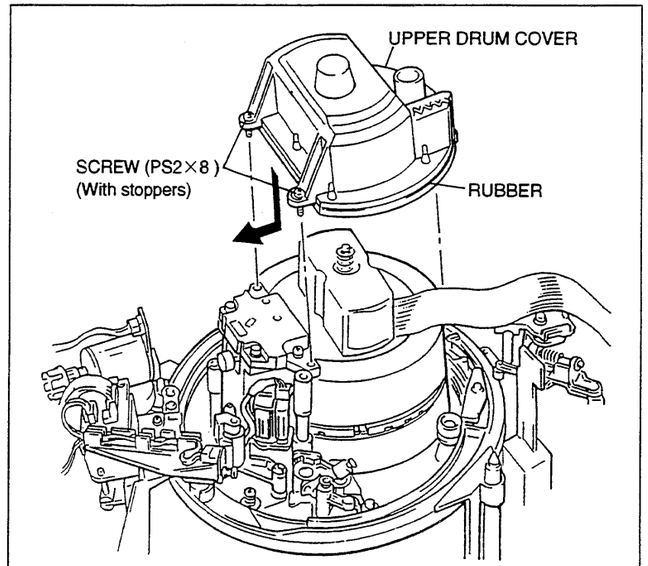
Install the Drum Assembly

9. Install the Upper Drum Cover

(1) Tighten the two screws while pushing the upper drum cover in the direction of the drum support.

Tightening torque: 14.7×10^{-2} N•m (1.5 kgf•cm)

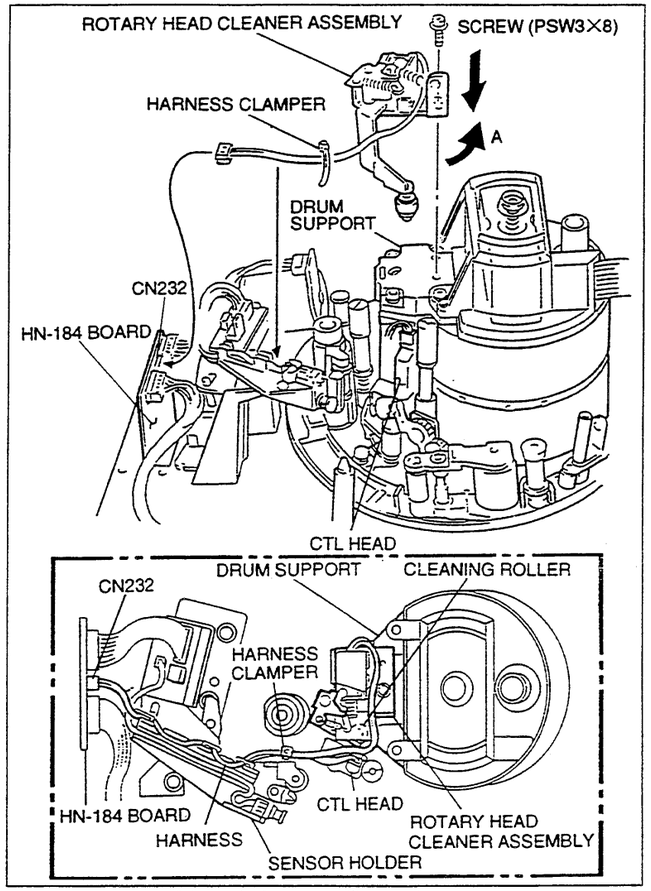
(2) Confirm that the rubber of the upper drum cover does not turn over.
(3) Confirm that the no clearance between the upper drum cover and the upper drum.



Install the Upper Drum Cover

10. Install the Rotary Head Cleaner Assembly

(1) Insert the cleaning roller from the clearance between the drum support and CTL head as shown in the figure.
(2) Align the two pins of the rotary head cleaner assembly with the two holes of the drum support.
(3) Tighten the screw while moving the rotary head cleaner assembly in the direction indicated by the arrow A.
(4) Fix the harness to the sensor holder position shown in the figure.
(5) Connect the connector into connector CN232 on the HN-184 board.
(6) Bind the rotary head cleaner harness with the harness clamper (or the equivalent).



Install the Rotary Head Cleaner Assembly

Adjustment after Replacement

11. Confirm the Drum Motor Operation
Refer to Section 5-2. (C015 : DRUM MOTOR)

12. Adjust the Tape Running
Refer to Section 8-4-2.

13. Adjust the Video Tracking
Refer to Section 8-4-3.

14. Adjust the CTL Head Height
Refer to Section 8-4-4.

15. Adjust the CTL Head Position
Refer to Section 8-4-5.

16. Adjust the Audio/TC Head Height
Refer to Section 8-4-6.

17. Adjust the Audio/TC Head Azimuth
Refer to Section 8-4-7.

18. Confirm the Audio/TC Head Head-to-Tape Contact
Refer to Section 8-4-8.

19. Adjust the Audio/TC Head Position
Refer to Section 8-4-9.

20. Confirm the Audio Level in REV Mode
Refer to Section 8-4-10.

21. Confirm the Tape Running
Refer to Section 8-4-2.

22. Perfrom the Servo/DT and RF Adjustment
Refer to Section 8-5.

23. Perform the Adjustment after Drum Replacement
Refer to Section 8-6.

8-2-4. Cleaning Roller and Rotary Head Cleaner Assembly Replacement

Outline

Replacement
1. Remove the Harness (CN232/HN-184 Board)
2. Remove the Rotary Head Cleaner Assembly
3. Replace the Cleaning Roller
4. Install the Rotary Head Cleaner Assembly
5. Adjust the Cleaning Roller Position
6. Install the Harness (CN232/HN-184 Board)
Adjustment after Replacement
7. Confirm the Cleaning Solenoid Operation (Refer to Section 5-2.) (C023: CLEANING ROLLER)

Note

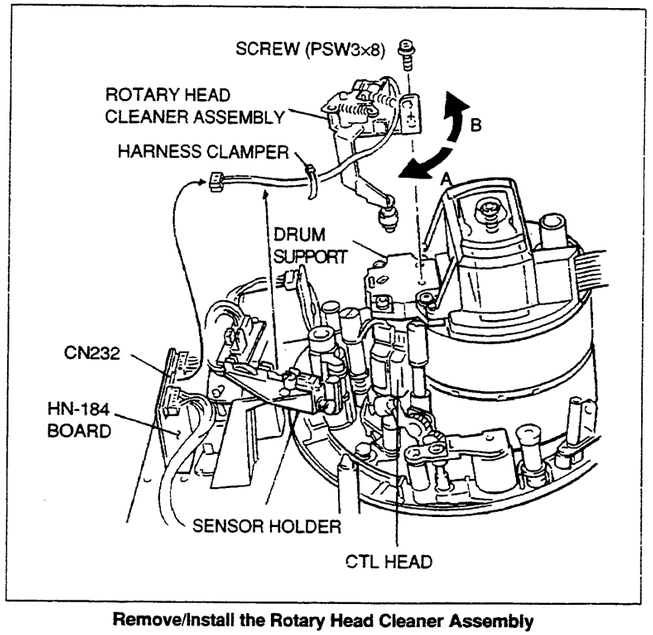
When the cleaning roller is replaced, it is recommended to replace the CR spacer at the same time.

- CR spacer : 3-182-765-02

Removal

1. **Remove the Harness**
   (1) Disconnect the connector from connector CN232 on the HN-184 board.
   (2) Cut the harness clamper.
   (3) Remove the harness from the sensor holder.

2. **Remove the Rotary Head Cleaner Assembly**
   Remove the screw, shift the rotary head cleaner assembly in the direction indicated by the arrow A, and remove it from the drum support.

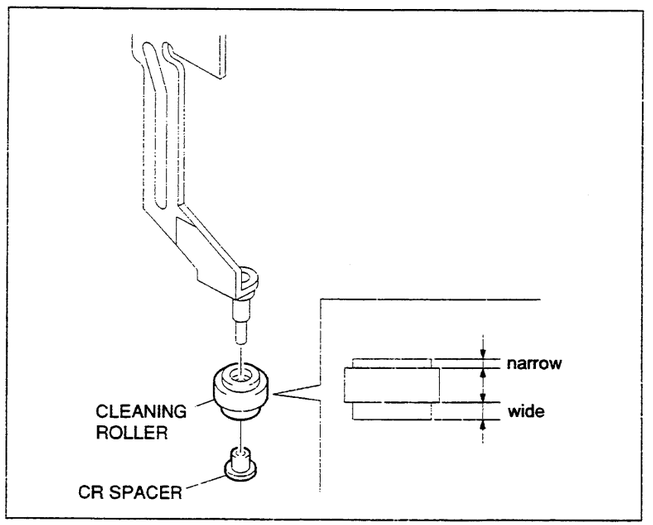


Remove/Install the Rotary Head Cleaner Assembly

3. **Replace the Cleaning Roller**
   (1) Remove the CR spacer, and remove the cleaning roller.
   (2) Pass a new cleaning roller through the shaft as shown in the figure. Then fix the cleaning roller by the CR spacer.
   (3) Move the cleaning roller in the vertical direction.
   At this time, confirm that there is no vertical play.

Installation

4. **Install the Rotary Head Cleaner Assembly**
   (1) Insert the cleaning roller from the clearance between the drum support and CTL head.
   (2) Align the two pins of the rotary head cleaner assembly with the two holes of the drum support.
   (3) Tighten the screw while moving the rotary head cleaner assembly in the direction indicated by the arrow B.
   (4) Write the time of replacement of the cleaning roller on the hours label pasted on the rotating head cleaner assembly.



Replace the Cleaning Roller

5. Adjust the Cleaning Roller Position

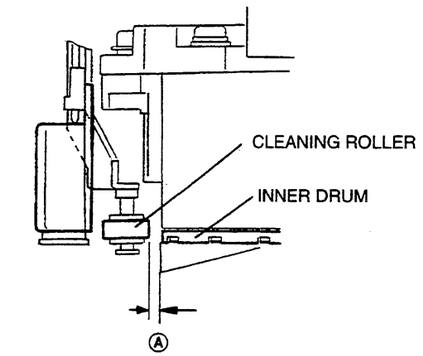
(1) Check that the cleaning roller does not come in contact with the inner drum as visual. (Spec.1)

If the cleaning roller comes in contact with the inner drum, bend the portion B of the video head cleaner sub assembly in the direction of the arrow C.

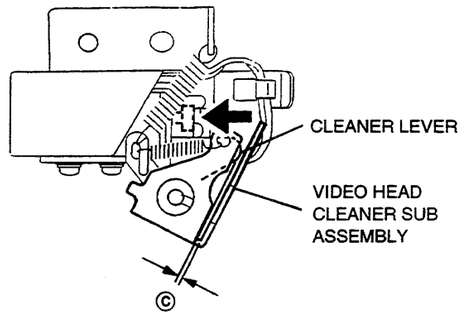
(2) Press the iron core in the direction of the arrow. At that time, check that clearance exists between the cleaner lever and the video head cleaner sub assembly. (Spec.2)

If clearance does not exist, bend the portion B of the video head cleaner sub assembly in the direction of the arrow D.

(3) Repeat steps (1) through (2) above until the specifications 1 through 2 are satisfied.

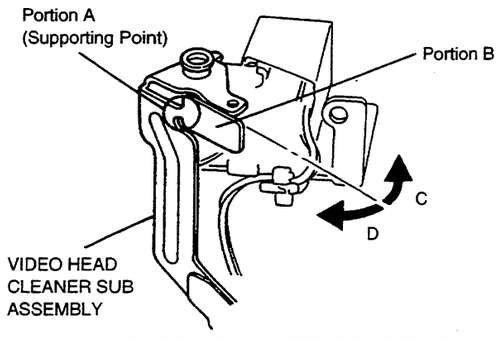


Spec.1: Ⓐ=Clearance exists.



Spec.2: Ⓒ=Clearance exists.

• When the specifications are not satisfied:



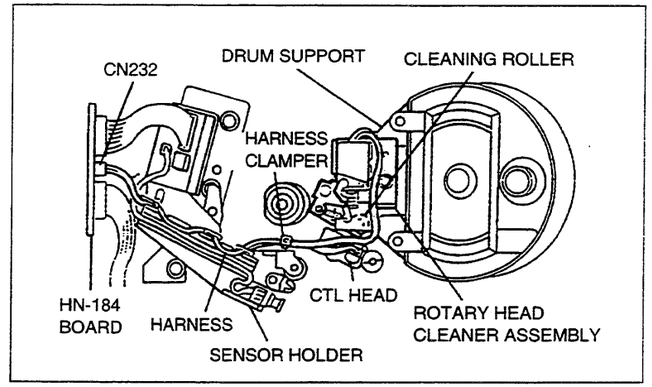
Cleaning Roller Position Adjustment

6. Install the harness

(1) Fix the harness to the sensor holder position shown in the figure.
(2) Connect a connector into connector CN232 on the HN-184 board.
(3) Bind the rotary head cleaner harness with the harness clamper (or the equivalent).

Adjustment after Replacement

7. Confirm the Cleaning Solenoid Operation
Refer to Section 5-2.
(C023: CLEANING ROLLER)



Install the Harness

8-2-5. AT Head Cleaner Replacement

Outline

Replacement
1. Remove the CL Arm Assembly
2. Install the CL Arm Assembly
3. Confirm the CL Arm Assembly Operation

Note

- When the cleaning roller becames dirty or was damaged, replace the CL arm assembly.
- Do not use the stop washer fixing the CL arm assembly again after it was removed once.
- Adjustment after the CL arm assembly replacement is not required. However, confirm the CL arm assembly operation.

Removal

1. **Remove the CL Arm Assembly**
   (1) Turn the M gear of the gear box assembly manually and move the CL arm assembly to the position shown in the figure.

   Note: Move the CL arm assembly to the front of the HN-185 board. If not, the CL arm assembly cannot be removed because the stop washer is hidden by other parts.

   (2) Remove the stop washer at the top of the CL arm.
   (3) Remove the CL arm assembly from the threading ring.

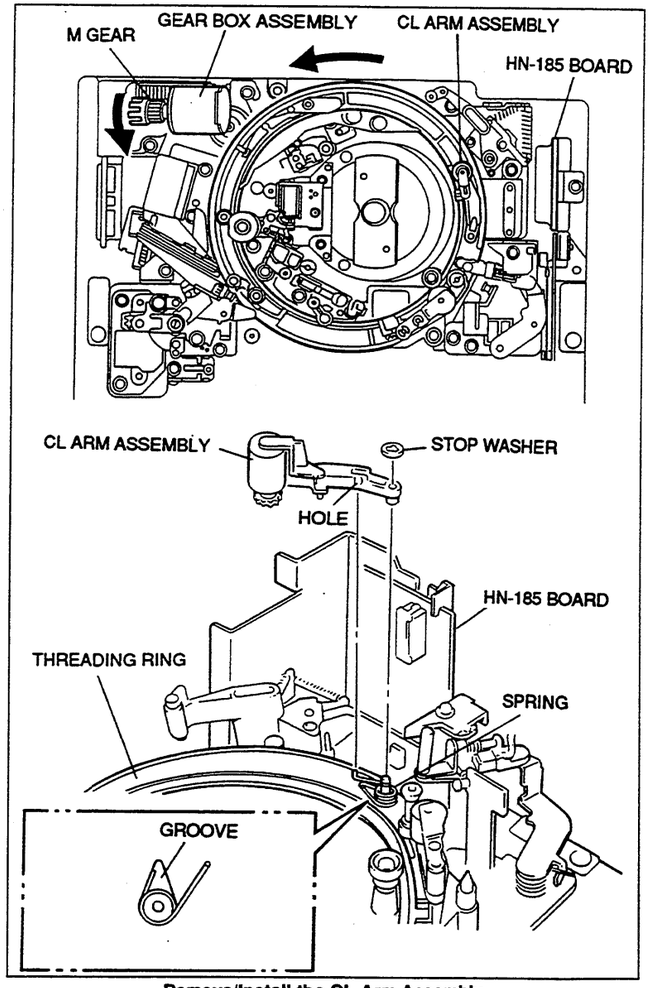
   Caution
   Do not remove the spring at the bottom of the CL arm from the shaft.

Installation

2. **Install the CL Arm Assembly**
   (1) Pass a new CL arm assembly through the shaft while hooking the spring as shown in the figure.

   Caution
   Insert the short-end spring into the groove of the threading ring and the long-end spring into the hole of the CL arm assembly.

   (2) Fix the CL arm assembly by the stop washer.



Remove/Install the CL Arm Assembly

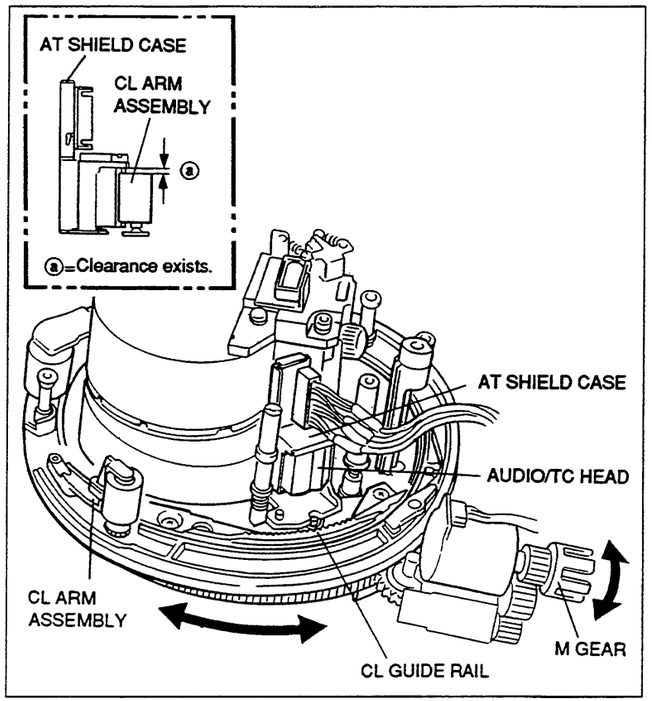
8-2-5. AT Head Cleaner Replacement

3. Confirm the CL Arm Assembly Operation

(1) Turn the M gear of the gear box assembly manually and confirm the items below while repeating the threading and unthreading.

- The CL arm assembly moves along the CL guide rail.
- The cleaning roller cleans the audio/TC head.
- A clearance exists between the CL arm assembly and AT shield case while the audio/TC head is cleaned.

(2) Turn the power on and confirm that the CL arm assembly smoothly operates while repeating the threading and unthreading.



Confirm the CL Arm Assembly Operation

8-2-7. Pinch Roller Replacement

Outline

Replacement
1. Remove the Pinch Arm Assembly
2. Install the Pinch Arm Assembly
3. Adjust the Pinch Arm Assembly Vertical Play
4. Cleaning (Pinch Roller Surface)
Adjustment after Replacement
5. Confirm the Tape Running (Refer to Section 8-4-2.)
6. Confirm the Audio/TC Head Height (Refer to Section 8-4-6.)
7. Confirm the Audio/TC Head Azimuth (Refer to Section 8-4-7.)

Note

- When the pinch roller was damaged or worn, replace the pinch roller assembly.
- Do not use the stop washer fixing the pinch arm assembly again after it was removed once.

Tools

- Thickness gauge: 9-911-053-00
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Removal

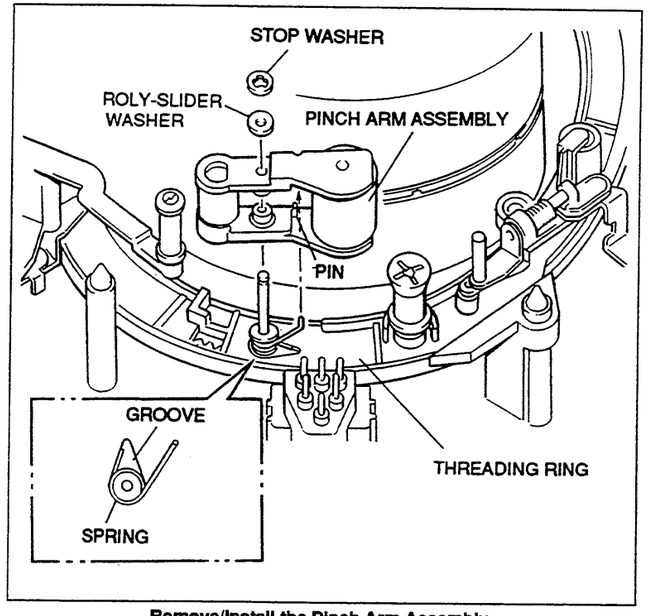
1. Remove the Pinch Arm Assembly

(1) Remove the stop washer at the top of the pinch arm.

Caution
If a poly-slider washer is inserted between the pinch arm assembly and the stop washer, remove it. This poly-slider washer is used for vertical play adjustment.

(2) Remove the pinch arm assembly from the threading ring.

Caution
Do not remove the poly-slider washer and spring at the bottom of the pinch arm assembly from the shaft.



Remove/Install the Pinch Arm Assembly

Installation

2. Install the Pinch Arm Assembly

(1) Pass a new pinch arm assembly through the shaft while hooking the spring as shown in the figure.

Caution
Insert the short-end spring into the groove of the threading ring and hook the long-end spring to the pin of the pinch arm assembly.

(2) Fix the pinch arm assembly by the stop washer.

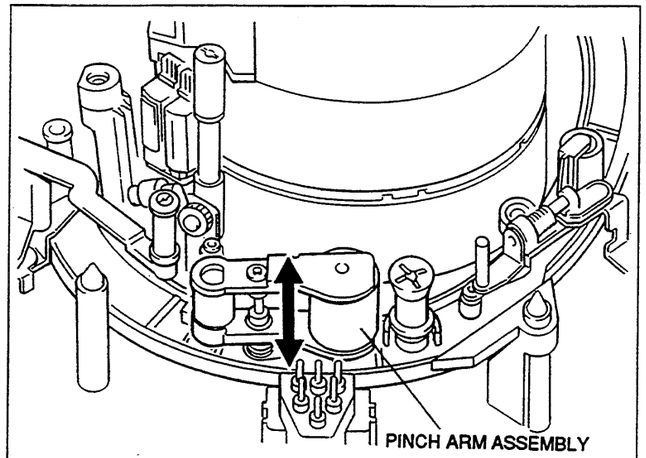
(3) Push the pinch arm assembly manually in the direction of the drum, then release. At that time, confirm that the pinch arm assembly smoothly returns to the former position.

8-2-7. Pinch Roller Replacement

3. **Adjust the Pinch Arm Assembly Vertical Play**
   Move the Pinch Arm Assembly in the vertical direction.
   At this time, confirm that the vertical play satisfies the specification.

   If the specification is not satisfied, perform the adjustment below.
   ① Remove the stop washer.
   ② Install or remove the poly-slider washer at the upper of the Pinch Arm.
   ③ Fix the pinch arm assembly by the stop washer, confirm again that the specification is met.

4. **Cleaning**
   Clean the pinch roller surface with a cleaning cloth moistened with cleaning fluid.



Spec.: Vertical play
0.05 mm to 0.2 mm

* If the specification is not satisfied.:
• Poly-slider washer for adjustment

Diameter	Thickness	Parts No.
3.0mm	0.13mm	3-701-439-01
	0.25mm	3-701-439-11

Adjust the Pinch Arm Assembly Vertical Play

Adjustment after Replacement

5. **Confirm the Tape Running**
   Refer to Section 8-4-2.

6. **Confirm the Audio/TC Head Height**
   Refer to Section 8-4-6.

7. **Confirm the Audio/TC Head Azimuth**
   Refer to Section 8-4-7.

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8-2-8. Audio/TC Head Replacement

Outline

Replacement
1. Remove the CL Guide Rail
2. Disconnect the Connector
3. Remove the Audio/TC Head Assembly
4. Remove the Audio/TC Head
5. Install the Audio/TC Head
6. Install the Audio/TC Head Assembly
7. Connect the Connector
8. Install the CL Guide Rail
9. Cleaning (Audio/TC Head Surface)
Adjustment after Replacement
10. Adjust the Audio/TC Head Zenith (Refer to Section 8-4-1.)
11. Adjust the Tape Running (Refer to Section 8-4-2.)
12. Adjust the Audio/TC Head Height (Refer to Section 8-4-6.)
13. Adjust the Audio/TC Head Azimuth (Refer to Section 8-4-7.)
14. Adjust the Audio/TC Head Head-to-Tape Contact (Refer to Section 8-4-8.)
15. Adjust the Audio/TC Head Position (Refer to Section 8-4-9.)
16. Confirm the Audio Level in REV Mode (Refer to Section 8-4-10.)
17. Confirm the Video Tracking (Refer to Section 8-4-3.)
18. Confirm the Tape Running (Refer to Section 8-4-2.)
19. Perform the Adjustment after Audio/TC Head Replacement (Refer to Section 8-7.)

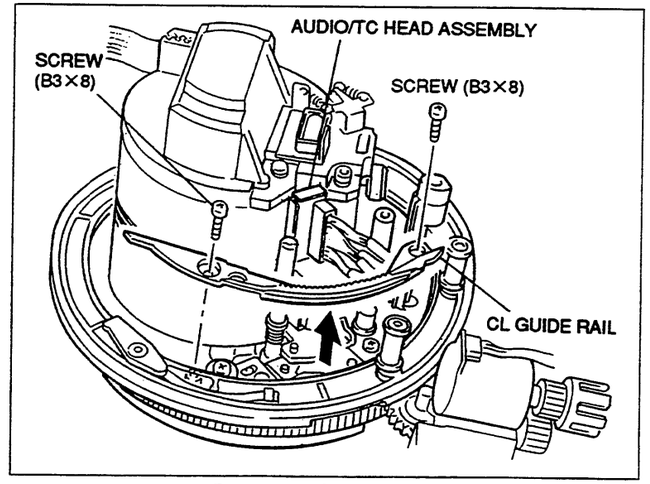
Tools

- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01
- Torque screwdriver (6 kg•cm) (JB-5251): J-6252-510-A
- Torque screwdriver's bit (+2 mm, l=75 mm): J-6323-420-A

8-2-8. Audio/TC Head Replacement

Removal

1. **Remove the CL Guide Rail**
   Remove the two screws, then remove the CL guide rail.



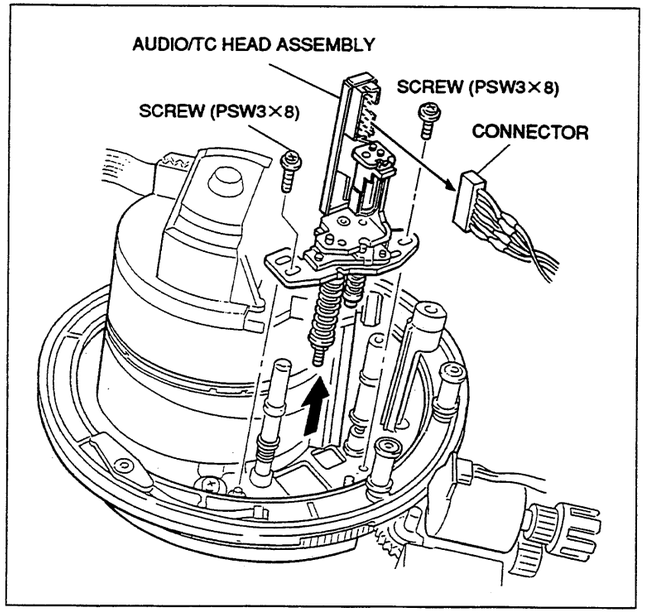
Remove the CL Guide Rail

2. **Disconnect the Connector**
   Disconnect a connector on the audio/TC head board.

3. **Remove the Audio/TC Head Assembly**
   Remove the two screws, then remove the audio/TC head assembly from the unit.

Caution

Be careful not to touch the drum (especially rotary heads). Also, take care not to damage the peripheral tape guides.



Remove the Audio/TC Head Assembly

4. Remove the Audio/TC Head

(1) Remove the two screws, then remove the audio/TC head and adjustment plate from the AT bracket.

(2) Remove the AT shield case.

Installation

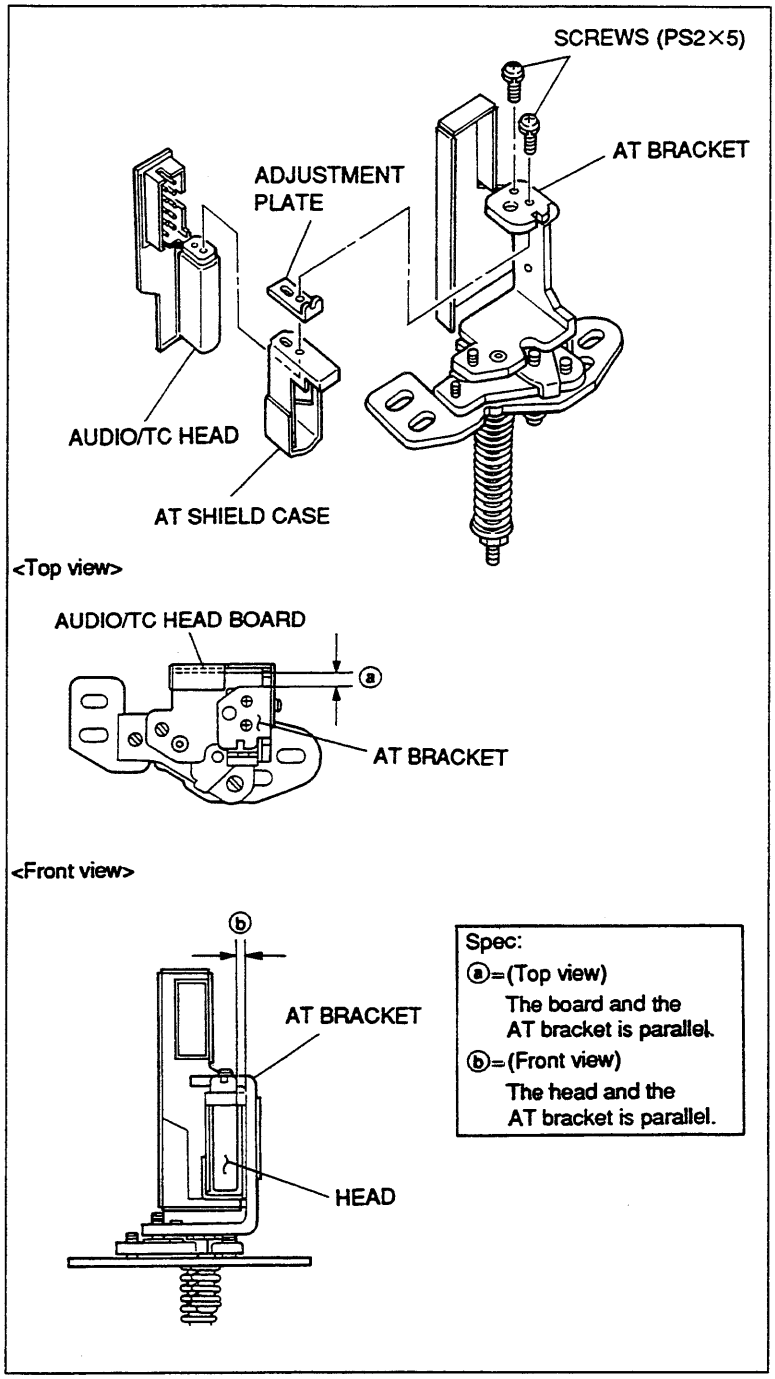
5. Install the Audio/TC Head

(1) Put a new head into the AT shield case and align the hole position.

(2) Align the hole position with the adjustment plate put between the audio/TC head and AT bracket, then tighten the two screws tentatively.

(3) Tighten the screws after confirming that the specification is satisfied.

Tightening torque: 19.6×10^{-2} N•m
(2 kg•cm)



Remove/Install the Audio/TC Head

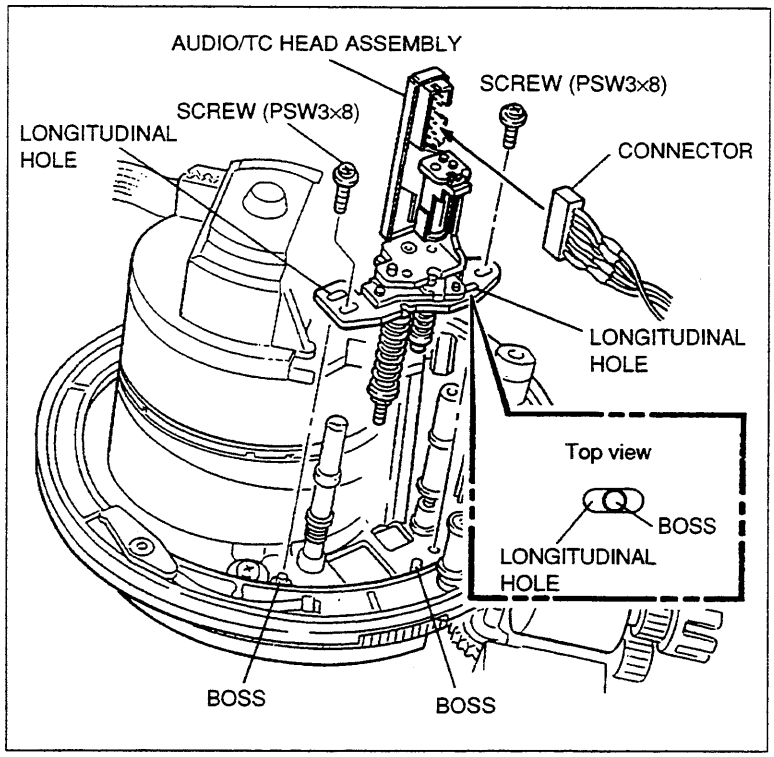
6. Install the Audio/TC Head Assembly

(1) Align the two longitudinal holes of the Audio/TC head assembly with the two bosses of the chassis.

Caution

1. Be careful not to touch the drum (especially rotary heads). Also, take care not to damage the peripheral tape guides.
2. Be careful not to damage the audio/TC head surface.

(2) Align the bosses of the chassis with center of the longitudinal holes and tighten the two screws.



Install the Audio/TC Head Assembly

7. Connect the Connector

Connect a connector into the audio/TC head board.

8. Install the CL Guide Rail

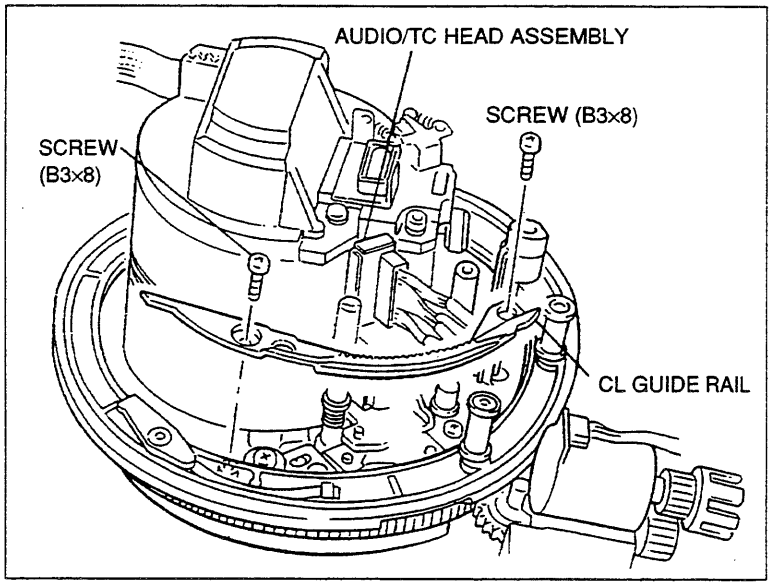
Install the CL guide rail with two screws.

9. Cleaning

Clean the audio/TC head surface with a cleaning cloth moistened with cleaning fluid.

Caution

After cleaning, wipe with a dry cleaning cloth.



Install the CL Guide Rail

8-2-8. Audio/TC Head Replacement

Adjustment after Replacement

10. **Adjust the Audio/TC Head Zenith**
    Refer to Section 8-4-1.

11. **Adjust the Tape Running**
    Refer to Section 8-4-2.

12. **Adjust the Audio/TC Head Height**
    Refer to Section 8-4-6.

13. **Adjust the Audio/TC Head Azimuth**
    Refer to Section 8-4-7.

14. **Adjust the Audio/TC Head Head-to-Tape Contact**
    Refer to Section 8-4-8.

15. **Adjust the Audio/TC Head Position**
    Refer to Section 8-4-9.

16. **Confirm the Audio Level in REV Mode**
    Refer to Section 8-4-10.

17. **Confirm the Video Tracking**
    Refer to Section 8-4-3.

18. **Confirm the Tape Running**
    Refer to Section 8-4-2.

19. **Perform the Adjustment after Audio/TC Head Replacement**
    Refer to Section 8-7.

8-2-9. CTL Head Replacement

Outline

Replacement
1. Disconnect the Connector
2. Remove the CTL Head Assembly
3. Remove the CTL Head
4. Install the CTL Head
5. Install the CTL Head Assembly
6. Connect the Connector
7. Cleaning (CTL Head Surface)
Adjustment after Replacement
8. Adjust the Tape Running (Refer to Section 8-4-2.)
9. Adjust the CTL Head Height (Refer to Section 8-4-4.)
10. Adjust the CTL Head Position (Refer to Section 8-4-5.)
11. Confirm the Tape Running (Refer to Section 8-4-2.)
12. Confirm the Audio/TC Position (Refer to Section 8-4-9.)
13. Adjust Drum Phase (Refer to Section 8-5-1.)

Tools

- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01
- Torque screwdriver (6 kg•cm) (JB-5251): J-6252-510-A
- Torque screwdriver's bit (+2 mm, l=75 mm): J-6323-420-A

Note

The replacement procedures for the CTL head depend on the serial number of the unit.

① If the unit applies to the following serial number, replace the CTL head referring to "For the New Component" (page 8-44 to 8-45).

- DVW-A510P (EK) : S/N 10721 and higher
- DVW-510P (EK) : S/N 10251 and higher
- DVW-CA510P (EK) : S/N 10051 and higher
- DVW-A510 (UC) : S/N 10257 and higher
- DVW-510 (UC) : S/N 10098 and higher
- DVW-CA510 (UC) : S/N 10010 and higher

② If the unit applies to the following serial number, replace the CTL head referring to "For the Old Component" (page 8-46 to 8-48).

- DVW-A510P (EK) : S/N 10001 thru. 10720
- DVW-510P (EK) : S/N 10001 thru. 10250
- DVW-CA510P (EK) : S/N 10001 thru. 10050
- DVW-A510 (UC) : S/N 10001 thru. 10256
- DVW-510 (UC) : S/N 10001 thru. 10097
- DVW-CA510 (UC) : S/N 10001 thru. 10009

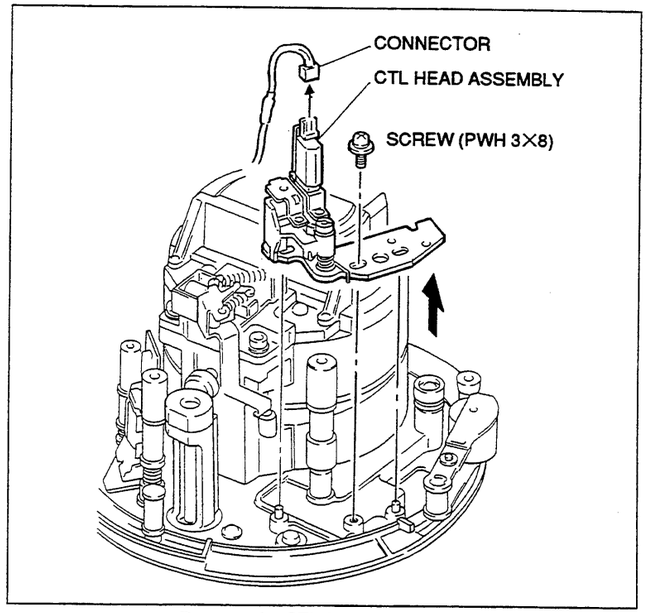
For the New Component

Removal

1. **Disconnect the Connector**
   Disconnect the connector on the CTL head board.

2. **Remove the CTL Head Assembly**
   Remove the screw, then remove the CTL head assembly.

   Caution
   Be careful not to touch the drum (especially rotary heads). Also, take care not to damage the peripheral tape guides.

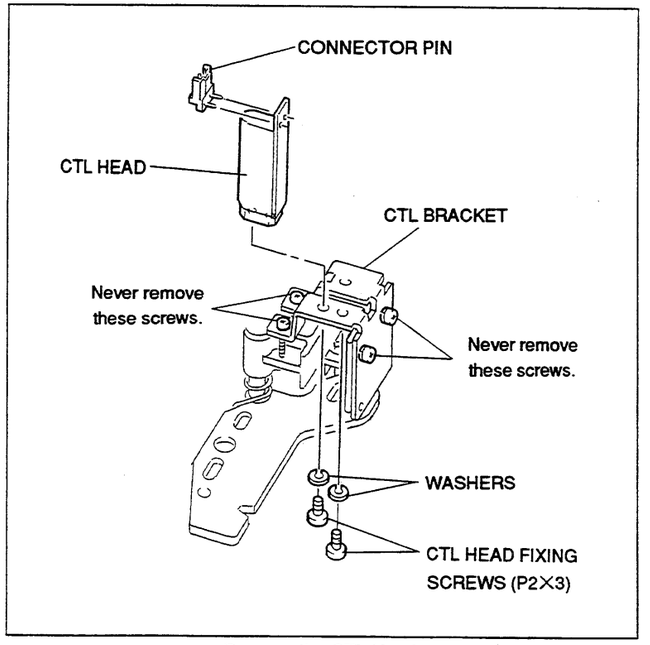


Remove the CTL Head Assembly

3. **Remove the CTL Head**
   (1) Remove the two CTL head fixing screws, then remove the CTL head.

   Caution
   Never loosen or remove the screws except for the CTL head fixing screws.
   If these screws are loosened or removed, the zenith of the CTL head will be out of specification.

   (2) Unsolder the connector pin.



Remove the CTL Head

Installation

4. Install the CTL Head

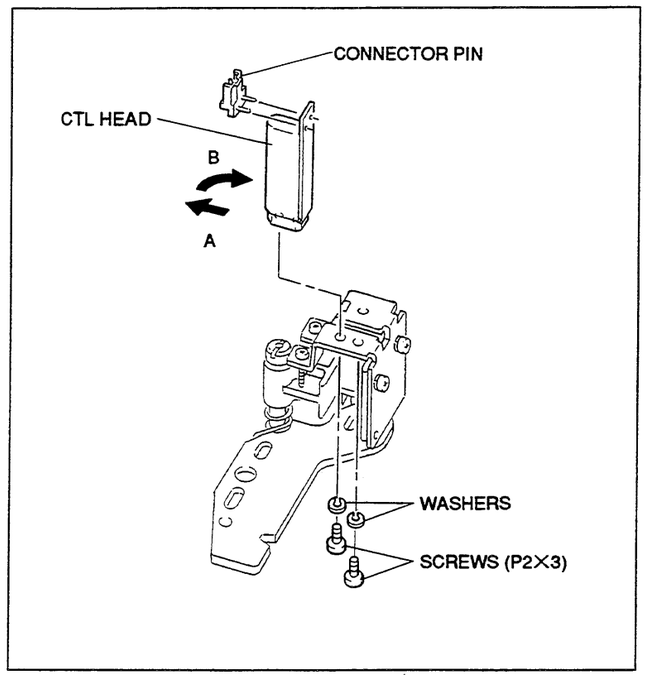
(1) Solder the connector pin to the CTL head board.

(2) Tighten the two screws while moving the CTL head in the direction indicated by arrows A and B.

Tightening torque: 19.6×10^{-2} N•m
(2kg•cm)

Caution

Be caeful not to damage the CTL head.



Install the CTL Head

5. Install the CTL Head Assembly

(1) Confirm that the threading ring is in the unthreading end state.

(2) Align longitudinal holes A and B of the CTL head assembly with the bosses of the chassis.

Caution

Be careful not to touch the drum (especially rotary heads). Also, take care not to damage the peripheral tape guides.

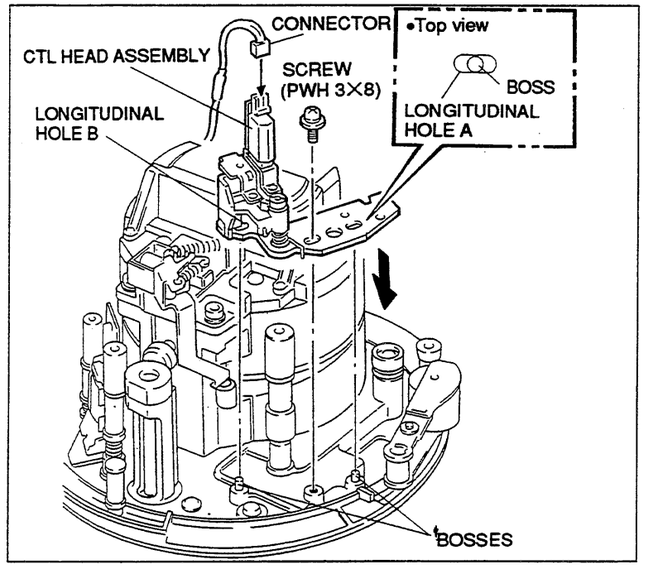
(3) Align the boss of the chassis with center of the longitudinal hole A and tighten the screw.

6. Connect the Connector

Connect the connector into the CTL head board.

7. Cleaning

Clean the CTL head surface with a cleaning cloth moistened with cleaning fluid.



Install the CTL Head Assembly

Adjustment after Replacement

8. Adjust the Tape Running
Refer to Section 8-4-2.

9. Adjust the CTL Head Height
Refer to Section 8-4-4.

10. Adjust the CTL Head Position
Refer to Section 8-4-5.

11. Confirm the Tape Running
Refer to Section 8-4-2.

12. Confirm the Audio/TC Head Position
Refer to Section 8-4-9.

13. Adjust the Drum Phase
Refer to Section 8-5-1.

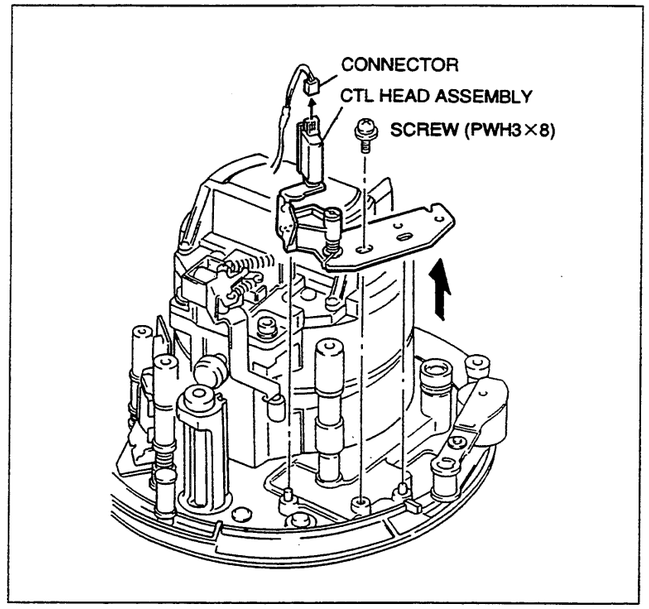
For the Old Component

Removal

1. **Disconnect the Connector**
   Disconnect the connector on the CTL head board.

2. **Remove the CTL Head Assembly**
   Remove the screw, then remove the CTL head assembly.

   Caution
   Be careful not to touch the drum (especially rotary heads). Also, take care not to damage the peripheral tape guides.

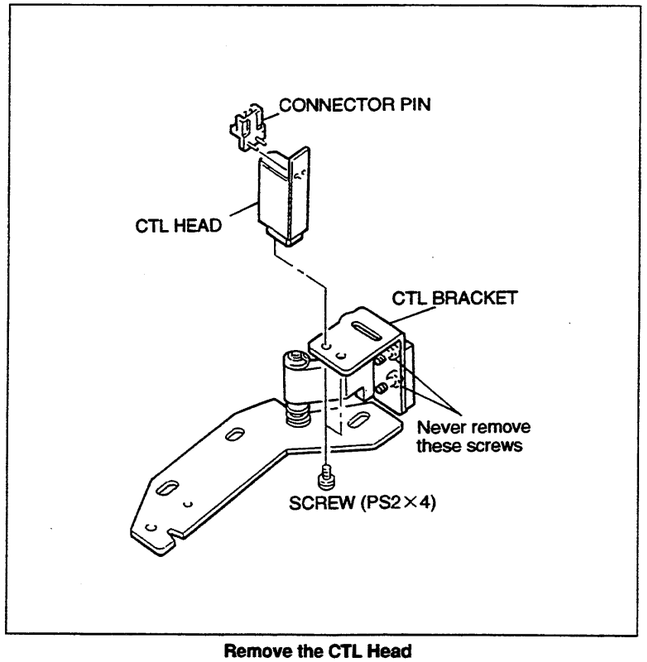


Remove the CTL Head Assembly

3. **Remove the CTL Head**
   (1) Remove the two screws, then remove the CTL head.

   Caution
   Never loosen or remove the two screws fixing the CTL bracket.
   If these screws are loosened or removed, the zenith of the CTL head will be out of specification.

   (2) Unsolder the connector pin.



Remove the CTL Head

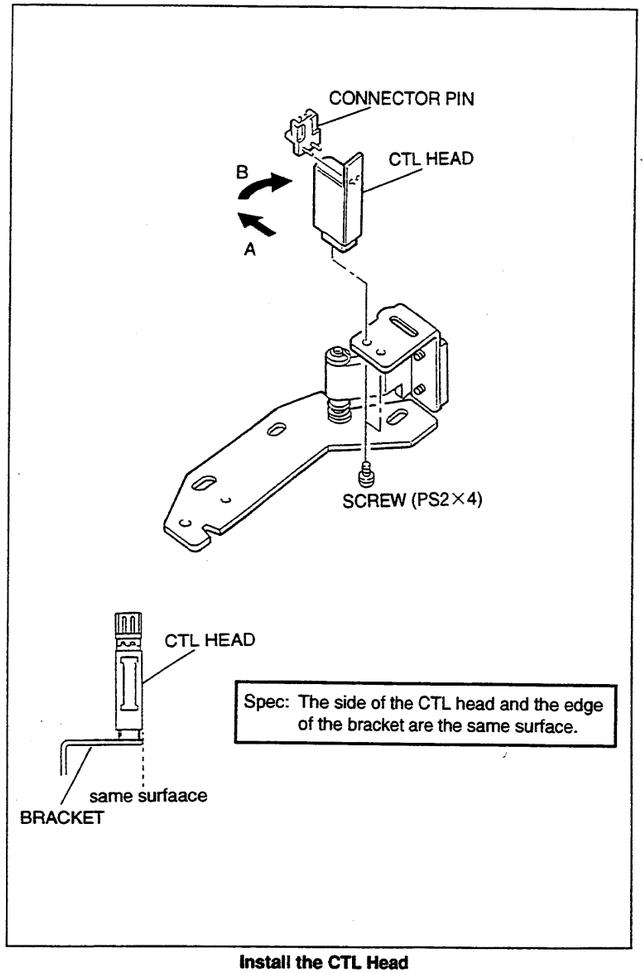
Installation

4. **Install the CTL Head**
   (1) Solder the connector pin to the CTL head board.
   (2) Tighten the two screws tentativery while moving the CTL head in the direction indicated by arrows A and B.

   Caution
   Be caeful not to damage the CTL head.

   (3) Tighten the screws after confirming that the specification is satisfied.

   Tightening torque: 19.6×10^{-2} N•m
   (2kg•cm)



Install the CTL Head

8-2-9. CTL Head Replacement

5. **Install the CTL Head Assembly**
   (1) Confirm that the threading ring is in the unthreading end state.
   (2) Align longitudinal holes A and B of the CTL head assembly with the bosses of the chassis.

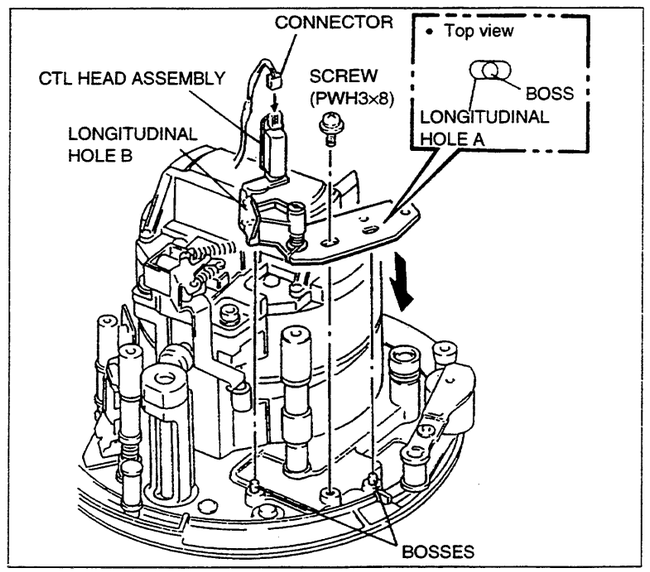
   Caution
   Be careful not to touch the drum (especially rotary heads). Also, take care not to damage the peripheral tape guides.

   (3) Align the boss of the chassis with center of the longitudinal hole A and tighten the screw.

6. **Connect the Connector**
   Connect the connector into the CTL head board.

7. **Cleaning**
   Clean the CTL head surface with a cleaning cloth moistened with cleaning fluid.

   Caution
   After cleaning, wipe with a dry cleaning cloth.



Install the CTL Head Assembly

Adjustment after Replacement

8. **Adjust the Tape Running**
   Refer to Section 8-4-2.

9. **Adjust the CTL Head Height**
   Refer to Section 8-4-4.

10. **Adjust the CTL Head Position**
    Refer to Section 8-4-5.

11. **Confirm the Tape Running**
    Refer to Section 8-4-2.

12. **Confirm the Audio/TC Head Position**
    Refer to Section 8-4-9.

13. **Adjust the Drum Phase**
    Refer to Section 8-5-1.

8-2-10. Capstan Motor Replacement

Outline

Replacement
1. Remove the Rotary Head Cleaner Assembly
2. Open the DR-307/200 Board
3. Remove the Capstan Motor
4. Install the Capstan Motor
5. Close the DR-307/200 Board
6. Install the Rotary Head Cleaner Assembly
7. Cleaning (Capstan Motor Shaft)
Adjustment after Replacement
8. Confirm the Pinch Press Clearance (Refer to Section 8-3-1.)
9. Confirm the Tape Running (Refer to Section 8-4-2.)
10. Confirm the Capstan Motor Operation (Refer to Section 5-2.) (C014 : CAPSTAN MOTOR)
11. Adjust the Capstan FG Duty (Refer to Section 5-7.) (A003 : CAPSTAN FG DUTY)
12. Adjust the Capstan Free Speed (Refer to Section 5-7.) (A010 : CAPSTAN FREE SPEED)
13. Store the Adjustment Data (Refer to Section 5-7.) (A012 : NV-RAM CONTROL)
14. Adjust the Capstan FG Level (Refer to Section 5-7.) (A020 : CAPSTAN FG LEVEL)
15. Store the Adjustment Data (Refer to Section 5-7.) (A023 : NV-RAM CONTROL)

Note

Replace the capstan motor with the left side panel of the unit down.

Tools

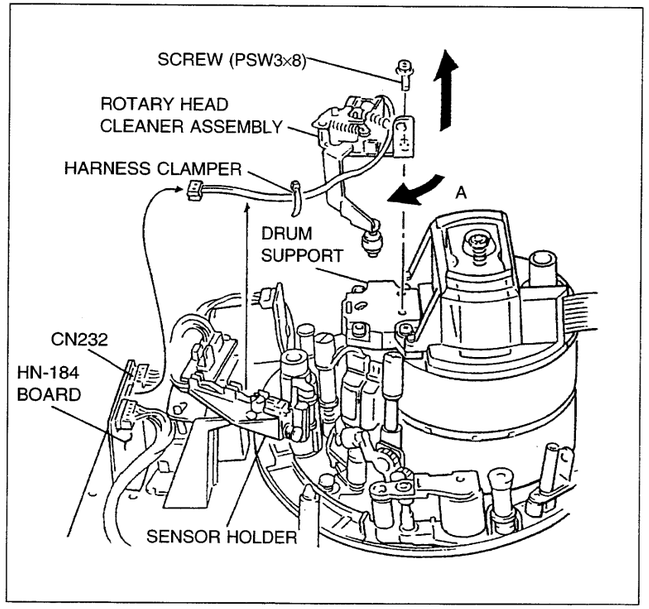
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Removal

1. Remove the Rotary Head Cleaner Assembly

(1) Disconnect a connector from connector CN232 on the HN-184 board.
(2) Cut the harness clamper.
(3) Remove the harness from the sensor holder.
(4) Remove the screw, shift the rotary head cleaner assembly in the direction indicated by the arrow A, and remove it from the drum support.

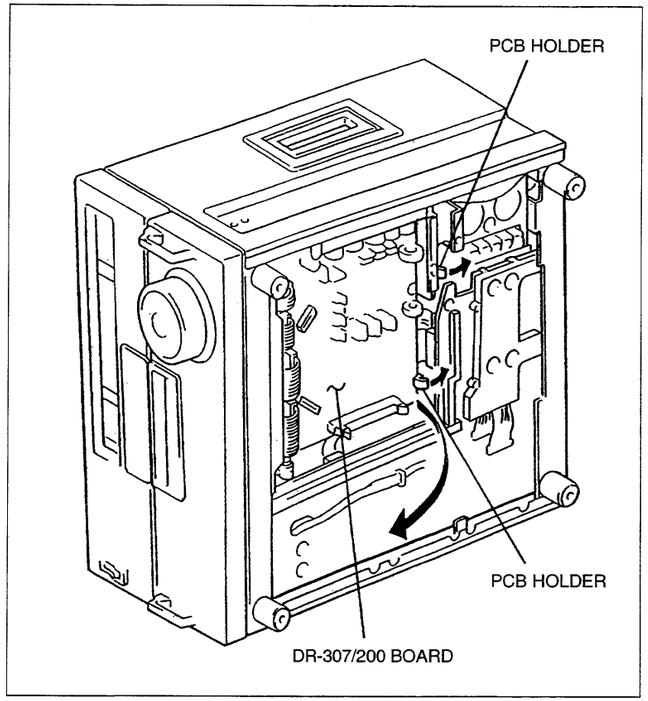
Note: To remove the fixing screws of the capstan motor, remove the rotary head cleaner assembly.



Remove the Rotary Head Cleaner Assembly

2. Open the DR-307/200 Board

Open the DR-307/200 board with the left side panel of the unit down.



Open the DR-307/200 Board

3. Remove the Capstan Motor

(1) Disconnect the connector on the capstan motor board.

(2) Remove the two screws while holding the capstan motor by hand.

Caution

Be careful not to drop the capstan motor.

Installation

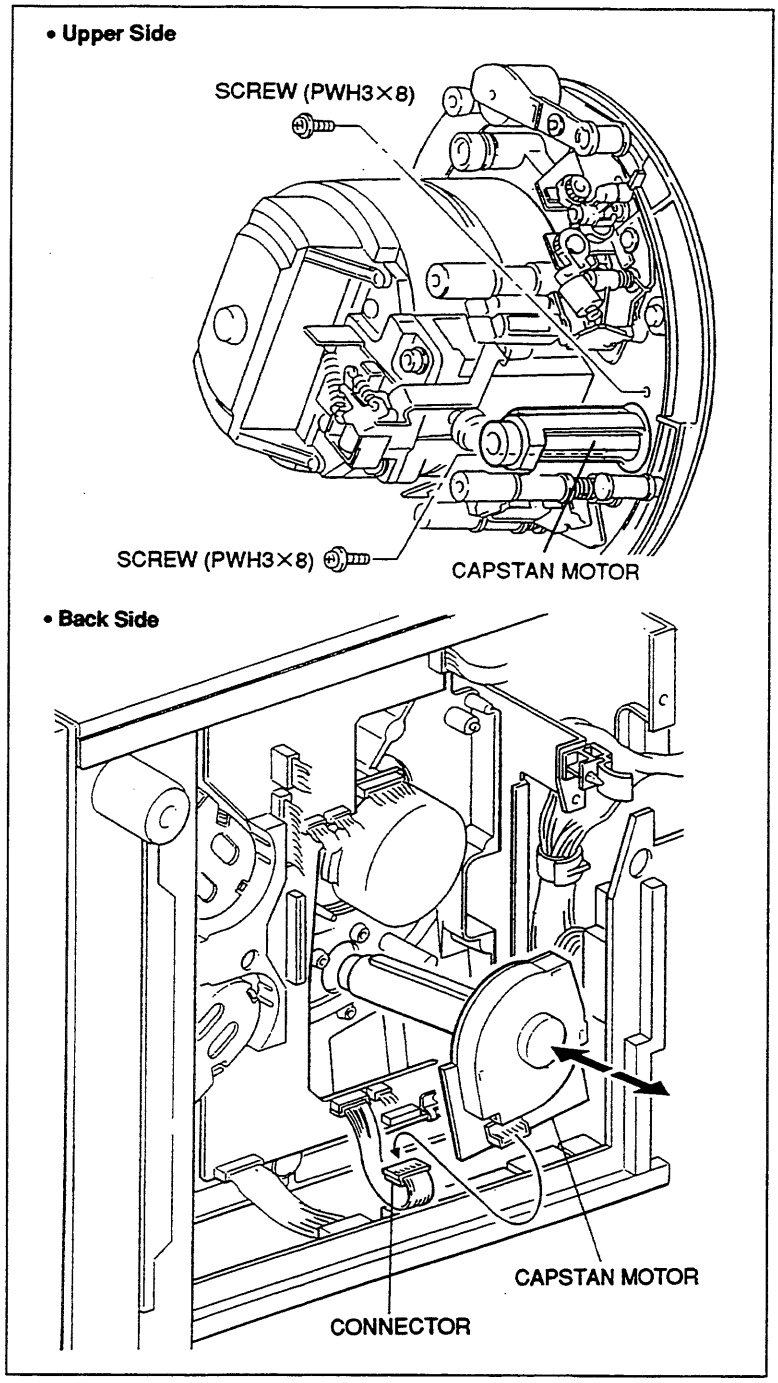
4. Install the Capstan Motor

(1) Pass a new capstan motor through the hole of the chassis in the direction shown in the figure and tighten the two screws.

Caution

Be careful not to damage the capstan motor shaft when passing the capstan motor through the hole of the chassis.

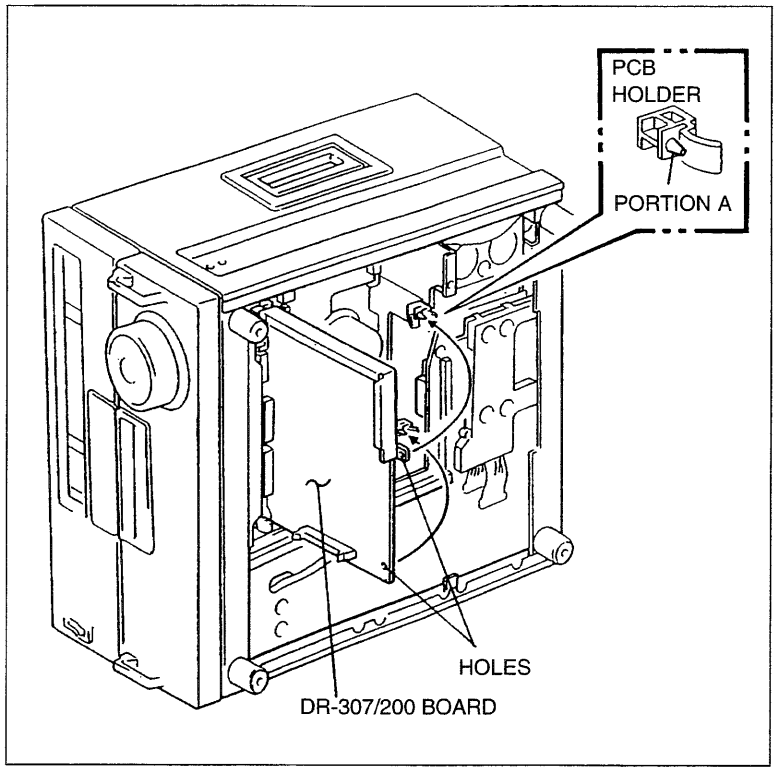
(2) Connect the connector disconnected in (1) of step 3 to the capstan motor board.



Remove/Install the Capstan Motor

5. Close the DR-307/200 Board

Put the two holes on the DR-307/200 board into the two portions A of the PCB holder shown in the figure.

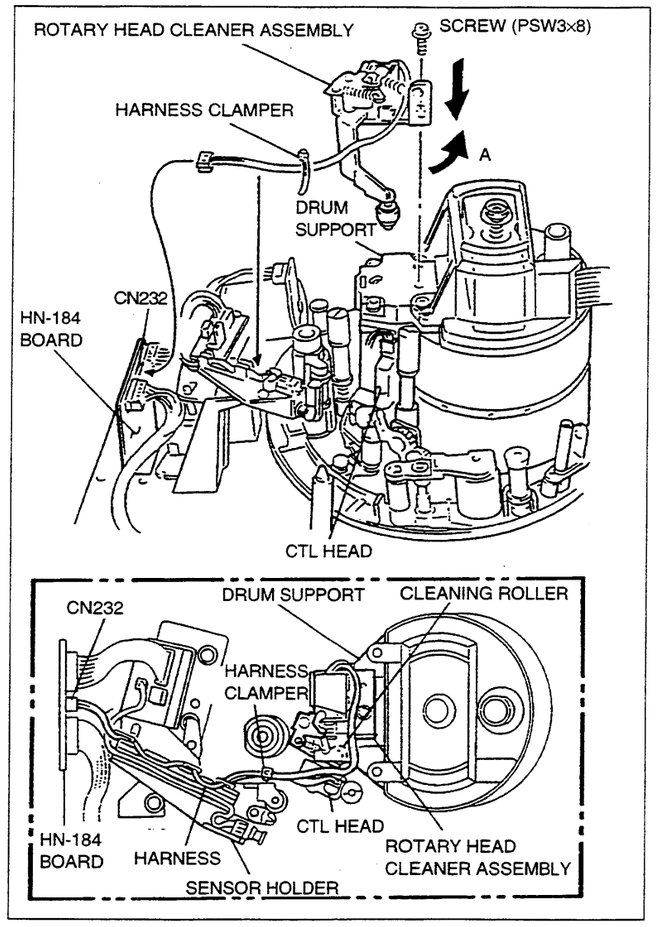


Close the DR-307/200 Board

6. **Install the Rotary Head Cleaner Assembly**
   (1) Insert the cleaning roller from the clearance between the drum support and CTL head as shown in the figure.
   (2) Align the two pins of the rotary head cleaner assembly with the two holes of the drum support.
   (3) Tighten the screw while moving the rotary head cleaner assembly in the direction indicated by the arrow A.
   (4) Fix the harness to the sensor holder position shown in the figure.
   (5) Connect a connector into connector CN232 on the HN-184 board.
   (6) Bind the rotary head cleaner harness with the harness clamper (or the equivalent).

7. **Cleaning**
   Clean the capstan motor shaft with a cleaning cloth moistened with cleaning fluid.

Caution
After cleaning, wipe with a dry cleaning cloth.



Install the Rotary Head Cleaner Assembly

Adjustment after Replacement

8. **Confirm the Pinch Press Clearance**
   Refer to Section 8-3-1.

9. **Confirm the Tape Running**
   Refer to Section 8-4-2.

10. **Confirm the Capstan Motor Operation**
    Refer to Section 5-2.
    (C014 : CAPSTAN MOTOR)

11. **Adjust the Capstan FG Duty**
    Refer to Section 5-7.
    (A003 : CAPSTAN FG DUTY)

12. **Adjust the Capstan Free Speed**
    Refer to Section 5-7.
    (A010 : CAPSTAN FREE SPEED)

13. **Store the Adjustment Data**
    Refer to Section 5-7.
    (A012 : NV-RAM CONTROL)

14. **Adjust the Capstan FG Level**
    Refer to Section 5-7.
    (A020 : CAPSTAN FG LEVEL)

15. **Store the Adjustment Data**
    Refer to Section 5-7.
    (A023 : NV-RAM CONTROL)

8-2-10. Capstan Motor Replacement
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8-2-11. Pinch Solenoid Replacement

Outline

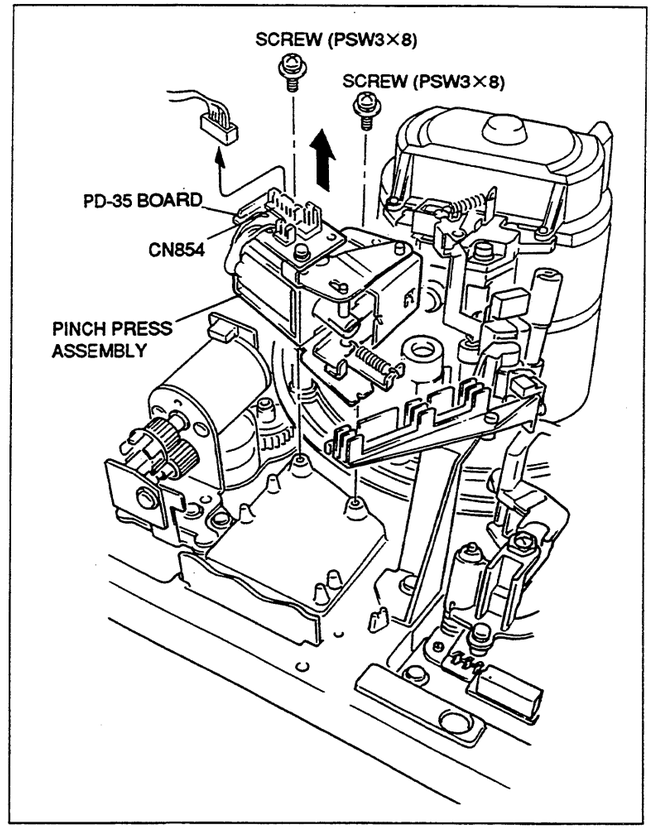
Replacement
1. Disconnect the Connector (CN854/PD-35 Board)
2. Remove the Pinch Press Assembly
3. Remove the PD-35 Board
4. Remove the P Stopper
5. Remove the Pinch Solenoid
6. Install the Pinch Solenoid
7. Install the P Stopper
8. Install the PD-35 Board
9. Install the Pinch Press Assembly
10. Connect the Connector (CN854/PD-35 Board)
Adjustment after Replacement
11. Confirm the Pinch Solenoid Operation (Refer to Section 5-2.) (C020 : PINCH ROLLER)
12. Adjust the Pinch Press Clearance (Refer to Section 8-3-1.)

8-2-11. Pinch Solenoid Replacement

Removal

1. **Disconnect the Connector**
   Disconnect connector CN854 on the PD-35 board.

2. **Remove the Pinch Press Assembly**
   Remove the two screws, then remove the pinch press assembly from the unit.

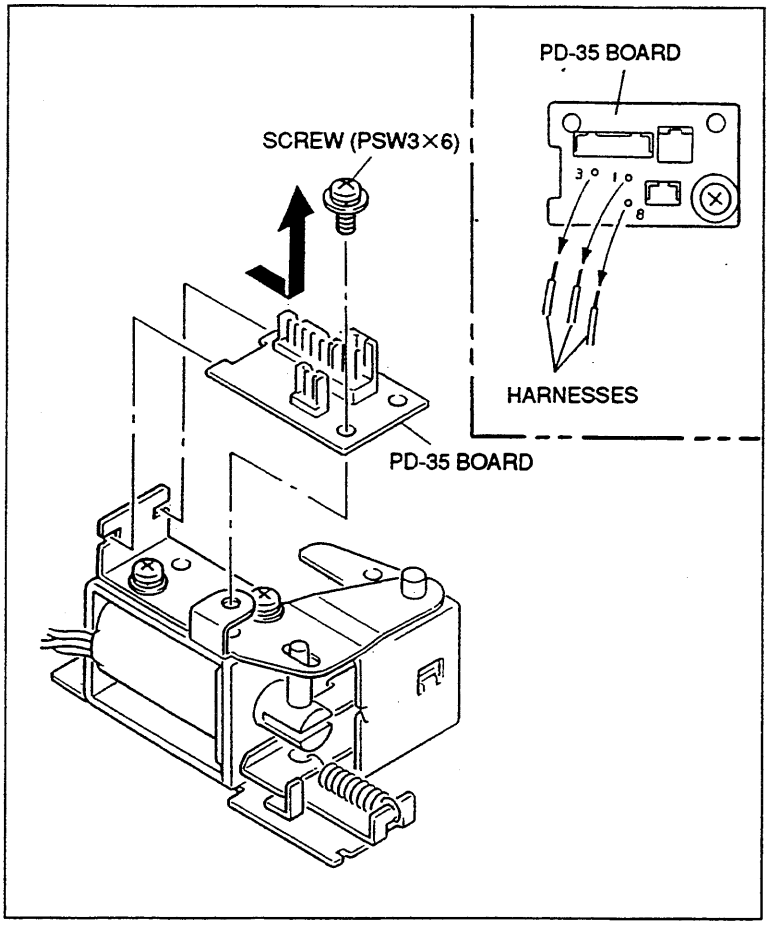


Remove the Pinch Press Assembly

3. Remove the PD-35 Board

(1) Remove the screw, then remove the PD-35 board from the pinch press assembly.

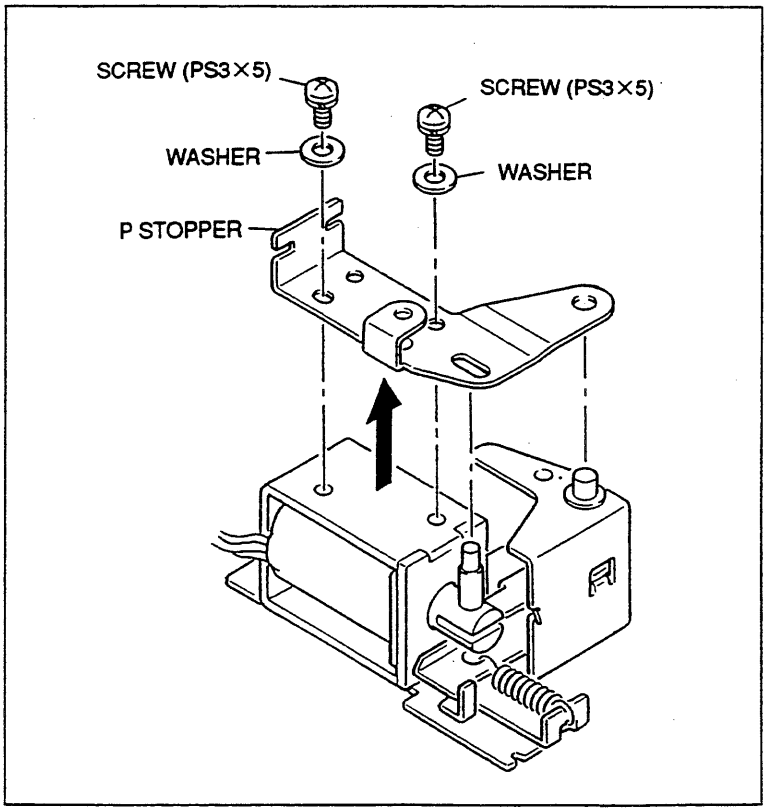
(2) Unsolder the three harnesses wired on the PD-35 board.



Remove the PD-35 Board

4. Remove the P Stopper

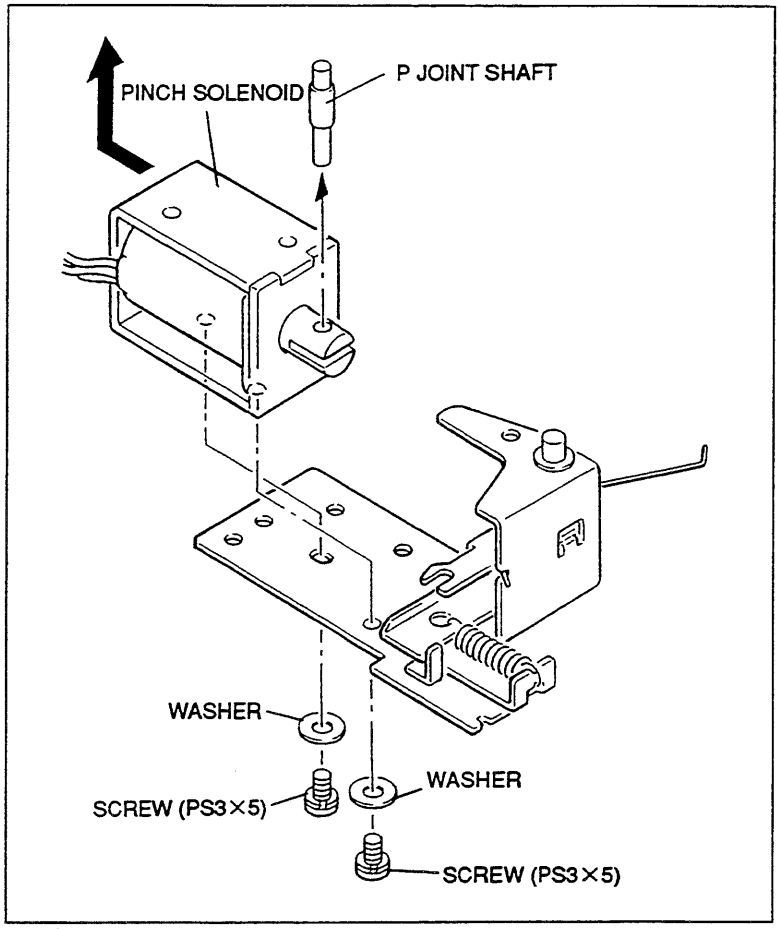
Remove the two screws and washers, then remove the P stopper.



Remove the P Stopper

5. Remove the Pinch Solenoid

(1) Extract the P joint shaft.
(2) Remove the two screws and washers, then remove the pinch solenoid.



Remove the Pinch Solenoid

Installation

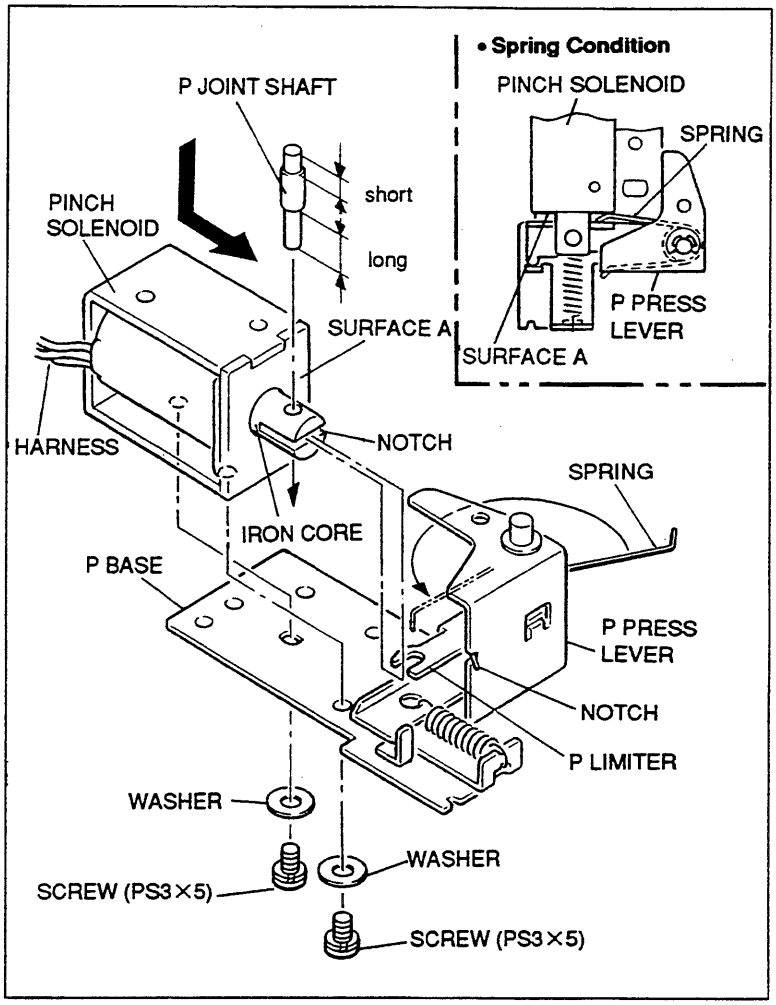
6. Install the Pinch Solenoid

(1) Install a new solenoid to the P base in the direction shown in the figure.

(2) Bend the spring in the direction indicated by the arrow and bring it into contact with surface A of the solenoid shown in the figure.

(3) Put the P limiter into the notch of the solenoid's iron core and pass the P joint shaft through the hole of the iron core in the direction shown in the figure.

(4) Confirm that the other end of the spring is put on the notch of the P press lever.

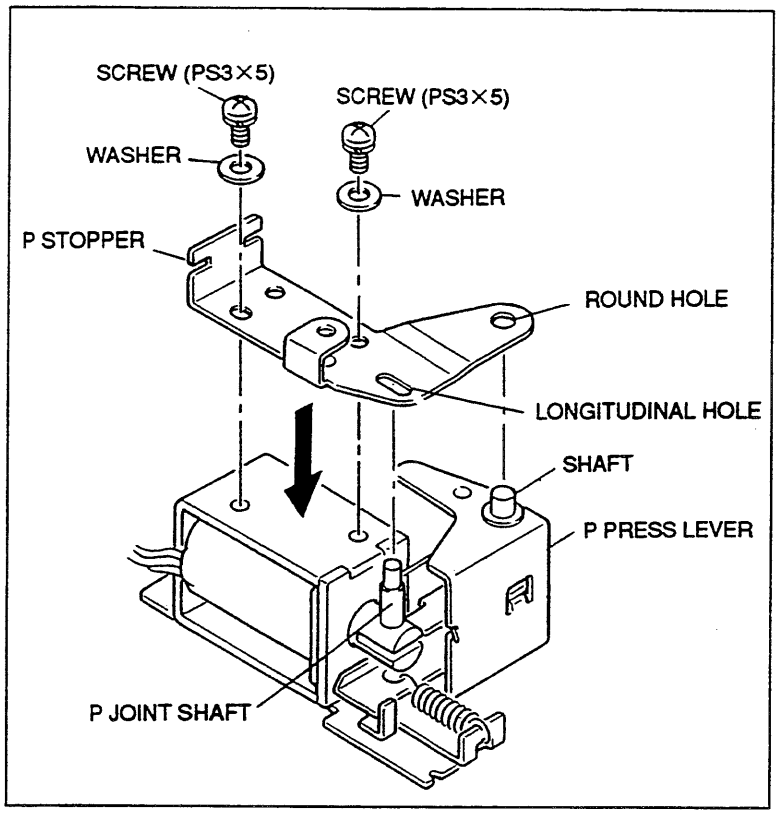


Install the Pinch Solenoid

7. Install the P Stopper

(1) Pass the longitudinal hole of the P stopper through the P joint shaft, then pass the round hole through the shaft of the P press lever.

(2) Put the washers and tighten the screws.

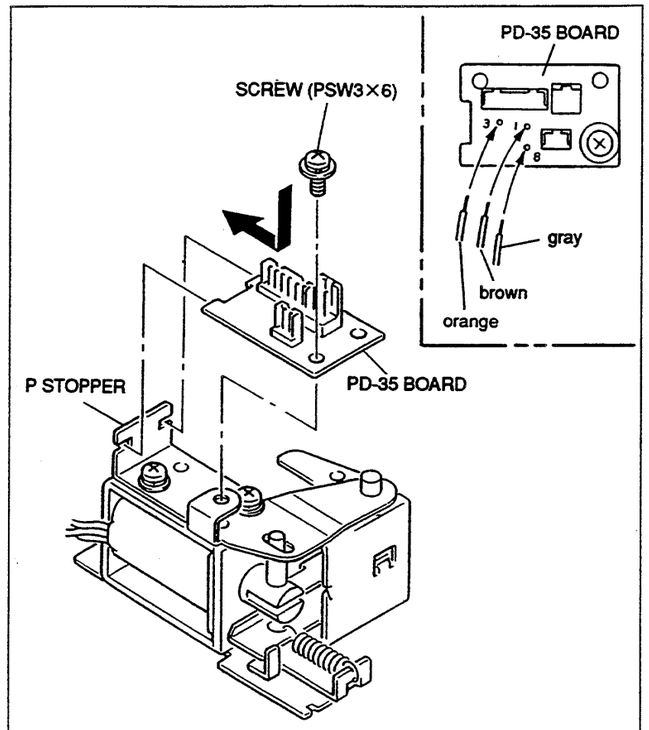


Install the P Stopper

8. Install the PD-35 Board

(1) Wire the harnesses to the PD-35 board as shown in the figure, then solder.

(2) Insert the PD-35 board into the P stopper and tighten the screw.



• Harness wiring

Indication of Board	Harnesses
1	Brown
3	Orange
8	Gray

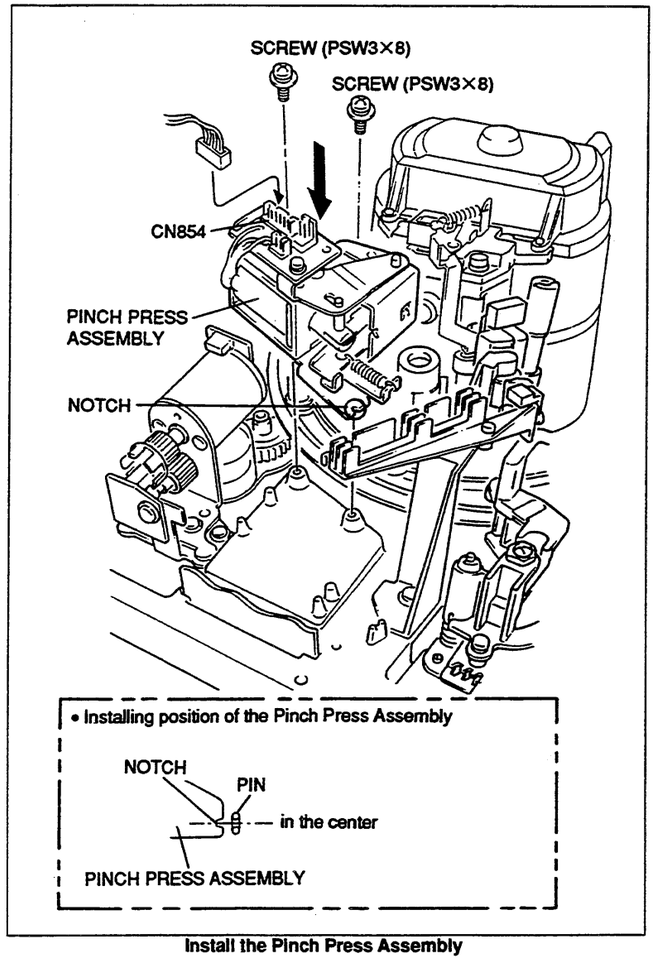
Install the PD-35 Board

9. Install the Pinch Press Assembly

Align the notch of the pinch press assembly with the center of the pin and tighten the two screws.

10. Connect the Connector

Connect the connector into connector CN854 on the PD-35 board.



Install the Pinch Press Assembly

Adjustment after Replacement

11. Confirm the Pinch Solenoid Operation

Refer to Section 5-2.
(C020 : PINCH ROLLER)

12. Adjust the Pinch Press Clearance

Refer to Section 8-3-1.

8-2-12. Brake Lining Replacement

Outline

Replacement
1. Remove the Reel Table Assembly
2. Remove the Brake Assembly
3. Remove the Brake Lining
4. Install the Brake Lining
5. Install the Brake Assembly
6. Install the Reel Table Assembly
Adjustment after Replacement
7. Confirm the Reel Table Height (Refer to Section 8-3-4.)
8. Confirm the Reel Brake Clearance (Refer to Section 8-3-5.)
9. Confirm the Reel Brake Release Amount (Refer to Section 8-3-6.)

Note

How to replace the brake lining assembly is the same on the supply and take-up sides.

Tools

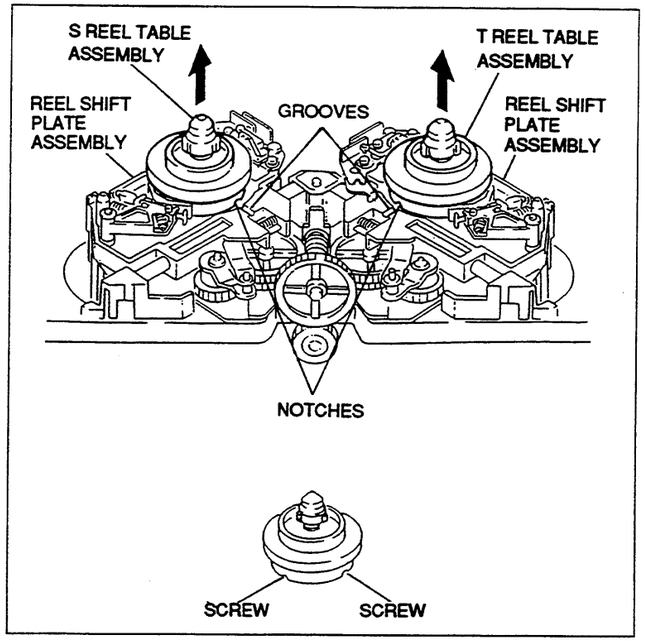
- L-shaped wrench (1.5 mm): 7-700-736-05
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Removal

1. **Remove the Reel Table Assembly**
   (1) Align one of the two notches at the bottom of the reel table assembly with the groove position of the reel shift plate assembly.
   (2) Insert the L-shaped wrench into the notch at the bottom of the reel table assembly along the groove of the reel shift plate.
   (3) Loosen the screw.
   (4) Align another notch at the bottom of the reel table assembly with the groove position of the reel shift plate assembly.
   (5) Loosen the screw in the same way as in step (2).
   (6) Remove the reel table assembly.

Caution

When the reel table assembly is removed, a poly-slider washer may adhere to it. In this case, remove the poly-slider washer from the reel table assembly and return it to the reel motor shaft position. This poly-slider washer is used for reel table height adjustment.



Remove the Reel Table Assembly

8-2-12. Brake Lining Replacement

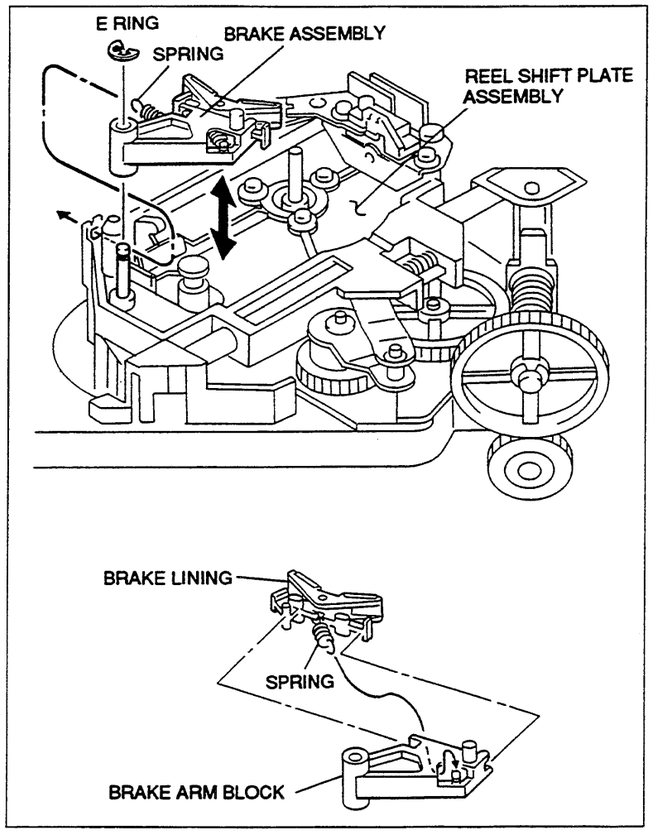
2. Remove the Brake Assembly
(1) Unhook the spring put on the reel shift plate assembly.
(2) Remove the E ring, then remove the brake assembly.

3. Remove the Brake Lining
Unhook the spring put on the brake arm block, then remove the brake lining.

Installation

4. Install the Brake Lining
(1) Combine a new brake lining with the brake arm block as shown in the figure.
(2) Hook the spring to the brake arm block.

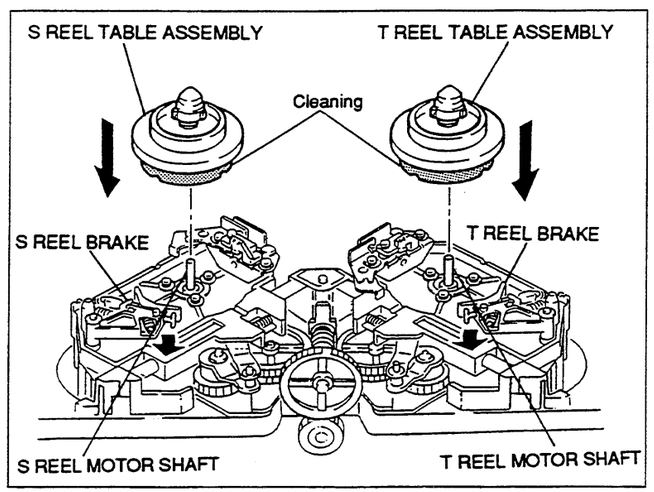
5. Install the Brake Assembly
(1) Pass the brake assembly through the shaft of the reel shift plate assembly.
(2) Hook the spring to the reel shift plate assembly.
(3) Fix the brake assembly by the E ring.



Remove/Install the Brake Lining

6. Install the Reel Table Assembly
(1) Clean the reel table assembly along the circumference.
(2) Release the reel brake in the direction indicated by the arrow and pass the reel table assembly through the reel motor shaft.

Caution
Tighten the two screws after the reel table height adjustment is completed.



Install the Reel Table Assembly

Adjustment after Replacement

7. Confirm the Reel Table Height
Refer to Section 8-3-4.

8. Confirm the Reel Brake Clearance
Refer to Section 8-3-5.

9. Confirm the Reel Brake Release Amount
Refer to Section 8-3-6.

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8-2-13. Reel Motor Assembly Replacement

Outline

Replacement
1. Disconnect the Flat Cable (S side: CN321/DR-307, DR-200 Board, T side: CN322/DR-307, DR-200 Board)
2. Remove the Reel Table Assembly
3. Remove the Crank Arm and Slide Shaft Holder
4. Remove the Reel Shift Plate Assembly
5. Disconnect the Flat Cable (S side: CN923/RM Board, T side: CN923/RM Board)
6. Disconnect the Connector (S side: CN926 and 927/RM Board, T side: CN926 and 927/RM Board)
7. Remove the Reel Motor Assembly
8. Cleaning
9. Install the Reel Motor Assembly
10. Connect the Flat Cable (S side: CN923/RM Board, T side: CN923/RM Board)
11. Connect the Connector (S side: CN926 and 927/RM Board, T side: CN926 and 927/RM Board)
12. Install the Slide Shaft
13. Install the Reel Shift Plate Assembly
14. Smear Grease to the Slide Shaft
15. Install the Crank Arm
Adjustment after Replacement
16. Confirm the Reel Motor Shaft Slantness (Refer to Section 8-3-2.)
17. Install the Reel Table Assembly
18. Confirm the Cassette Pillar Height (Refer to Section 8-3-3.)
19. Confirm the Reel Table Height (Refer to Section 8-3-4.)
20. Connect the Flat Cable (S side: CN321/DR-307, DR-200 Board, T side: CN322/DR-307, DR-200 Board)
21. Confirm the Reel Brake Clearance (Refer to Section 8-3-5.)
22. Confirm the Reel Brake Release Amount (Refer to Section 8-3-6.)
23. Confirm the Reel Motor Operation (Refer to Section 5-2.) (C010 : S REEL MOTOR/ C011 : T REEL MOTOR)
24. Adjust the Reel FG Duty (Refer to Section 5-7.) (A001 : S REEL FG DUTY / A002 : T REEL FG DUTY)
25. Adjust the Reel Offset/Friction (Refer to Section 5-7.) (A004 : S REEL OFFSET/FRIC / A005: T REEL OFFSET/FRIC)
26. Adjust the Reel Torque (Refer to Section 5-7.) (A006 : S REEL TORQUE/A007 : T REEL TORQUE)
27. Store the Adjustment Data (Refer to Section 5-7.) (A012 : NV-RAM CONTROL)

Note

The parts consisting reel motor is different between S side and T side. However, how to replace the reel motor assembly is the same for both sides.

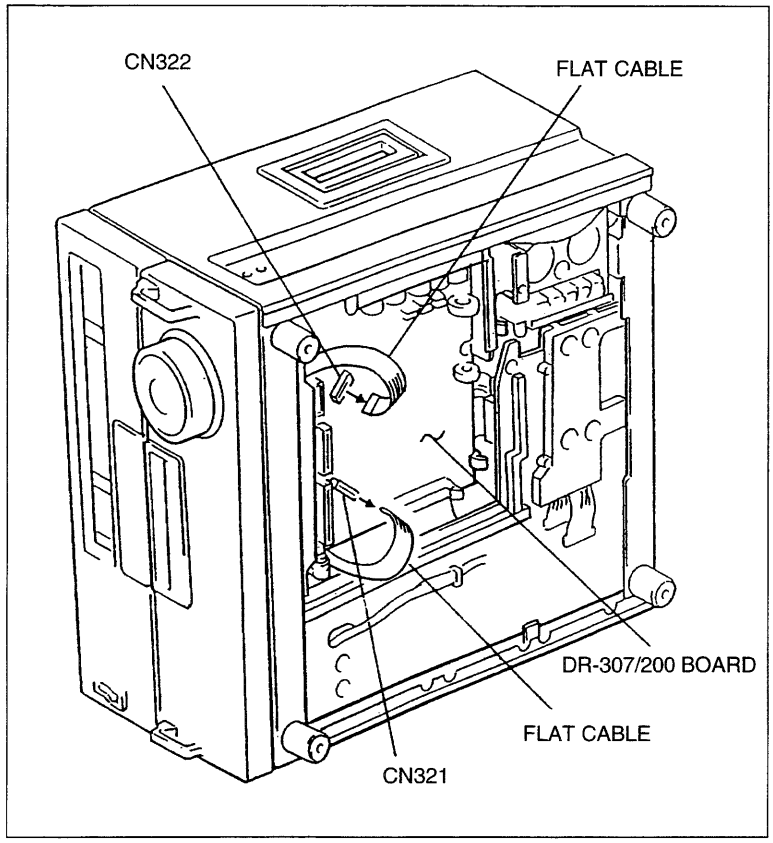
Tools

- L-shaped wrench (1.5 mm): 7-700-736-05
- Torque screwdriver (12 kg • cm)(JB-5252): J-6252-520-A
- Torque screwdriver's bit (+ 3 mm, l=90 mm): J-6323-430-A
- Grease (SGL-505): 7-662-010-04
- Oil: 7-661-018-18
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Removal

1. Disconnect the Flat Cable

(1) Place the unit with the left side panel down.
(2) Disconnect the flat cable connected with DR-307/200 board.
S side: CN321
T side: CN322
(3) Place the unit to the horizontal position.



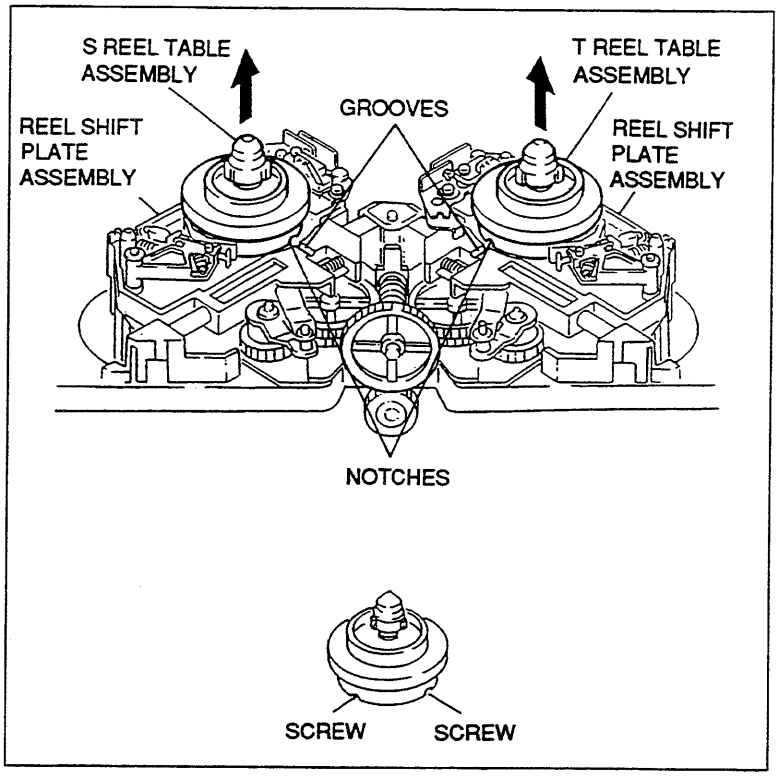
Disconnect the Flat Cable

2. Remove the Reel Table Assembly

(1) Align one of the two notches at the bottom of the reel table assembly with the groove of the reel shift plate assembly.
(2) Insert the L-shaped wrench into the notch of the reel table assembly along the groove of the reel shift plate.
(3) Loosen the screw.
(4) Align another notch of the reel table assembly with the groove of the reel shift plate assembly.
(5) Loosen the screw in the same way as in step (2).
(6) Remove the reel table assembly.

Caution

When the reel table assembly is removed, a poly-slider washer may adhere to it. In this case, remove that from the reel table assembly and return it to the reel motor shaft position. This poly-slider washer is used for reel table height adjustment.



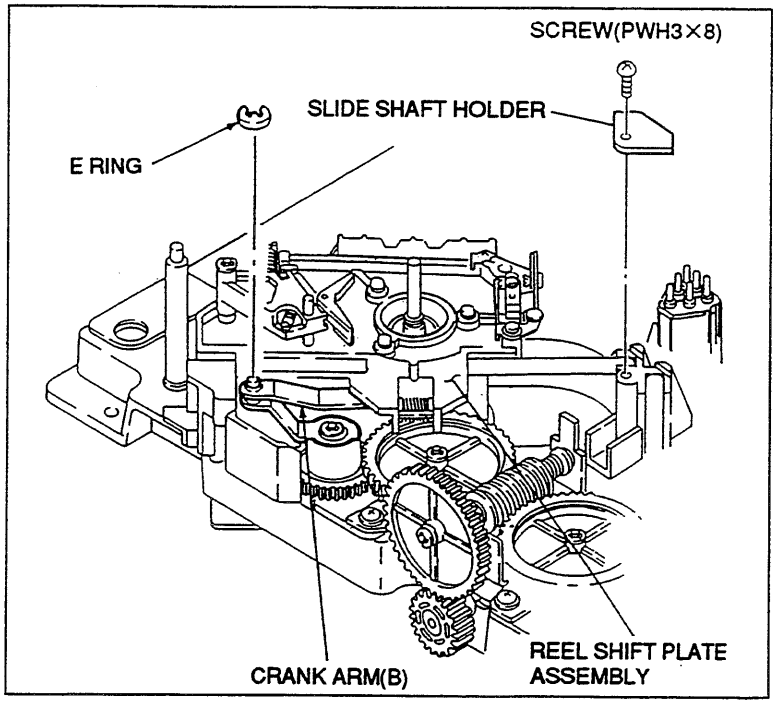
Remove the Reel Table Assembly

3. Remove the Crank Arm and Slide Shaft Holder

(1) Place the reel shift plate assembly in the intermediate position of S and L cassette.

Note: The reel shift plate assembly cannot be removed in the S cassette position or T cassette position.

(2) Remove an E ring and remove the crank arm (B).
(3) Remove the screw and remove the slide shaft holder.

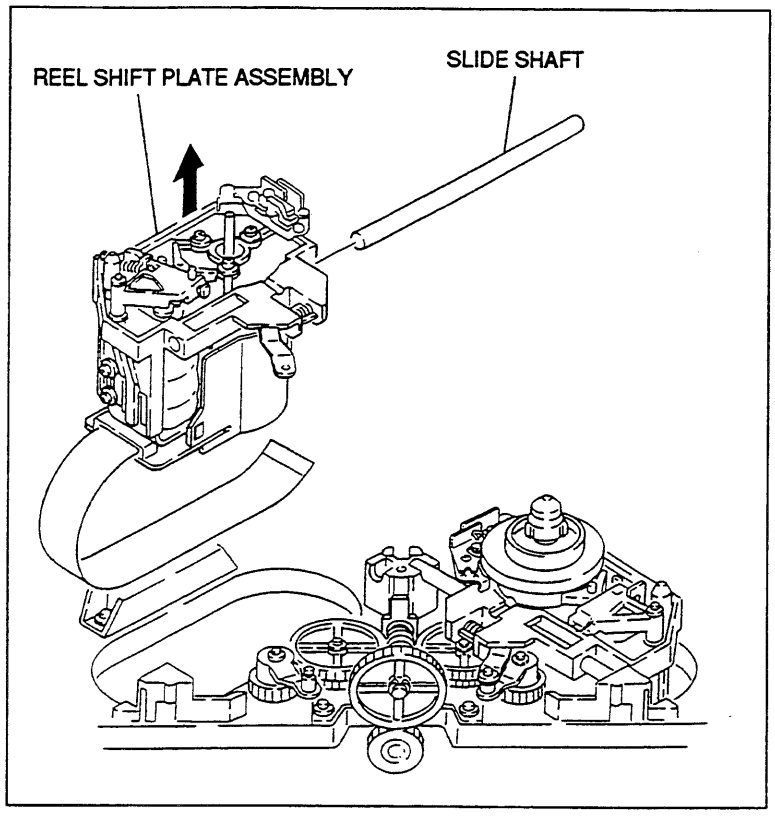


Remove the Crank Arm and Slide Shaft Holder

4. **Remove the Reel Shift Plate Assembly**
While pulling out the slide shaft and remove the reel shift plate assembly.

Caution

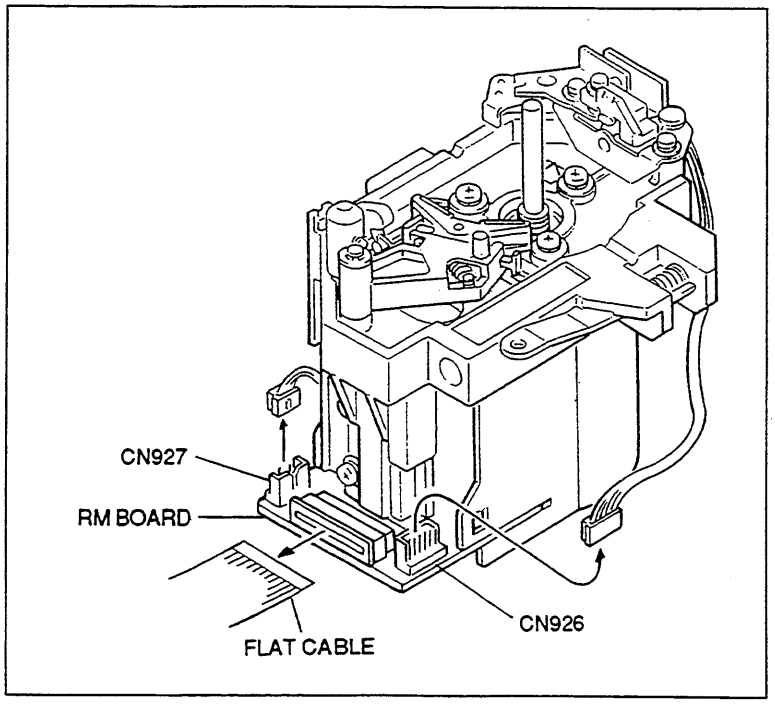
1. Be careful not to adhere grease smeared the slide shaft to another parts.
2. Be careful not to cause damage to the slide shaft during removal.



Remove the Reel Shift Plate Assembly

5. **Disconnect the Flat Cable**
Disconnect the flat cable connected with RM board.

6. **Disconnect the Connectors**
Disconnect the two connectors CN926 and CN927 on the RM board.



Disconnect the Flat Cable and Connectors

7. Remove the Reel Motor Assembly

(1) Remove the three screws and shield cover, then remove the reel motor assembly.

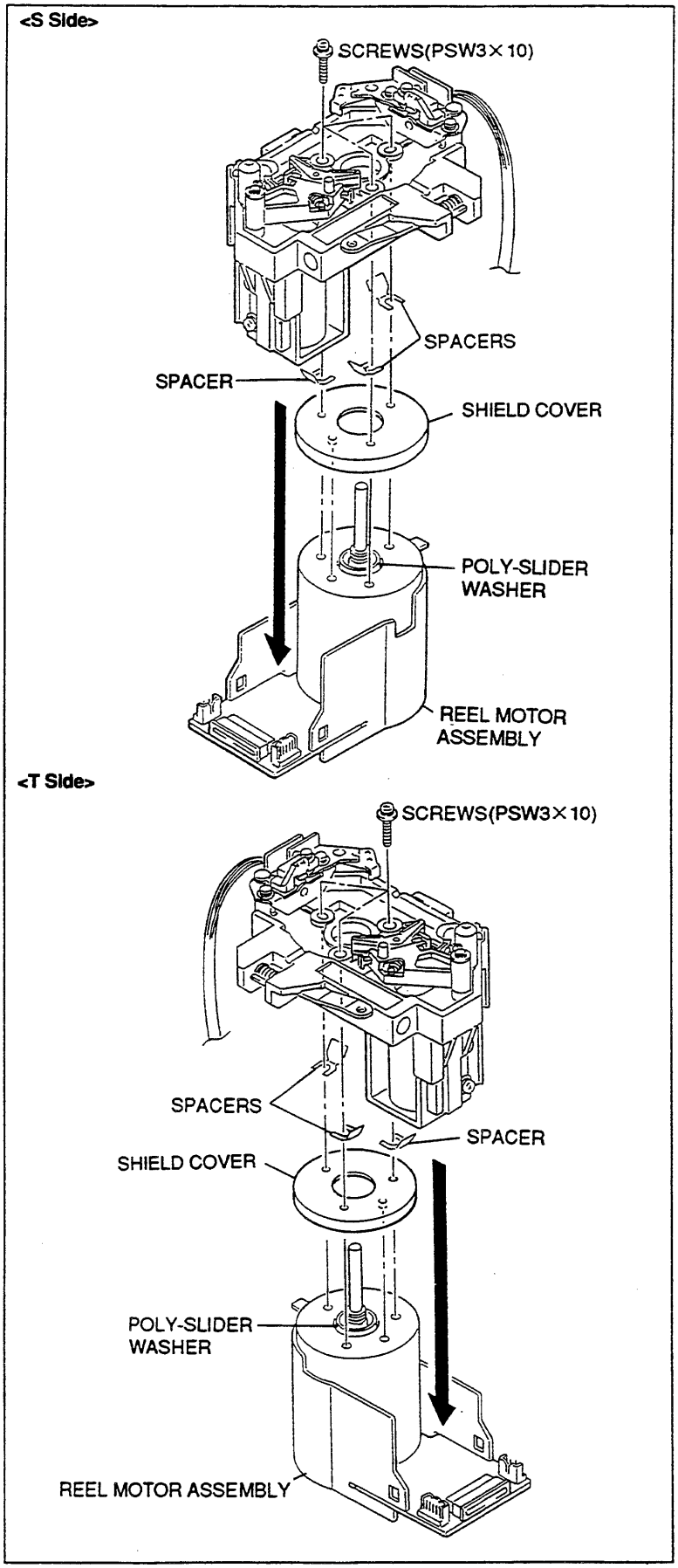
Caution

1. The shield cover is not required for DVW-500P/510P/500/510.
2. The spacer is inserted between the reel motor and the reel shift plate assembly. Be careful not to lose this spacer since it comes off with the reel motor assembly.

(2) Remove the poly-slider washer from the reel motor shaft.

Caution

Confirm the quantity of the spacer and be careful not to lose it.



Remove the Reel Motor Assembly

Installation

8. Cleaning

(1) Clean the reel motor assembly mounting surface and reel shift plate assembly mounting surface with a cleaning cloth moistened with cleaning fluid.

(2) Clean the shield cover mounting surface with a cleaning cloth moistened with cleaning fluid. (This step is required only DVW-A500P/A510P/A500/A510.)

9. Install the Reel Motor Assembly

(1) Pass the shield cover through the reel motor shaft and align the pin of the shield cover with the hole of the reel motor. (This step is required only DVW-A500P/A510P/A500/A510.)

(2) Pass the reel motor assembly through the hole of the reel shift plate as in the direction shown in the figure.

(3) Tighten the three screws gradually while moving the reel motor assembly in the direction indicated by the arrow A.

Tightening torque: 68.6×10^{-2} N · m
(7 kgf · cm)

(4) Pass the poly-slider washer removed in (2) of step 7 through the reel motor shaft.

10. Connect the Flat Cable

(1) Clean the insertion of the flat cable with a cleaning cloth moistened with cleaning fluid.

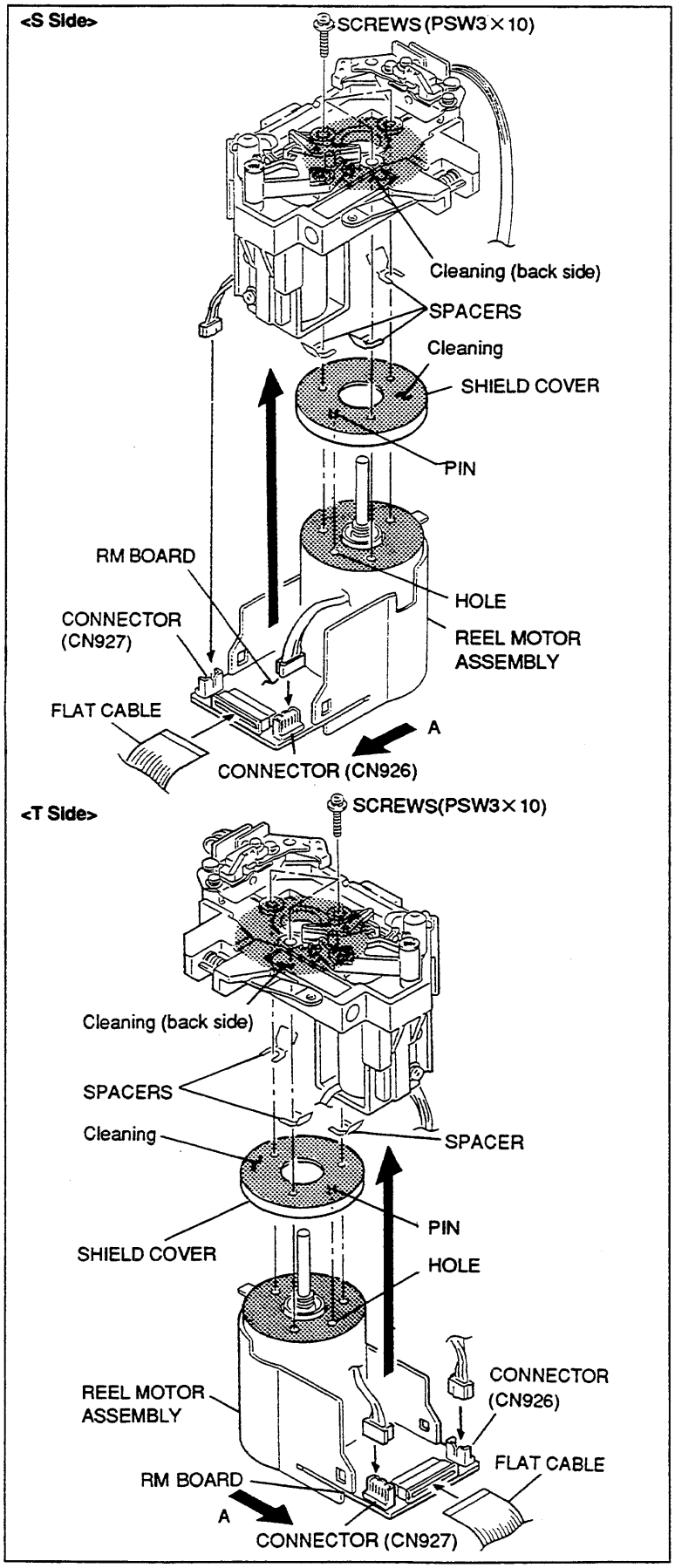
(2) Connect the flat cable disconnected in step 5 into the connector on the RM board, then lock.

Caution

1. Connect the flat cable with its printing surface upside.
2. Be careful not to twist the flat cable when connecting it.

11. Connect the Connector

Connect the two connectors CN926 and CN927 on the RM board.



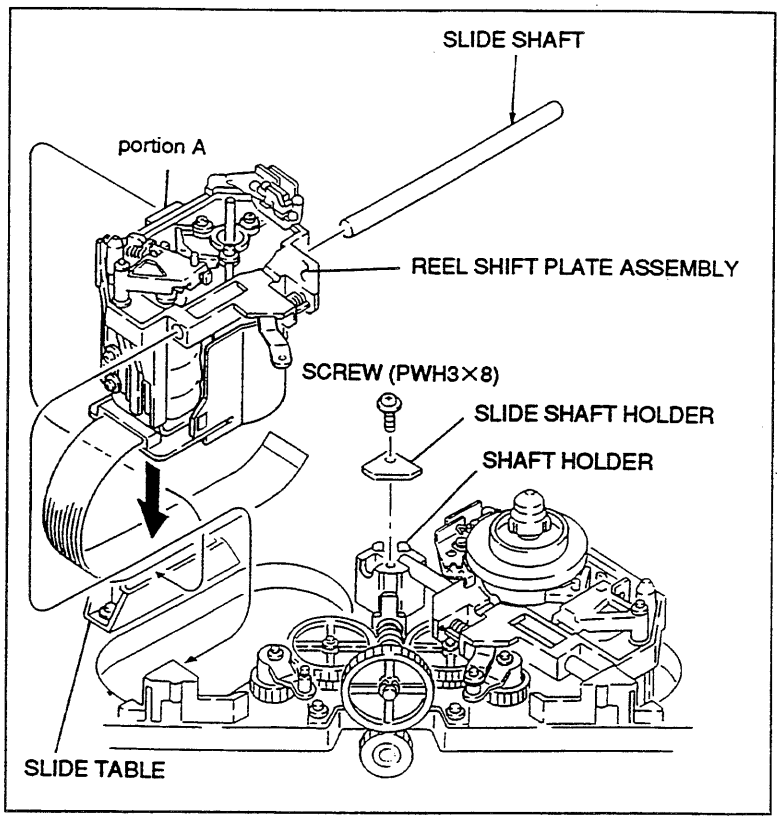
Install the Reel Motor Assembly

12. Install the Slide Shaft

(1) Wipe grease from the two holes where the slide shaft to be inserted of the reel shift plate assembly, then clean them.
(2) Wipe grease from the slide shaft removed in step 4, then clean it.
(3) Insert the slide shaft to the reel shift plate assembly.

13. Install the Reel Shift Plate Assembly

(1) Put the slide shaft on the shaft holder while inserting the portion A shown in the figure of the reel shift plate into the slide table.
(2) Install the slide shaft holder.



Install the Reel Shift Plate Assembly

14. Smear Grease to the Slide Shaft

(1) Smear grease very lightly to the slide shaft.
(2) Confirm that the reel shift plate assembly moves smoothly when moving it by hand towards S cassette and L cassette positions.

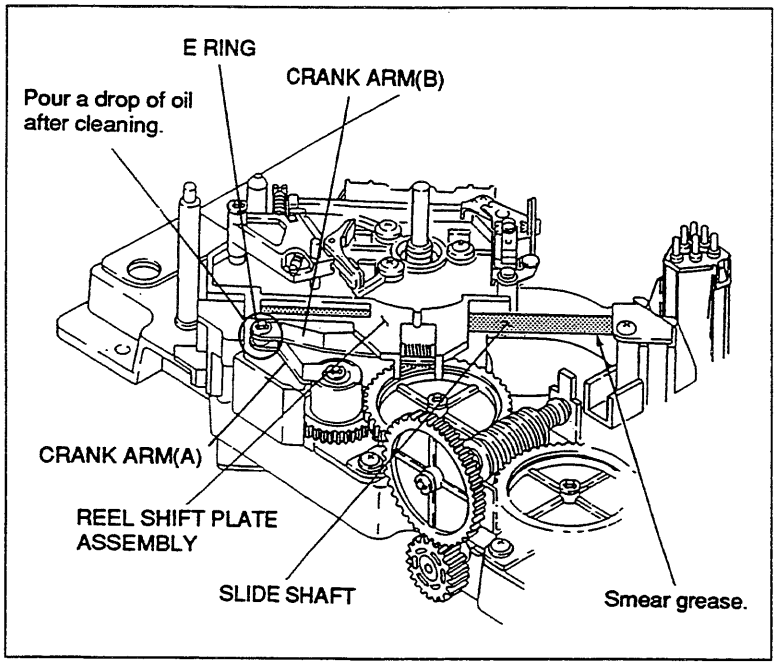
15. Install the Crank Arm

(1) Clean the shaft of the crank arm (A), then pour a drop of oil on it.
(2) Confirm that the reel shift plate assembly is in the intermediate position of S and L cassettes.

Caution

When installing the crank arm, place the reel shift plate assembly in the intermediate position of S and L cassettes for phase adjustment of the gears.

(3) Install the crank arm (B) to the shaft of the crank arm (A) with an E ring.



Smear Grease and Install the Crank Arm

Adjustment after Replacement

16. Confirm the Reel Motor Shaft Slantness
Refer to Section 8-3-2.

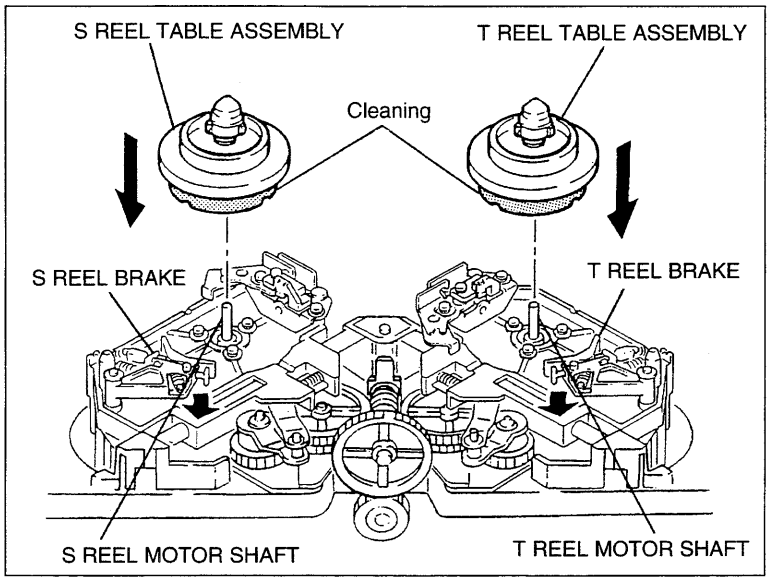
17. Install the Reel Table Assembly
(1) Clean the circumference of the reel table assembly with a cleaning cloth moistened with cleaning fluid.
(2) Pass the reel table assembly through the reel motor shaft while moving the reel brake in the direction indicated by the arrow.

Caution
Tighten two fixing screws after the adjustment of reel table height.

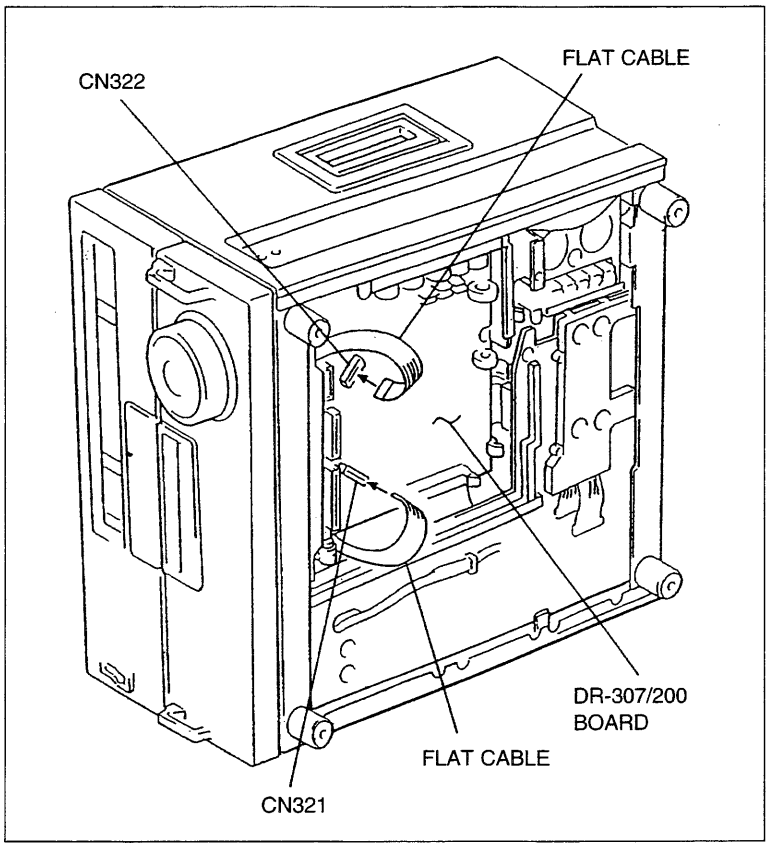
18. Confirm the Cassette Pillar Height
Refer to Section 8-3-3.

19. Confirm the Reel Table Height
Refer to Section 8-3-4.

20. Connect the Flat Cable
(1) Place the unit with the left side panel down.
(2) Connect the flat cable into the connector on the DR-307/200 board.
S side: CN321
T side: CN322
(3) Place the unit to the horizontal position.



Install the Reel Table Assembly



Connect the Flat Cable

21. **Confirm the Reel Brake Clearance**
    Refer to Section 8-3-5.

22. **Confirm the Reel Brake Release Amount**
    Refer to Section 8-3-6.

23. **Confirm the Reel Motor Operation**
    Refer to Section 5-2. (C010 : S REEL MOTOR/ C011 : T REEL MOTOR)

24. **Adjust the Reel FG Duty**
    Refer to Section 5-7. (A001 : S REEL FG DUTY / A002 : T REEL FG DUTY)

25. **Adjust the Reel Offset/Friction**
    Refer to Section 5-7. (A004 : S REEL OFFSET/FRIC / A005: T REEL OFFSET/ FRIC)

26. **Adjust the Reel Torque**
    Refer to Section 5-7. (A006 : S REEL TORQUE/A007 : T REEL TORQUE)

27. **Store the Adjustment Data**
    Refer to Section 5-7. (A012 : NV-RAM CONTROL)

8-2-14. Fan Motor Replacement

Outline

Replacement
1. Disconnect the Connectors (CN150/MB-441 Board, Switching Regulator)
2. Remove the Fan Motor
3. Install the Fan Motor
4. Connect the Connectors (CN150/MB-441 Board, Switching Regulator)

Note

Adjustment after the fan motor replacement is not required.

Removal

1. **Disconnect the Connectors**
   Disconnect the connectors of the switching regulator and connector CN150 on the MB-441 board.

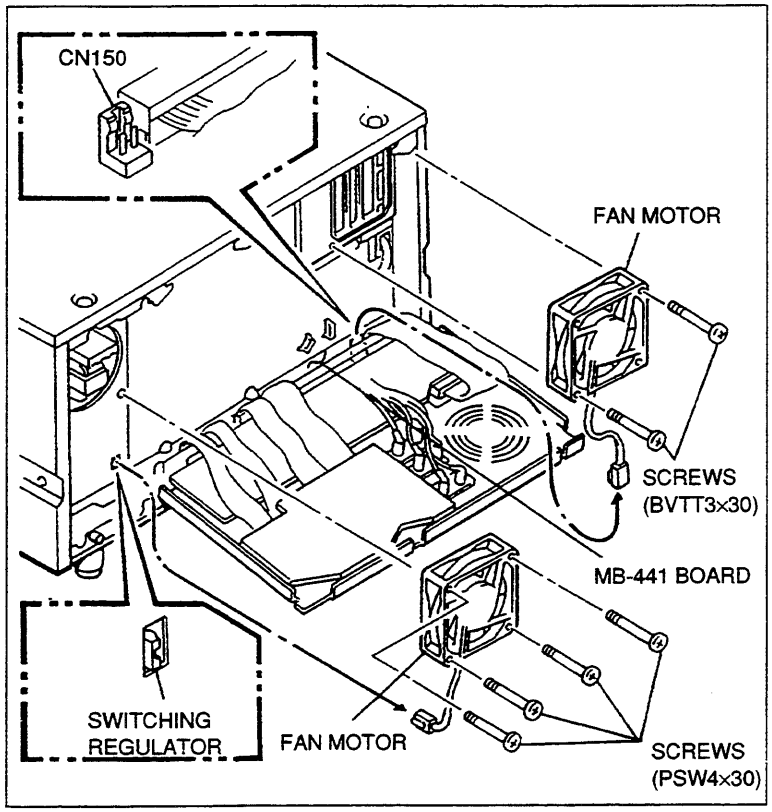
2. **Remove the Fan Motor**
   Remove the screws, then remove the fan motor.

Installation

3. **Install the Fan Motor**
   Install a new fan motor with screws.

   Caution
   1. Install the fan motor in position send the air out.
   2. The fan motors on the switching regulator side and connector panel differ in the type and number of fixing screws.
      - Fan motor on switching regulator side: PSW4x30 (4 pcs)
      - Fan motor on connector panel: BVTT3x30 (2 pcs)

4. **Connect the Connectosrs**
   Connect the connectors into connector CN150 on the MB-441 board and the switching regulator.



Remove/Install the Fan Motor

8-2-15. Filter Replacement

Outline

Replacement
1. Remove the Cap
2. Replace the Filter
3. Install the Cap

Note

Adjustment after the filter replacement is not required.

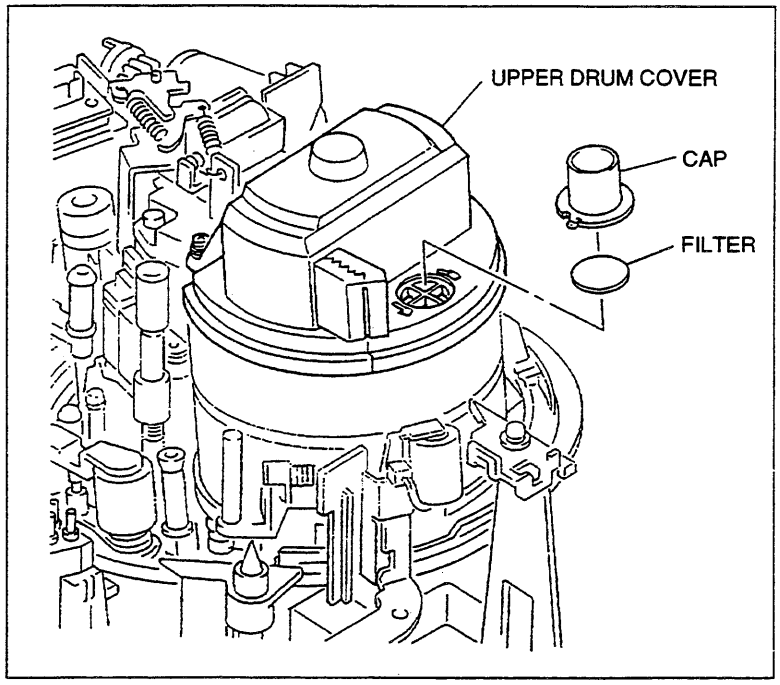
Replacement

1. **Remove the Cap**
   Turn the cap counterclockwise and remove it.

2. **Replace the Filter**
   Replace the dirty filter with a new one.

   Caution
   Be careful not to lose the washer, if it is inserted under the filter.

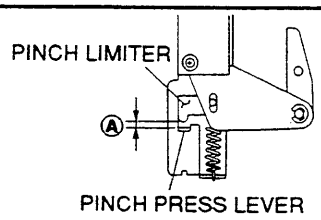
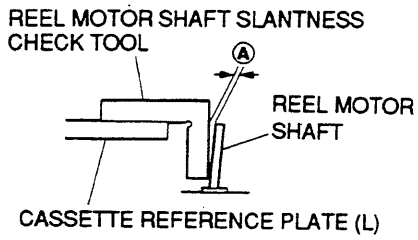
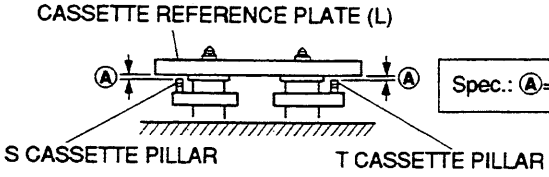
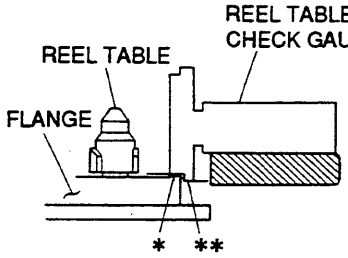
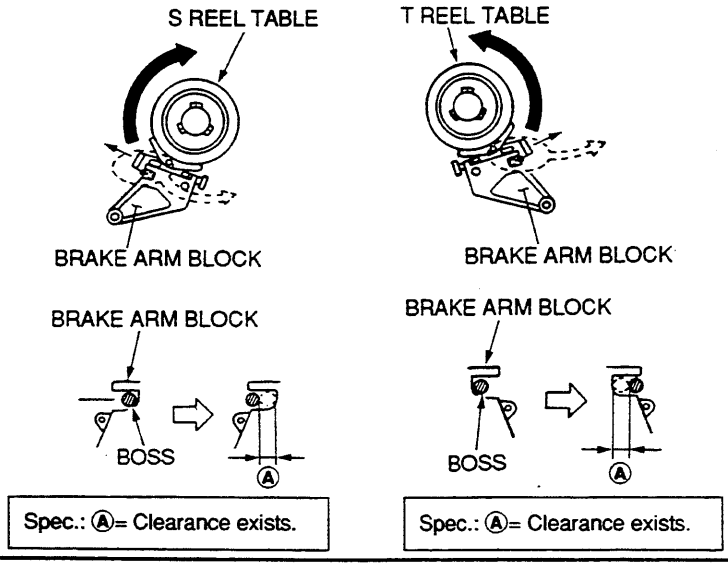
3. **Install the Cap**
   Turn the cap clockwise until it is clicked.



Remove/Install the Filter

8-3. MECHANICAL ADJUSTMENT

Index

Adjustment	Specification	Page
Pinch Press Clearance Adjustment	 Spec.: Ⓐ=0.6 to 0.8 mm	8-73
Reel Motor Shaft Slantness Adjustment	 Spec. 1: (L cassette position) Ⓐ≦0.03 mm Spec. 2: (S cassette position) Ⓐ≦0.1 mm	8-75
Cassette Pillar Height Adjustment	 Spec.: Ⓐ= No clearance	8-77
Reel Table Height Adjustment	 Spec.: The * marked portion of the gauge slide over the flange of the reel table. The ** marked portion of the gauge does not slide over.	8-79
Reel Brake Clearance Check	 Spec.: Ⓐ= Clearance exists. Spec.: Ⓐ= Clearance exists.	8-83
Reel Brake Release Amount Adjustment	Spec. 1: The brake lining doesn't touch a reel table while reel table rotating.	8-85

8-3-1. Pinch Press Clearance Adjustment

Note

- Be sure to check the clearance during pinch press when the pinch press assembly is removed.

Tool

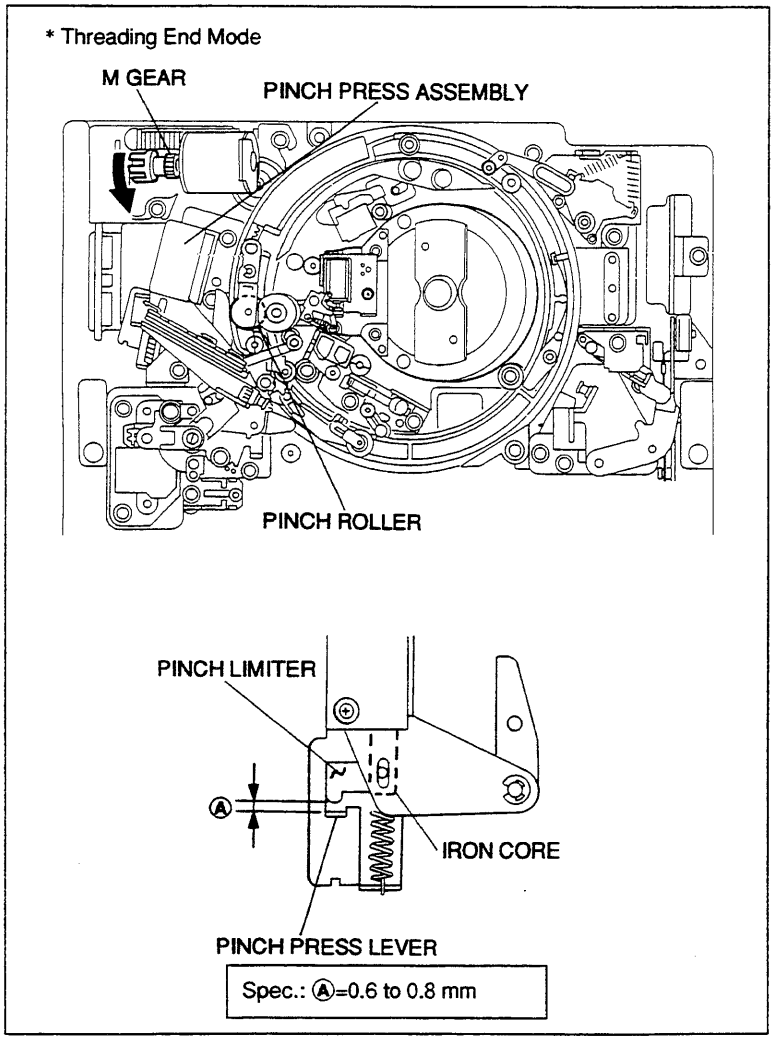
- Wire clearance check gauge set: J-6152-450-A

Check

1. **Put the Pinch Solenoid into the Energized State**
   (1) Turn the M gear of the gear box assembly manually, and put the unit into the threading end mode.
   (2) Press the iron core of the pinch solenoid in the direction of the fully energized state.

2. **Check the Pinch Press Clearance**
   Check that the clearance between the pinch limiter and pinch press lever satisfies the specification.

   If the specification is not satisfied, perform steps 3 and later.



Pinch Press Clearance Check

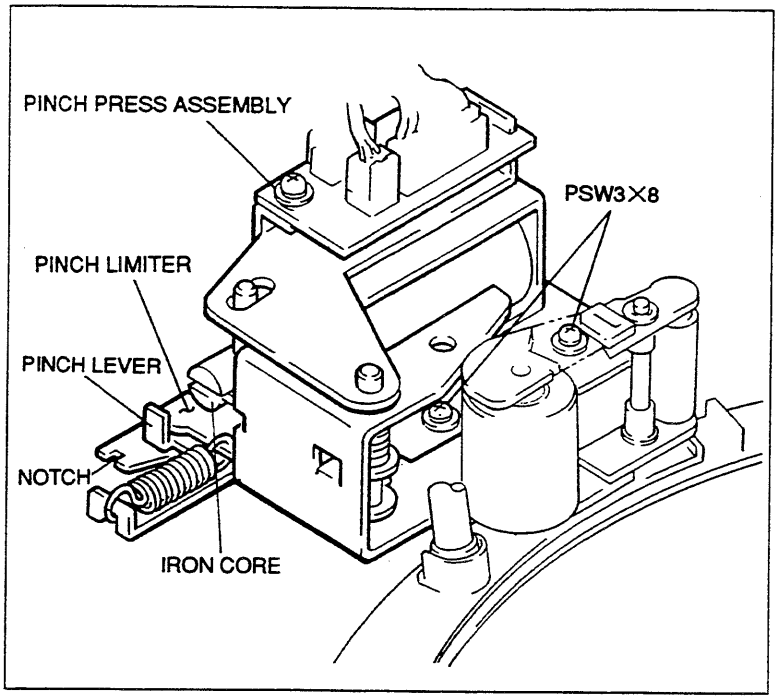
Adjustment

3. **Loosen Screws**
   Loosen the two screws fixing the pinch press assembly by 1/2 to one turn.

4. **Adjust the Pinch Press Assembly Position**
   Put the pinch solenoid into the energized state, then insert the tip of a 3 mm flat-blade screwdriver into the notch of the pinch press assembly and adjust the pinch press assembly position so that the specification is satisfied.

5. **Tighten Screws**
   Tighten the two screws loosened in step 3.

6. **Recheck the Pinch Press Clearance**
   Refer to steps 1 and 2.



Pinch Press Clearance Adjustment

8-3-2. Reel Motor Shaft Slantness Adjustment

Notes

- Be sure to check the slantness of the reel motor shaft when the reel motor assembly is replaced or when the reel shift plate assembly is removed.
- Perform the reel motor shaft slantness adjustment correctly.
  If this adjustment is not performed correctly, a reel hub touches the case in a cassette tape, a noise occurs, and the tape does not run correctly. This may damage the tape.

Tools

- Cassette reference plate (L)(MW-088): J-6320-880-A
- Reel motor shaft slantness check tool (MW-087): J-6320-870-A
- Thickness gauge: 9-911-053-00
- Torque screwdriver (12 kg•cm) (JB-5252): J-6252-520-A
- Torque screwdriver's bit (+3 mm, l=50 mm): J-6323-430-A

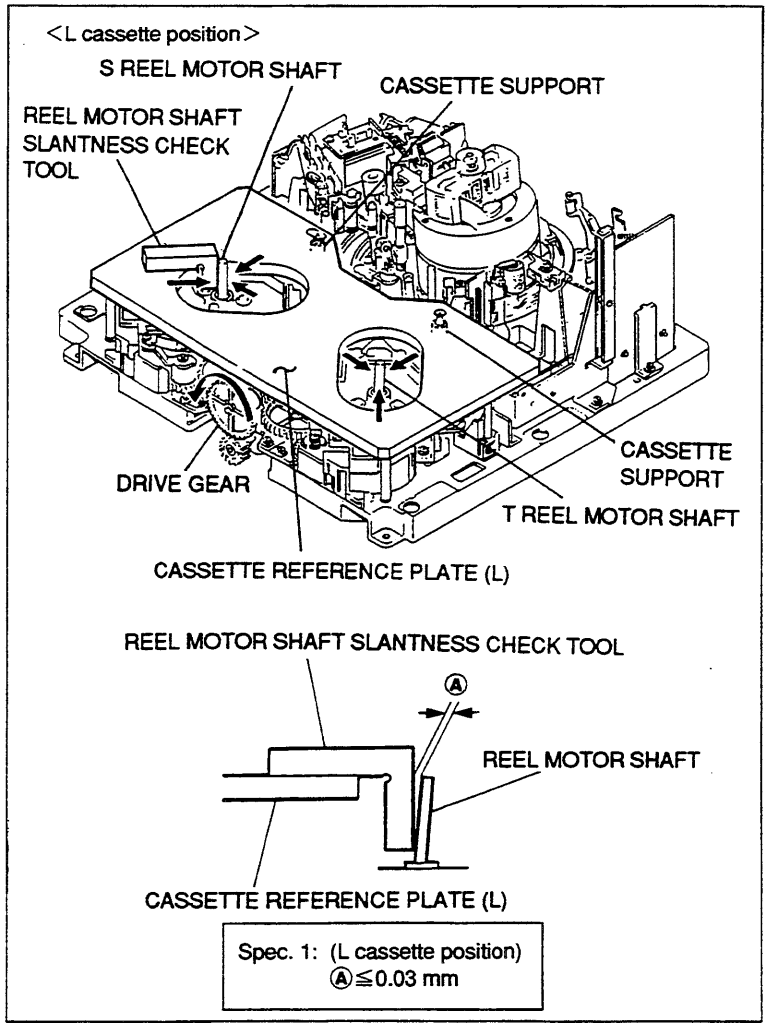
Check

1. **Install the Cassette Reference Plate (L)**
   Place the cassette reference plate (L) in the direction shown in the figure, then place it on two cassette supports.

2. **Place the Reel Shift Plate Assembly in the L Cassette Position**
   Rotate the drive gear counterclockwise as far as it will go.

3. **Check the Slantness in the L Cassette Position**
   (1) Press the check tool against the reel motor shaft from the directions indicated by the arrow.
   (2) Check that the clearance between the reel motor shaft and tool satisfies specification 1.

   If the specification is not satisfied, perform steps 6 through 10.

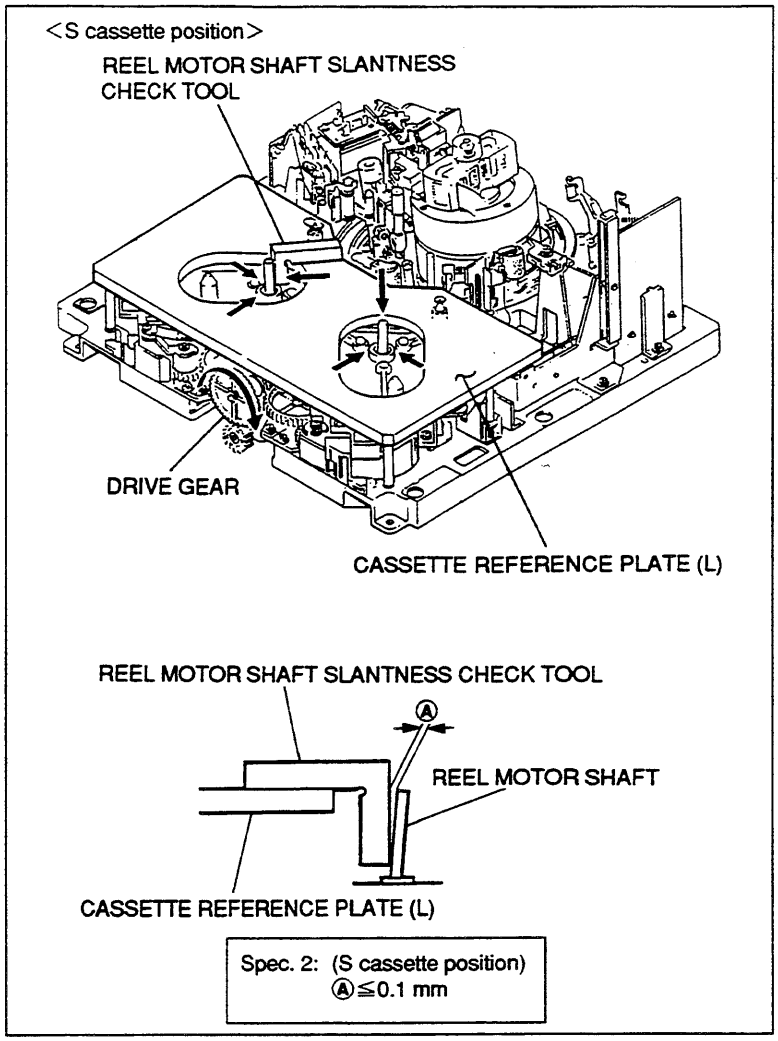


Reel Motor Shaft Slantness Check (L)

4. **Place the Reel Shift Plate Assembly in the S Cassette Position**
   Rotate the drive gear clockwise as far as it will go.

5. **Check the Slantness in the S Cassette Position**
   (1) Press the check tool against the reel motor shaft from the directions indicated by the arrow.
   (2) Check that the clearance between the reel motor shaft and tool satisfies specification 2.

   If the specification is not satisfied, perform steps 6 and later.



Reel Motor Shaft Slantness Check (S)

Adjustment

6. **Loosen Screws**
   Loosen the three screws fixing the reel motor by one to two turns.

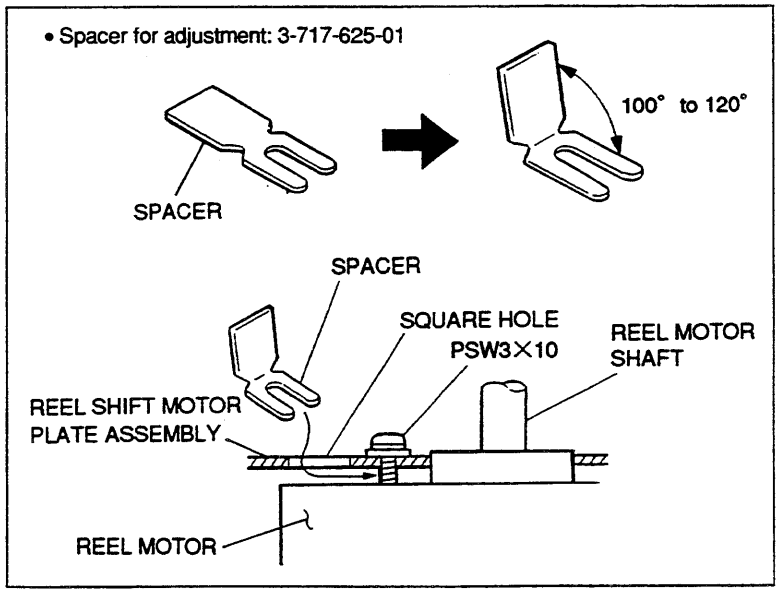
7. **Bend Spacer**
   Bend the adjustment spacer as shown in the figure.

8. **Insert Spacer**
   Insert the adjustment spacer into the square hole on the upper surface of the reel shift plate assembly with tweezers.

9. **Tighten Screws**
   Gradually tighten the three screws loosened in step 6.

   Tightening torque: 68.6×10^{-2} N·m (7 kgf·cm)

10. **Recheck the Reel Motor Shaft Slantness**
    Refer to steps 2 through 5.



Reel Motor Shaft Slantness Adjustment

8-3-3. Cassette Pillar Height Adjustment (L Cassette)

DVW-A500 (UC)	: S/N 15993 and Higher
DVW-A500P (CE)	: S/N 17638 and Higher
DVW-500 (UC)	: S/N 12400 and Higher
DVW-500P (CE)	: S/N 14881 and Higher
DVW-A510 (UC)	: S/N 11154 and Higher
DVW-A510P (CE)	: S/N 13276 and Higher
DVW-510 (UC)	: S/N 10638 and Higher
DVW-510P (CE)	: S/N 11065 and Higher

Note

- Be sure to check the height of the cassette pillars when the reel shift plate assembly is removed.

Tools

- Cassette reference plate (L)(MW-088): J-6320-880-A
- Adjustment mirror (circular): J-6080-029-A
- L-shaped wrench (1.5 mm): 7-700-736-05

Check

1. **Install the Cassette Reference Plate (L)**
   Place the cassette reference plate (L) in the direction shown in the figure, then place it on two cassette supports.

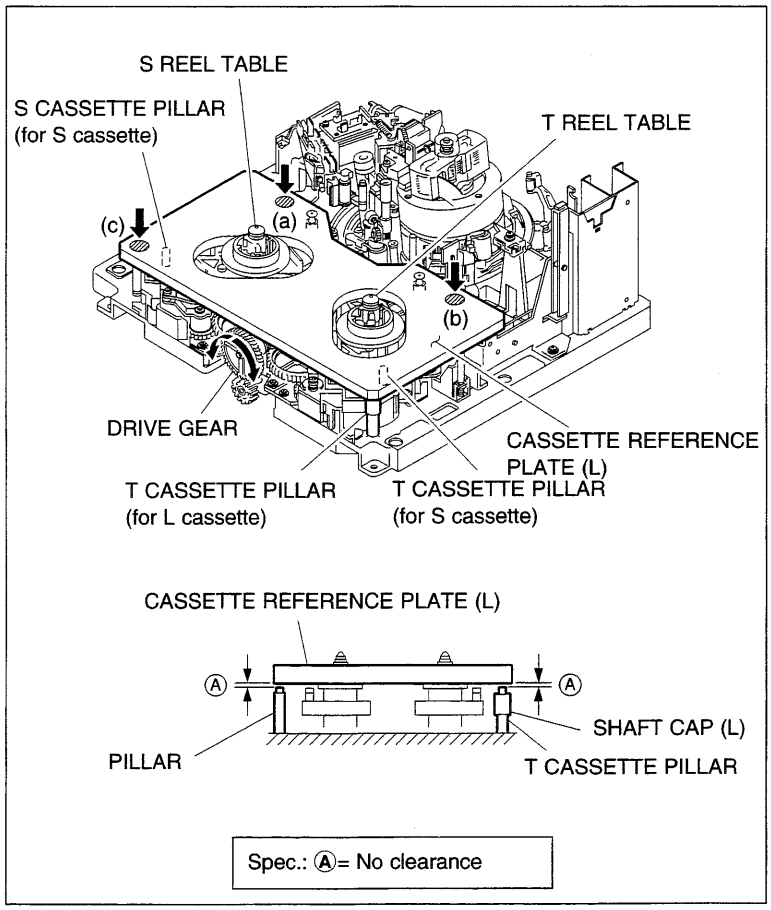
2. **Place the Reel Shift Plate Assembly in the Intermediate Position of S and L Cassette**
   (1) Rotate the drive gear and place the reel shift plate assembly in the intermediate position of S and L cassettes.

   Note: The reel shift plate assembly should be moved to the position where the cassette pillars do not appear from the hole of the reference plate.

   (2) Check that the S and T cassette pillars are positioned under the reference plate.

3. **Check the Cassette Pillar Height**
   Push the three positions (a), (b), and (c) of the cassette reference plate (L) lightly toward the chassis and make sure that the clearance between the shaft cap and cassette reference plate satisfies the specification.

   If the specification is not satisfied, perform steps 4 through 6.



Cassette Pillar Height Check

Adjustment

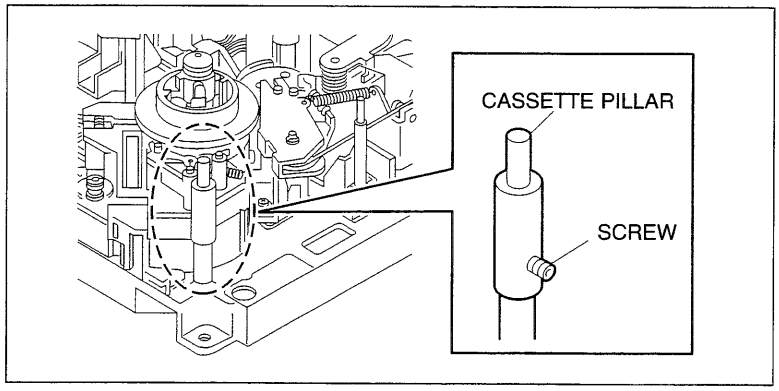
4. **Loosen Fixing Screw**
   Loosen the fixing screw of the T cassette pillar by one or two turns with L-shaped wrench.

5. **Adjust the Cassette Pillar Height**
   Turn and adjust the shaft cap until the clearance is met the specification, then tighten the fixing screw.

   Tightening torque: 0.6 to 0.7 N•m (6 to 7 kgf•cm)

6. **Recheck the Cassette Pillar Height**
   Check that the height of the S and T cassette pillars satisfies the specification.

Caution
Shift the tightening position of the fixing screw when performing readjustment with the specification not satisfied. (Do not tighten the screw in the same position as previous.)



Cassette Pillar Height Adjustment

8-3-3. Cassette Pillar Height Adjustment (S Cassette)

Note

- Be sure to check the height of the cassette pillars when the reel shift plate assembly is removed.

Tools

- Cassette reference plate (L)(MW-088): J-6320-880-A
- Adjustment mirror (circular): J-6080-029-A
- L-shaped wrench (1.5 mm): 7-700-736-05

Check

1. **Install the Cassette Reference Plate (L)**
   Place the cassette reference plate (L) in the direction shown in the figure, then place it on two cassette supports.

2. **Place the Reel Shift Plate Assembly in the Intermediate Position of S and L Cassette**
   (1) Rotate the drive gear and place the reel shift plate assembly in the intermediate position of S and L cassettes.

   Note: The reel shift plate assembly should be moved to the position where the cassette pillars do not appear from the hole of the reference plate.

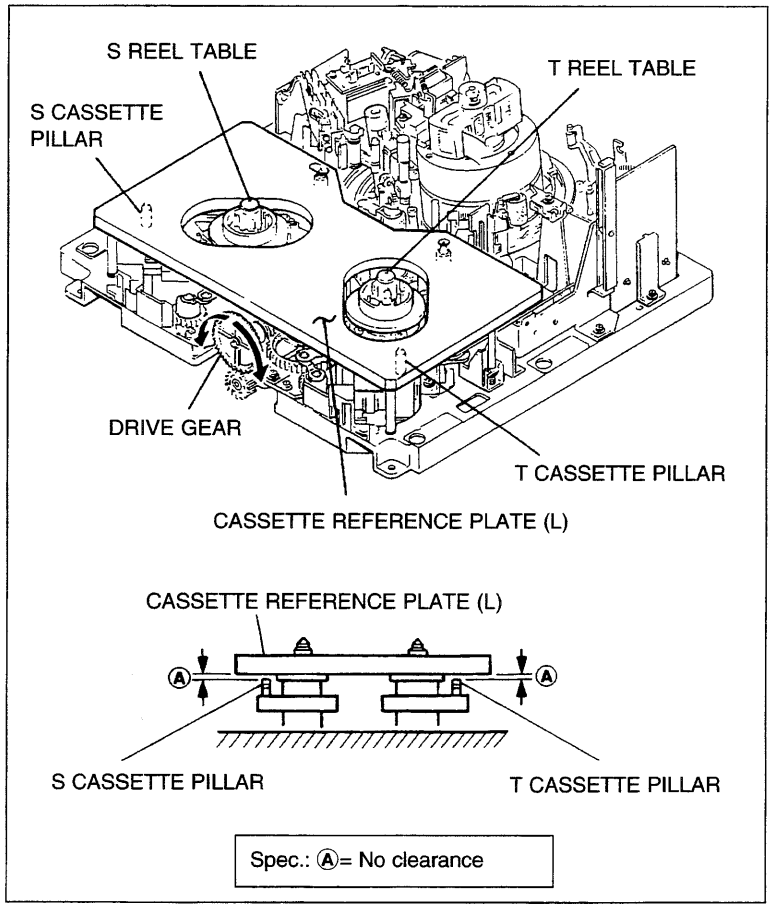
   (2) Check that the S and T cassette pillars are positioned under the reference plate.

3. **Check the Cassette Pillar Height**
   (1) Turn the reference plate over and place it on the cassette pillars.

   Note: The reference plate should be turned over because it has a concave portion at the back and cannot be adjusted correctly.

   (2) Check with an adjustment mirror that there are no clearances between the S and T cassette pillars and the reference plate.

   If the specification is not satisfied, perform steps 4 through 6.



Cassette Pillar Height Check

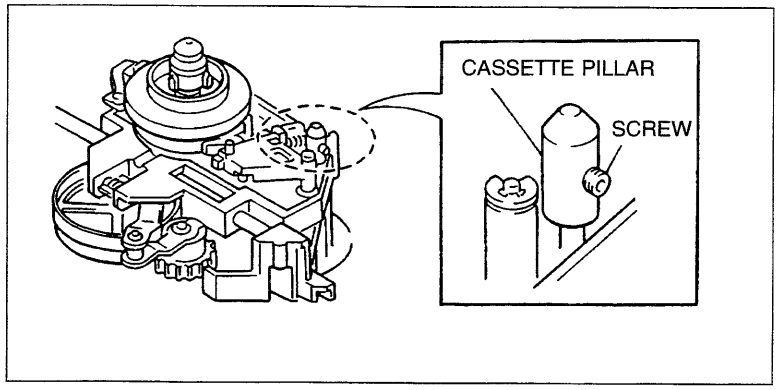
Adjustment

4. **Loosen Fixing Screw**
   Loosen the fixing screw of the S or T cassette pillar by one to two turns.

5. **Adjust the Cassette Pillar Height**
   Lift the cassette pillars and press them slightly against the lower surface of the reference plate. Tighten the fixing screw under this condition.

6. **Recheck the Cassette Pillar Height**
   Check that the height of the S and T cassette pillars satisfies the specification.

Caution
Shift the tightening position of the fixing screw when performing readjustment with the specification not satisfied. (Do not tighten the screw in the same position as previous.)



Cassette Pillar Height Adjustment

8-3-4. Reel Table Height Adjustment

Notes

- Be sure to check the height of the reel table when a reel table is removed.
- Perform the reel table height adjustment correctly.
  The height of the reel table is used as the reference for the tape path.
- After supply reel table height adjustment is performed, be sure to check the video tracking. (Refer to Section 8-4-3.)

Tools

- Cassette reference plate (L)(MW-088): J-6320-880-A
- Reel table height gauge (MW-935): J-6329-350-A
- L-shaped wrench (1.5 mm): 7-700-736-05

Check

1. **Install the Cassette Reference Plate (L)**
   Place the cassette reference plate (L) in the direction shown in the figure, then place it on two cassette supports.

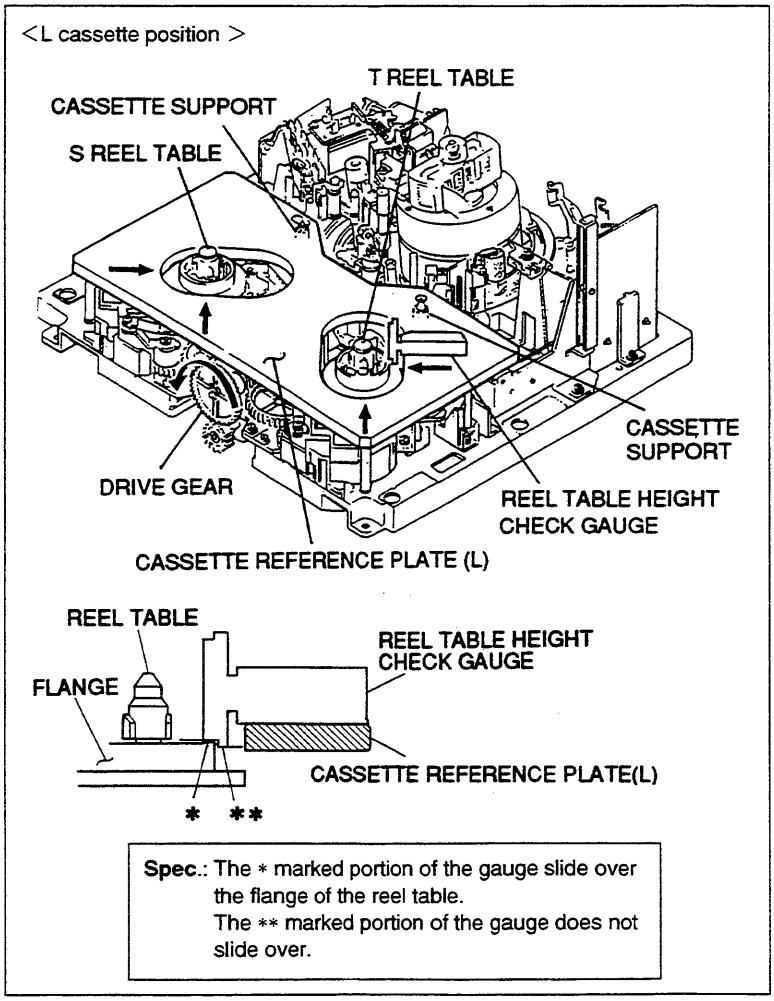
2. **Place the Reel Shift Plate Assembly in the L Cassette Position**
   Rotate the drive gear counterclockwise as far as it will go.

3. **Check the Take-up Reel Table Height**
   (1) Press the "T"-stamped side of the gauge against the take-up reel table from the directions indicated by the arrow.
   (2) Check that the specification is satisfied while rotating the take-up reel table clockwise by one turn.

   If the specification is not satisfied, perform steps 7 and 8.

4. **Check the Supply Reel Table Height**
   (1) Press the "S"-stamped side of the gauge against the supply reel table from the directions indicated by the arrow.
   (2) Check that the specification is satisfied while rotating the supply reel table counter-clockwise by one turn.

   If the specification is not satisfied, perform steps 7 and 8.

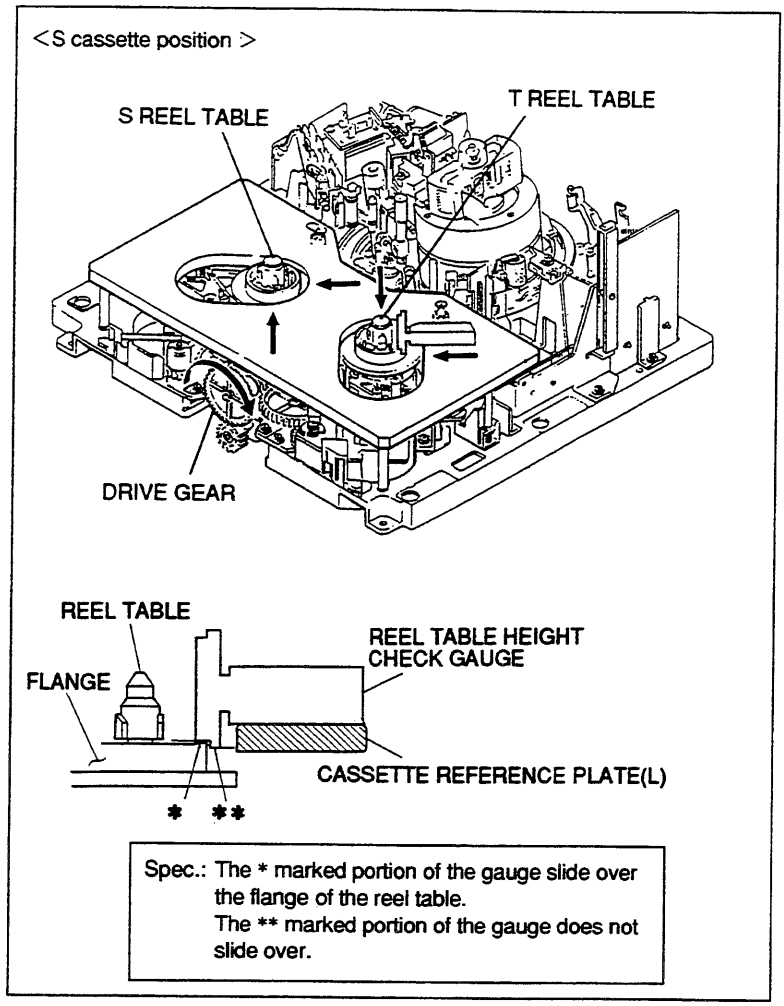


Reel Table Height Check (L)

5. **Place the Reel Shift Plate Assembly in the S Cassette Position**
   Rotate the drive gear clockwise as far as it will go.

6. **Chek the Supply and Take-up Reel Table Height**
   Perform in the same way as in steps 3 and 4.

   If the specification is not satisfied, perform steps 7 and later.
   If the specifications are satisfied in both the L and S cassette positions, perform steps 9 and later.



Reel Table Height Check (S)

Adjustment

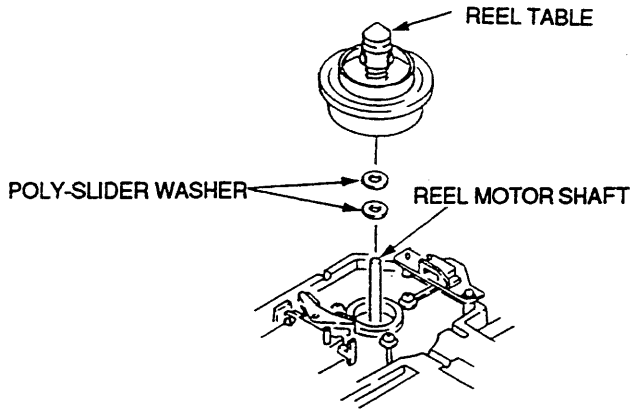
7. **Remove the Reel Table**

8. **Adjust the Number of Poly-slider Washers**
   Adjust the number of poly-slider washers installed in the reel motor shaft so that the specifications are satisfied in both the L and S cassette positions.

9. **Remove the Cassette Reference Plate (L)**
   Remove the cassette reference plate (L) and reel table height gauge.

10. **Tighten the Screws of the Reel Table Assembly**
    (1) Align the notch at the bottom of the reel table assembly with the groove position of the reel shift plate assembly.
    (2) Insert an L-shaped wrench into the notch at the bottom of the reel table assembly along the groove of the reel shift plate and tighten the two screws.

11. **Recheck the Reel Table Height**
    Refer to steps 2 through 6.



• Poly-slider washer for adjustment

Diameter	Thickness	Part No.
4 mm	0.05mm	3-188-108-01
	0.13 mm	3-701-441-01
	0.25 mm	3-701-441-11
	0.5mm	3-701-441-21

Reel Table Height Adjustment

8-3-5. Reel Brake Clearance Check

Note

- Be sure to check clearance of the reel brake when the brake lining assembly is replaced or when the reel table assembly is removed.

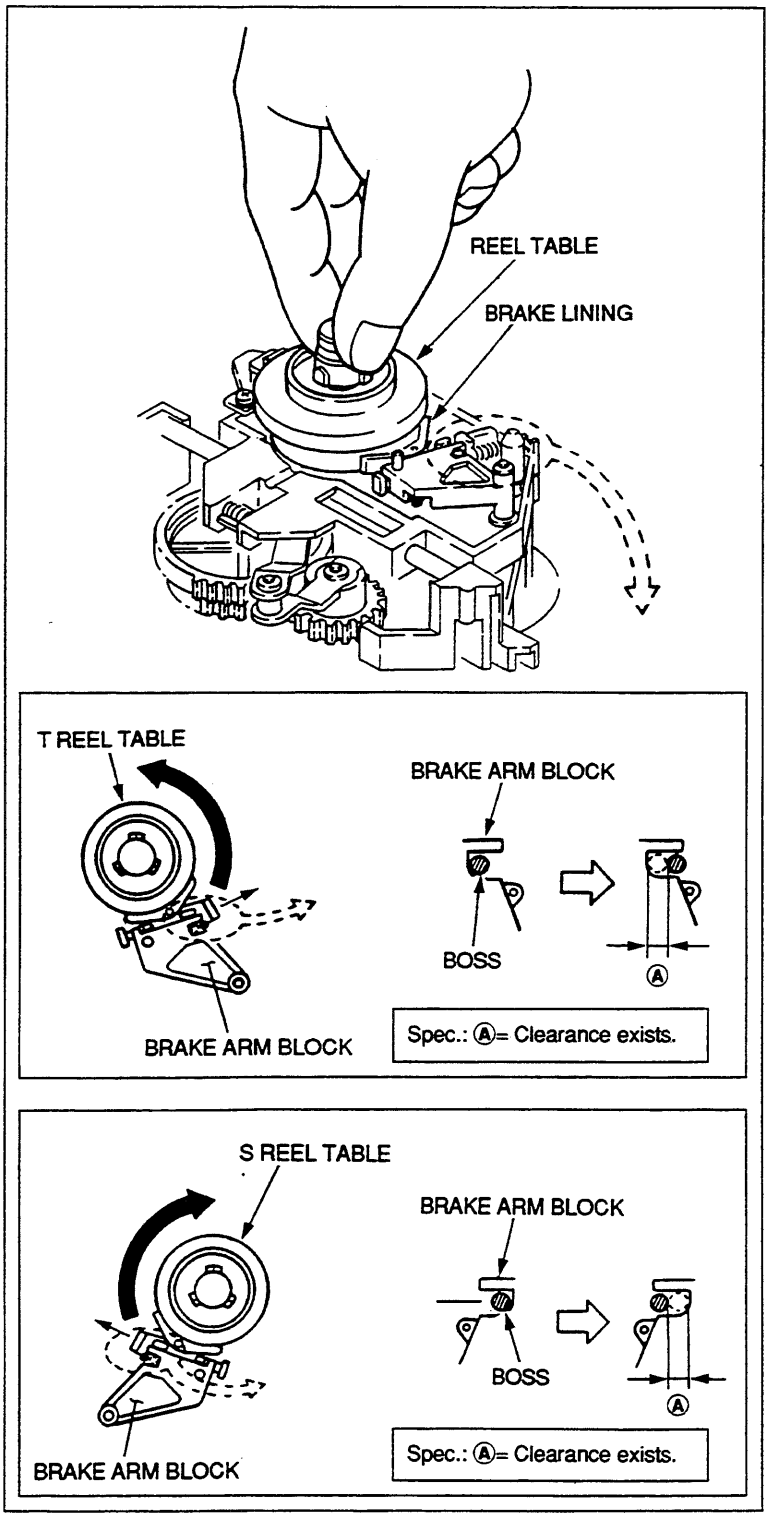
Check

1. **Check the Take-up Reel Brake Clearance**
   Rotate the take-up reel table counterclockwise by fingers.
   At that time, check that a clearance occurs between the brake arm block and boss.

   If no clearance occurs, replace the brake lining. (Refer to Section 8-2-12.)

2. **Check the Supply Reel Brake Clearance**
   Rotate the supply reel table clockwise by fingers.
   At that time, check that a clearance occurs between the brake arm block and boss.

   If no clearance occurs, replace the brake lining. (Refer to Section 8-2-12.)



Reel Brake Clearance Check

8-3-6. Reel Brake Release Amount Adjustment

Notes

- Be sure to check the release amount of the reel brake when the brake lining assembly is replaced or when the reel table assembly is removed.
- Be sure to check the following when performing adjustment with the specification not satisfied.
  (1) Cassette pillar height check (Refer to Section 8-3-3.)
  (2) Reel table height check (Refer to Section 8-3-4.)

Basic knowledge

The brake lining is pressed against the reel table when the power is off.
When the power is turned on, the brake lining is released.
In the PLAY, STOP, REW, F FWD, SEARCH, and REV modes, the brake lining remains released.
Press the EJECT button to put the unit into the EJECT mode. The brake lining is pressed against the reel table a few seconds after the EJECT mode is completed.

Tool

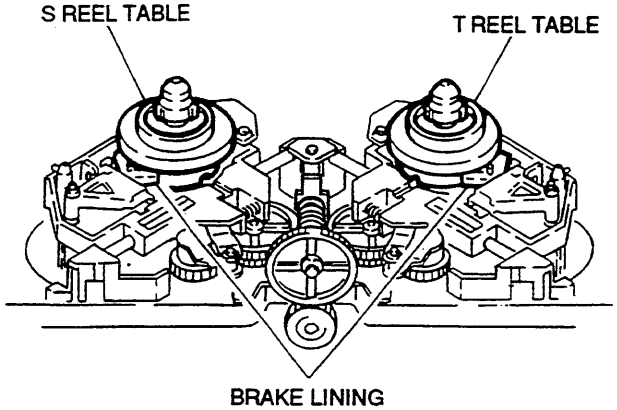
- Wire clearance check gauge set: J-6152-450-A

Check

1. **Turn the Power On**

2. **Check the Brake Release Amount**
   Check on the supply and take-up sides that the brake lining does not touch the reel table while a reel table is rotating. (Specification 1)

   If specification 1 is not satisfied, perform steps 3 and later.



Spec. 1: The brake lining doesn't touch a reel table while reel table rotating.

Reel Brake Release Amount Check

Adjustment

3. **Turn the Power Off**

4. **Remove the Reel Shift Plate Assembly**
   Refer to steps 1 through 4 in Section 8-2-13.
   (It is not necessary to remove a reel table.)

5. **Loosen the Screws Fixing the Brake Solenoid**
   Loosen the two screws fixing the brake solenoid.

6. **Adjust the Brake Solenoid Position**
   Press down the iron core of the brake solenoid to the energized position.
   At that time, adjust the brake solenoid position so that the clearance between the brake lining and reel table satisfies specification 2.

   Note
   Press down only the iron core by a sharp-pointed stick.
   Do no touch other portions.

   Know-how:
   - Shift the brake solenoid upward.
     →Clearance A is narrowed.
   - Shift the brake solenoid downward.
     →Clearance A is widened.

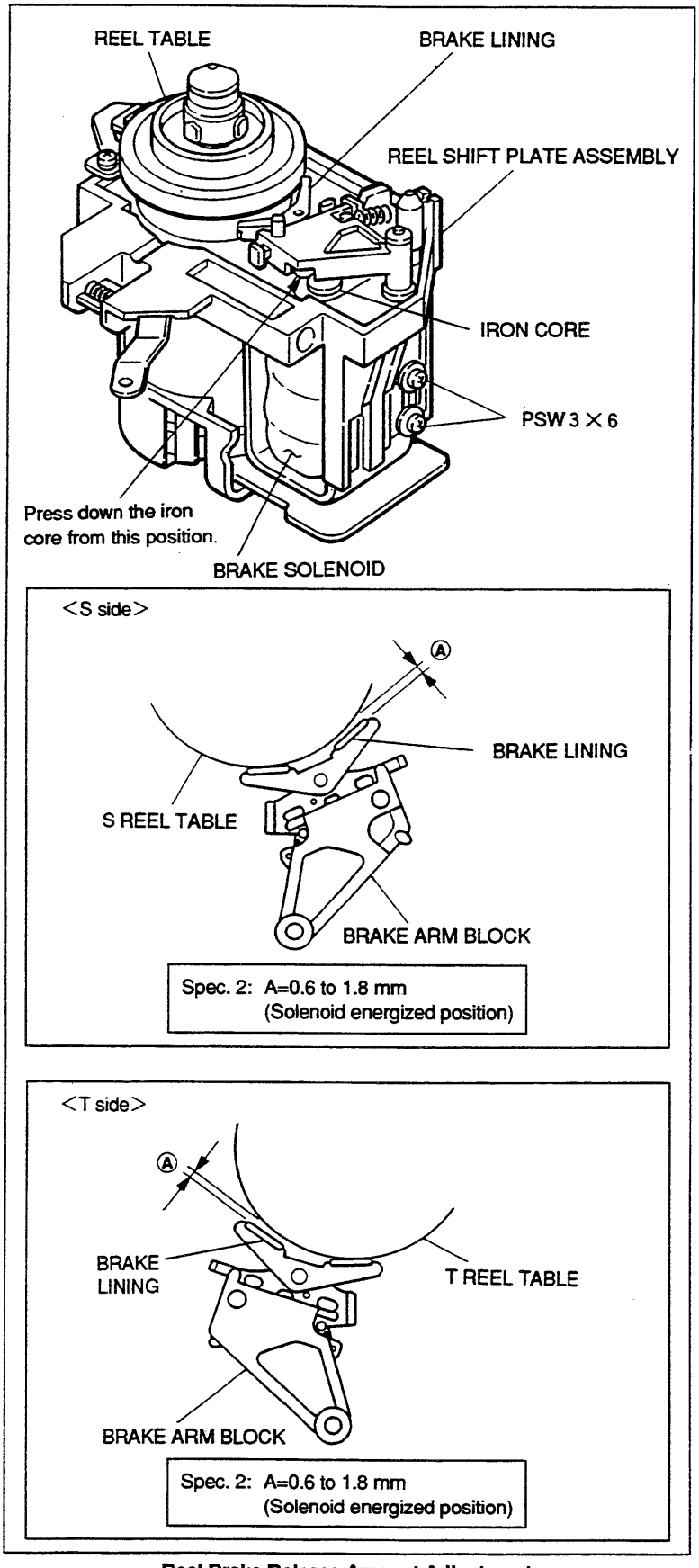
7. **Tighten the Screws Fixing the Brake Solenoid**
   Tighten the two screws loosened in step 5.

8. **Recheck the Brake Release Amount**
   Refer to step 6.

9. **Install the Reel Shift Plate Assembly**
   Refer to steps 12 through 22 in Section 8-2-13.
   (It is not necessary to smear grease again to the slide shaft or to apply oil again to the crank arm (A).)

10. **Check the Cassette Pillar Height**
    Refer to Section 8-3-3.

11. **Check the Reel Table Height**
    Refer to Section 8-3-4.



Reel Brake Release Amount Adjustment

8-4. TAPE PATH ADJUSTMENT

1. Parts Location of the Tape Running System

·The parts location of the tape running system is described on page 8-135.

2. Notes

(1) Cassette Compartment

- The tape path adjustment should be performed with the cassette compartment not installed in the unit. If not, the check and adjustment may be impossible.
- When the tape path adjustment is performed with the cassette compartment removed, the tape protection circuit is activated and the "ERROR" message may be displayed. In this case, turn the power off, then turn it on again.

(2) S701-1 on SS-52 board

This switch selects whether to enable the tracking control volume.
- ON (Upper position): Tracking control disabled.
- OFF (Lower position) : Tracking control enabled.

After adjustment is completed, be sure to return this switch to ON (upper position).

(3) Audio/TC Head

The audio erase head is not installed although it is drawn in the figures.

3. Preparation

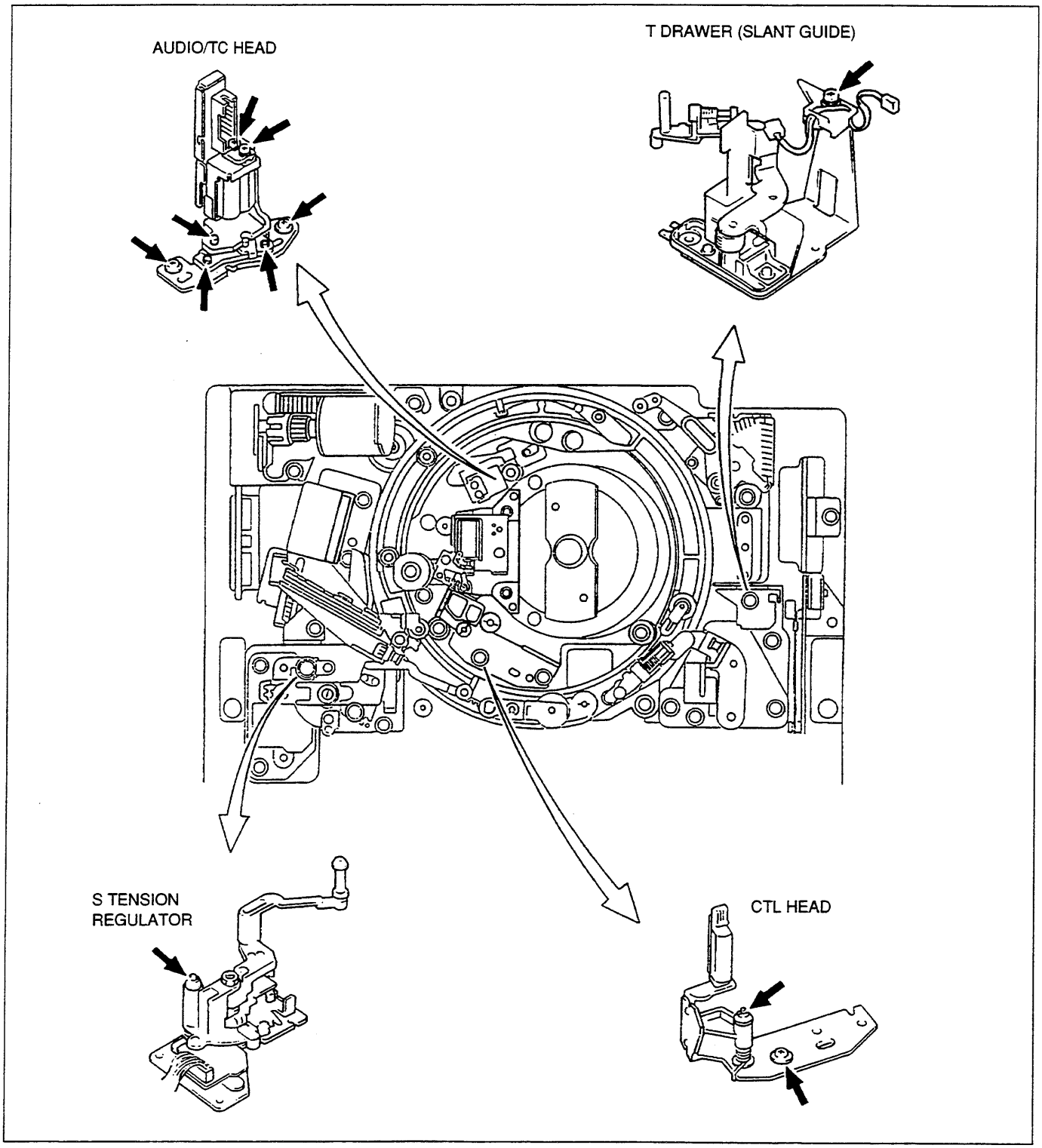
(1) Remove the rotary head cleaner. (Refer to Section 8-2-4.)
(2) Clean the following portions :
- Rotary heads (Refer to Section 7-1-2.)
- Upper drum's tape running surface (Refer to Section 7-1-3.)
- Lower drum's tape running surface and lead surface (Refer to Section 7-1-4.)
- Stationary heads (Refer to Section 7-1-5.)
- Tape running system and tape cleaner (Refer to Section 7-1-6.)

Note : The tape running condition may be difficult to check with the rotary head cleaner installed. Therefore, remove this component in advance.

4. Locking Compound

When loosing the following screws, apply locking compound to the screws after adjustment is completed.
The locking compound that applied to other surrounding parts must be wiped off with gauze or soft cloth.

- Locking compound : 7-432-114-11



5. Alignment Tape

(1) ZR2-1P

- Part No.: 8-960-073-61
- Contents:

TIME min. sec	CTL TRACK	CUE TRACK	VIDEO/AUDIO TRACK	USE
00 : 00 ↑ (7 : 3 PULSE) ↓ 15: 00	CTL	1 kHz, 0 VU	4 MHz (A CH only)	• Video Tracking Adjustment • CTL Head Position Adjustment • Audio/TC Head Height Adjustment (DVW-510P) • Audio/TC Head Position Adjustment • Audio Level Check in REV Mode (DVW-510P)
15: 00 — 20 : 00	CTL	12 kHz, 0 VU	A, C CH – 4 MHz B, D CH – 8 MHz	• Audio/TC Head Azimuth Adjustment (DVW-510P) • Audio/TC Head Head-to-tape Contact Adjustment (DVW-510P)
20 : 00 — 25 : 00	CTL	12 kHz, 0 VU	16 MHz (ALL CH)	
25 : 00 — 27 : 00	CTL	———	50 % FLAT FIELD (ALL CH)	

* CTL head height adjustment can be performed at any portion of this alignment tape.

Note
When the 7:3 pulse portion is played back, the displayed TC data is interpolated by CTL signal due to no recording on the time code track.

(2) CR8-1A PS

- Part No.: 8-960-098-45
- Contents:

TIME min. sec	AUDIO TRACK	VIDEO TRACK	CTL TRACK	USE
00 : 00 — 02 : 55	1 kHz, 0 VU	———	CTL	
02 : 55 — 03: 00	Blank			
03: 00 — 04 : 55	10 kHz, −10 VU	———	CTL	• Audio/TC Head Azimuth Adjustment (DVW-A510P/CA510P) • Audio/TC Head Head-to-tape Contact Adjustment (DVW-A510P/CA510P)
04 : 55 — 05 : 00	Blank			
05 : 00 — 05 : 55	1 kHz, −20 VU	———	CTL	
05 : 55 — 06 : 00	Blank			
06 : 00 — 07 : 55	40 Hz, −20 VU 7 kHz, −20 VU 10 kHz, −20 VU 15 kHz, −20 VU	———	CTL	
07 : 55 — 08 : 00	Blank			
08 : 00 — 10 : 00	1 kHz, 0 VU	———	1 kHz Sine Wave	• Audio/TC Head Height Adjustment (DVW-A510P/CA510P) • Audio Level Check in REV Mode (DVW-A510P/CA510P)

Note
This alignment tape is not required in the DVW-510P.

(3) CR5-1B PS

- Part No.: 8-960-096-91
- Contents:

TIME min.:sec.	VIDEO TRACK	AFM	CTL	USE
0 : 00	RF Sweep	No Signal		
2 : 00	60% H Sweep (CTDM)			
5 : 00	Pulse & Bar (CTDM)			
8 : 00	60% Multi Burst			
11 : 00	Pulse & Bar			
14 : 00	100% Color Bars	400 Hz SINE WAVE 25 kHz DEVIATION	CTL	• Y/C Head Head-to-tape Contact Check
16 : 30		75 kHz DEVIATION		
17 : 00	50% Bowtie & 10T	No Signal		
19 : 00	Line 17 Signal			
22 : 00	Quad Phase			
24 : 00	Flat Field			
26 : 00	100% Color Bars with Dropout			
28 : 00	Composite H Sweep with VISC			
30 : 00				

Note

This alignment tape is not required in the DVW-510P.

8-4-1. Audio/TC Head Zenith Adjustment

Note

The audio/TC head zenith check and adjustment are not required except when the audio/TC head is replaced.

Tools

- Flatness plate (SL-657): J-6086-570-A
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

Check

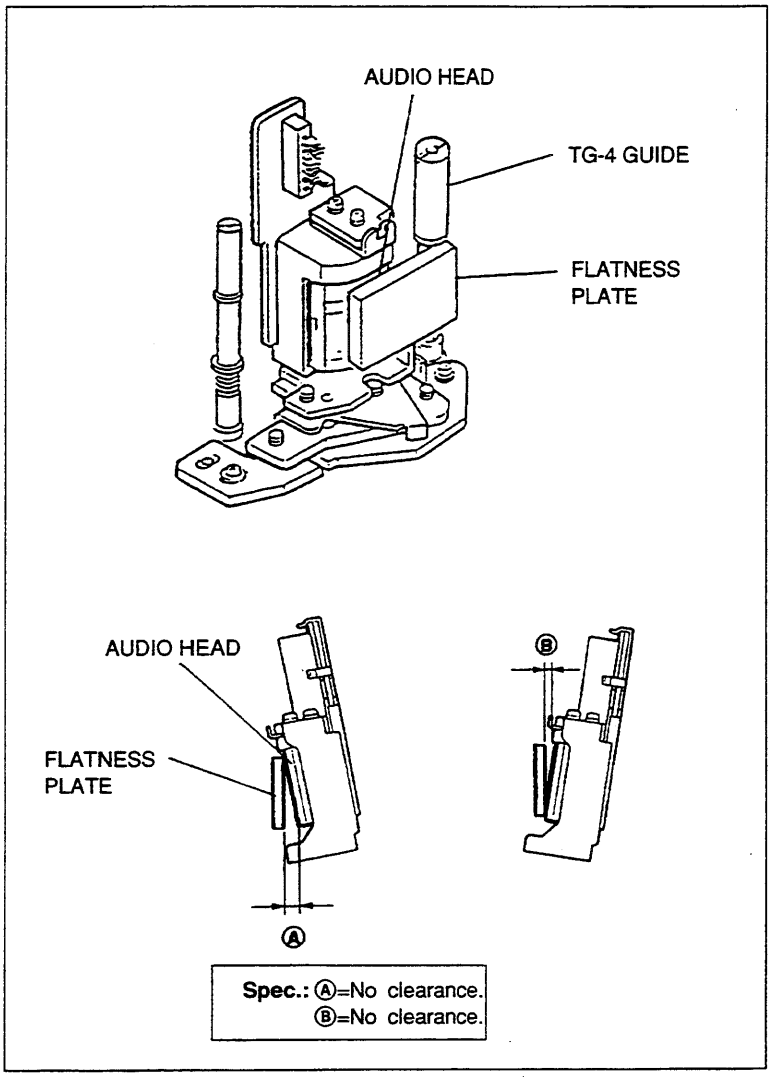
1. **Unthreading End Mode**
   Check that the unit is in the unthreading end mode.

2. **Check the Audio/TC Head Zenith**
   (1) Push the flatness plate lightly against the TG-4 guide and audio head.

   Caution
   Be careful not to damage the surface of the audio head and TG-4 guide.

   (2) Check that no clearance exists between the audio head and flatness plate as TG-4 guide reference in step (1).

   If the specification is not satisfied, perform steps 3 and later.
   If it is satisfied, perform step 7.



Audio/TC Head Zenith Check

Adjustment

3. **Remove the CL Guide Rail**
   Remove the two screws, then remove the CL guide rail.

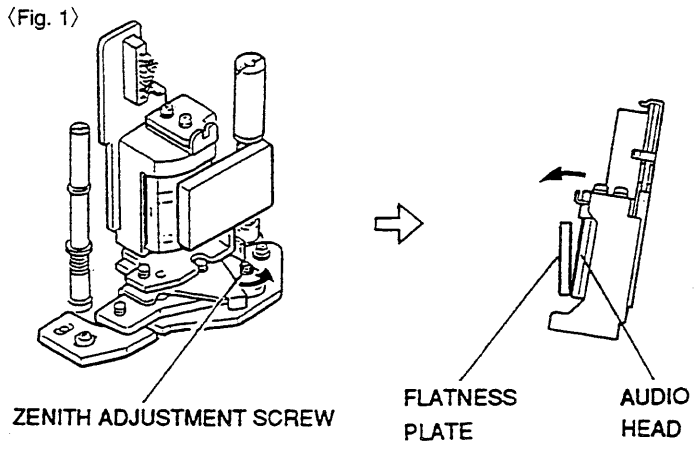
4. **In Case Clearance Exists at the Upper Part (Fig. 1)**
   Turn the zenith adjustment screw counterclockwise to satisfy the specification.

5. **In Case Clearance Exists at the Lower Part (Fig. 2)**
   Turn the zenith adjustment screw clockwise to satisfy the specification.

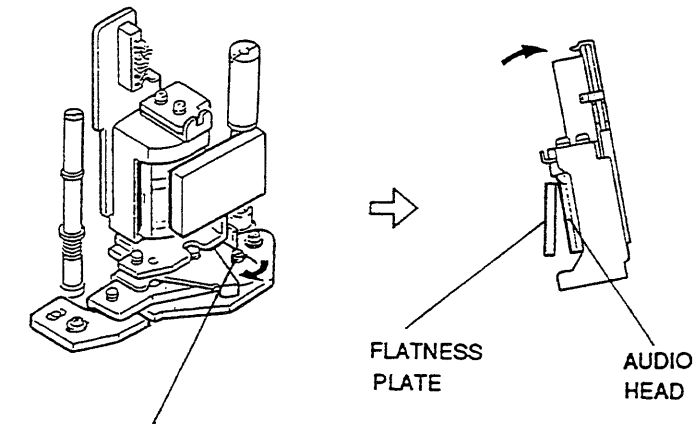
6. **Install the CL Guide Rail**
   Install the CL guide rail with two screws.

7. **Cleaning**
   Clean the surface of the audio head and TG-4 guide with a cleaning cloth moistened with cleaning fluid.

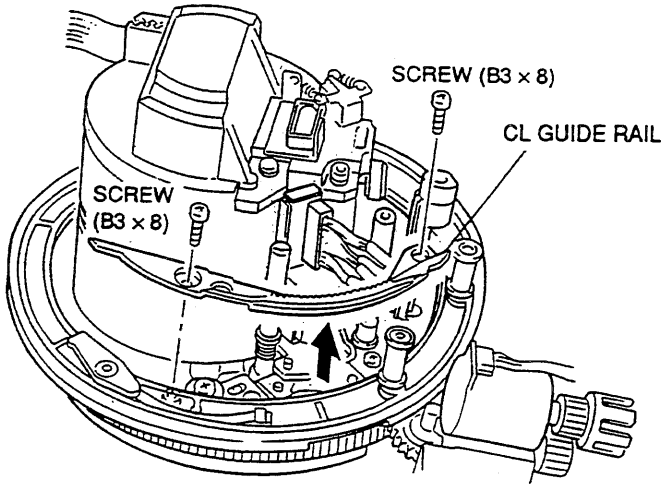
〈Fig. 1〉



〈Fig. 2〉



* Removal/Installation of the CL Guide Rail



Audio/TC Head Zenith Adjustment

8-4-2. Tape Running Adjustment

Drum Entrance Side

Tools

- Digital Betacam cassette BCT-D32 (S cassette)
- Adjustment mirror (circular): J-6080-029-A
- Tape guide adjustment driver (MW-261): J-6322-610-A

Check

1. Set the S Cassette Tape
(1) Place the reel shift plate assembly in the S cassette position.
(2) Set the BCT-D32 and put a weight on the cassette so that it does not rise up.

2. Turn the Power On

3. PLAY Mode
Check that the tape running condition satisfies specification 1.

If specification 1 is not satisfied, perform steps 9 and 10.

4. REV × 10 Mode
Check that the tape running condition satisfies specification 1.

If specification 1 is not satisfied, perform steps 9 and 10.

5. F.FWD Mode
Check that the tape running condition satisfies specification 1.

If specification 1 is not satisfied, perform steps 9 and 10.

6. REW Mode
Check that the tape running condition satisfies specification 1.

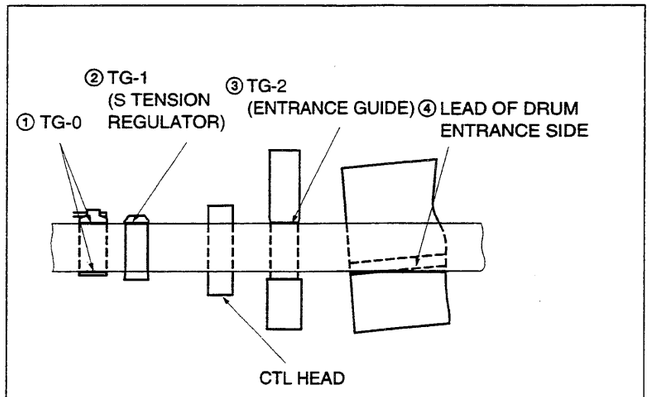
If specification 1 is not satisfied, perform steps 9 and 10.

7. REV × 1 Mode
Check that the tape running condition satisfies specification 1.

If specification 1 is not satisfied, perform steps 9 and 10.

8. VAR × -1/30 Mode
Check that the tape running condition satisfies specification 1.

If specification 1 is not satisfied, perform steps 9 and 10.



Spec. 1: ① TG-0
The tape runs without any curl at the upper and lower flanges.

② TG-1 (S TENSION REGULATOR)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

③ TG-2 (ENTRANCE GUIDE)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

④ LEAD OF DRUM ENTRANCE SIDE
The tape runs without any curl at the lead.

Tape Running Check at Drum Entrance Side

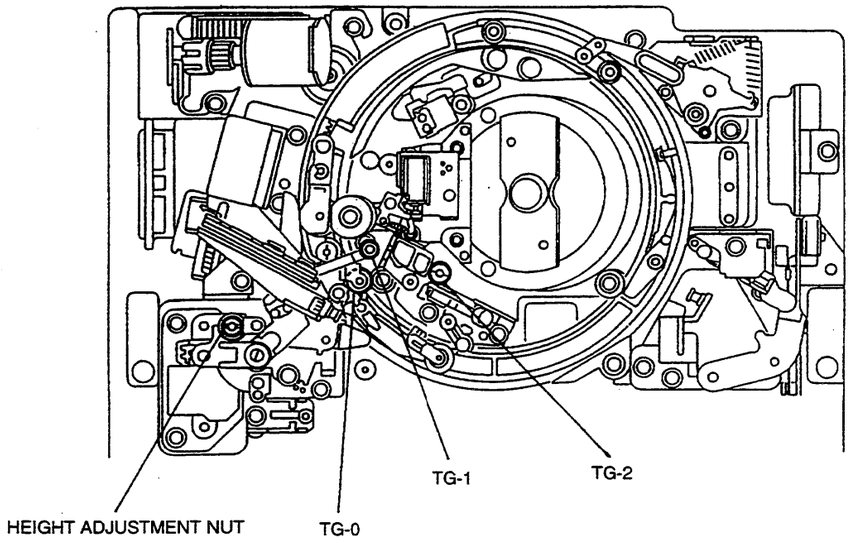
8-4-2. Tape Running Adjustment

Adjustment

9. Adjust the TG-1 and TG-2 (Entrance Guide) Height
(1) Put the unit into the PLAY mode.
(2) Turn the height adjustment nut of TG-1 and the upper flange of TG-2 using a tape guide adjustment driver and adjust the height of TG-1 and TG-2 so that the specification 1 is satisfied.

10. Recheck the Tape Running at Drum Entrance Side
Refer to steps 3 through 8.

If the specification 1 is not satisfied, perform the adjustment in step 9 again.



Tape Running Adjustment at Drum Entrance Side

Drum Exit Side

Tools

- Digital Betacam cassette BCT-D32 (S cassette)
- Digital Betacam cassette BCT-D94L (L cassette)
- Adjustment mirror (circular): J-6080-029-A
- Tape guide adjustment driver (MW-261): J-6322-610-A

Check

1. **Set the S Cassette Tape**
   (1) Place the reel shift plate assembly in the S cassette position.
   (2) Set the BCT-D32 and put a weight on the cassette so that it does not rise up.

2. **Turn the Power On**

3. **PLAY Mode**
   Check that the tape running condition satisfies specification 2.

   If specification 2 is not satisfied, perform steps 12 and 14.

4. **REV × 10 Mode**
   Check that the tape running condition satisfies specification 2.

   If specification 2 is not satisfied, perform steps 13 and 14.

5. **F.FWD Mode**
   Check that the tape running condition satisfies specification 2.

   If specification 2 is not satisfied, perform steps 12 and 14.

6. **REW Mode**
   Check that the tape running condition satisfies specification 2.

   If specification 2 is not satisfied, perform steps 12 and 14.

7. **REV × 1 Mode**
   Check that the tape running condition satisfies specification 2.

   If specification 2 is not satisfied, perform steps 12 and 14.

8. **VAR × -1/30 Mode**
   Check that the tape running condition satisfies specification 2.

   If specification 2 is not satisfied, perform steps 13 and 14.

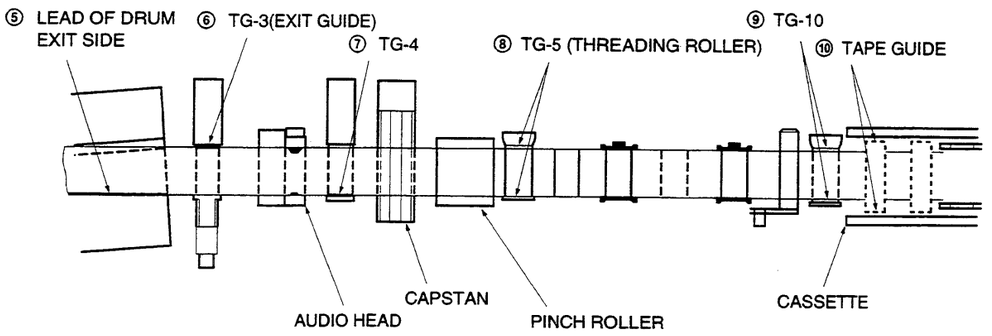
9. **Set the L Cassette Tape**
   (1) Take out the BCT-D32.
   (2) Press S700 (C-1/side A) on the SS-52 board and place the reel shift plate assembly in the L cassette position.
   (3) Set the BCT-D94L and put a weight on the cassette so that it does not rise up.

10. **Play Back the Tape**
    Play back the tape beginning portion of the BCT-D94L.

11. **Check the Tape Running at the T Tape Guide of Cassette**
    Check that the tape running condition satisfies specification 3 at TG-10 and the T tape guide of the BCT-D94L.

    If specification 3 is not satisfied, perform step 15.

8-4-2. Tape Running Adjustment



Spec. 2: ⑤ LEAD OF DRUM EXIT SIDE
The tape runs without any curl at the lead.

⑥ TG-3 (EXIT GUIDE)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

⑦ TG-4
The tape runs in contact with the lower flange.
The tape curl is less than 1/10 of the tape width.

⑧ TG-5 (THREADING ROLLER)
The tape runs without any curl at the upper and lower flanges.

Spec. 3: PLAY Mode
⑨ TG-10
The tape runs not in contact with the upper and lower flanges.

⑩ TAKE-UP SIDE TAPE GUIDE
The tape runs without any curl at the upper and lower portions of the tape guide.

Tape Running Check at Drum Exit Side

8-4-2. Tape Running Adjustment

Adjustment

12. Adjust the TG-3 (Exit Guide) and TG-4 Height

(1) Set the BCT-D32 and put the unit into the PLAY mode.
(2) Turn the upper flanges of TG-3 and TG-4 using a tape guide adjustment driver and adjust the height of TG-3 and TG-4 so that the specification 2 is satisfied.

13. Adjust the TG-5 (Threading Roller) Height (only when the specification is not satisfied in REV × 10 mode and VAR × –1/30 mode)

(1) Put the unit into the EJECT mode.
(2) Take out the cassette tape.
(3) Turn the upper flange of TG-5 using a tape guide adjustment driver and adjust the height of TG-5 so that the specification 2 is satisfied.
(4) Set the S cassette tape and put the unit into the REV × 10 mode or VAR × –1/30 mode. At this time, check that the tape running condition satisfies specification 2.

If it is not satisfied, repeat steps (1) through (4) mentioned above.

14. Recheck the Tape Running at Drum Exit Side

Refer to steps 2 through 8.

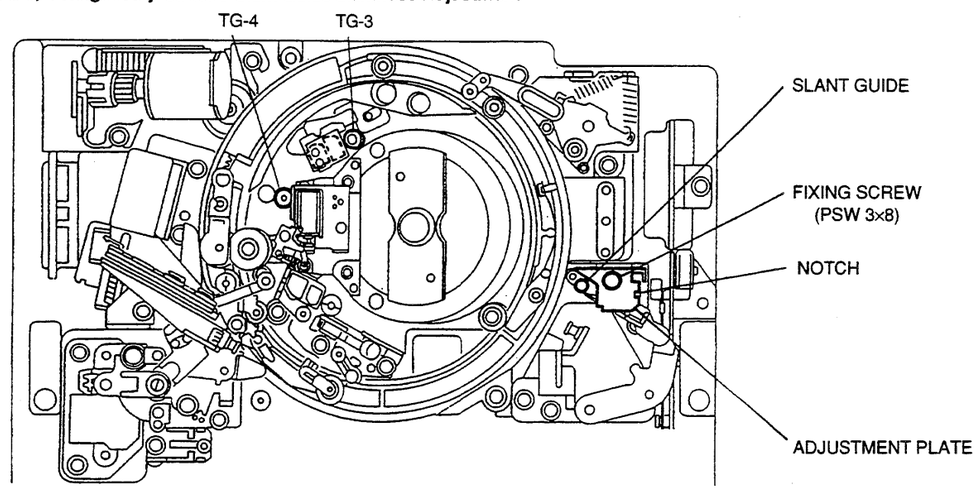
If the specification 2 is not satisfied, perform the adjustment in step 12 again.
(If the specification 2 is not satisfied in REV × 10 mode and VAR × –1/30 mode, perform the adjustment in step 13 again.)

15. Adjust the Slant Guide Slantness

(1) Loosen the fixing screw of the adjustment plate by 1/4 to 1/2 turn.
(2) Insert a 3 mm flatbladed screwdriver into the notch of the adjustment plate.
(3) Adjust the slantness of the slant guide so that specification 3 is satisfied.
(4) Tighten the screw loosened in step (1).
(5) Recheck that specification 3 is satisfied referring to steps 9 through 11.

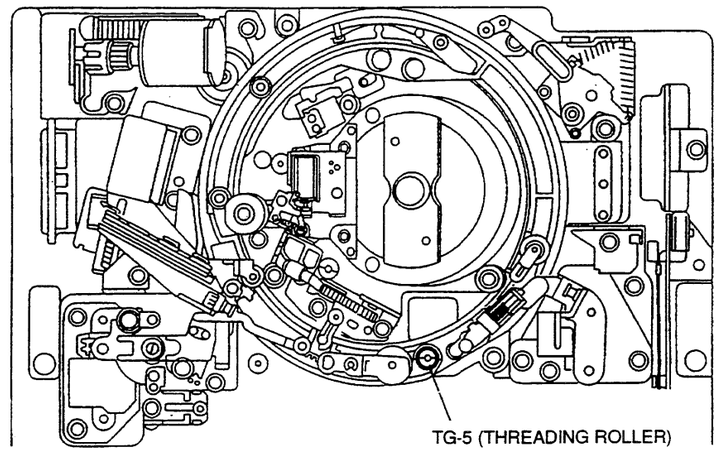
If it is not satisfied, repeat steps (1) through (5) mentioned above.

*** TG-3, 4 Height Adjustment/ Slant Guide Slantness Adjustment**



*** TG-5 Height Adjustment (only when the specification is not satisfied in REV × 10 mode and VAR × -1/30 mode)**

〈Unthreading End Mode〉



Tape Running Adjustment at Drum Exit Side

8-95

8-4-3. Video Tracking Adjustment

8-4-3. Video Tracking Adjustment

Note

The Y/C Head Head-to-tape Contact Check (step 16) should be performed in the DVW-A510P/CA510P only. In the DVW-510P, it is not required.

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

- Alignment tape CR5-1B PS: 8-960-096-91
  (Not required in the DVW-510P)

- Adjustment mirror (circular): J-6080-029-A
- Tape guide adjustment driver (MW-261): J-6322-610-A

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: TP2502/SS-52 board (ENV A/C signal)
   TRIG: TP819/SS-52 board (1/2 VD signal)

3. **Set the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

4. **Put S2101-7, 8 on the SS-52 Board to ON (upper position)**

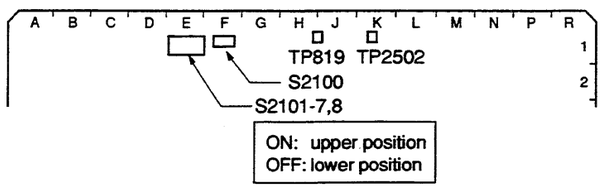
5. **Turn the power On**

6. **Press S2100 on the SS-52 Board**

* Connection of the Oscilloscope

CH-1: TP2502/SS-52 board (ENV A/C signal)
TRIG: TP819/SS-52 board (1/2 VD signal)

〈SS-52 BOARD, Side A〉



Preparation

8-97

Check

7. PLAY Mode

(1) Play back the ZR2-1P (00:00 to 15:00).

(2) Put S701-1 on the SS-52 board to OFF (lower position) so that the tracking control volume can be operated.

(3) Turn RV700 (tracking control volume) on the SS-52 board and check that the output levels at the entrance and exit sides do not become higher than the output level in the center portion.

If they become higher, perform the adjustment (at the Drum Entrance Side or Drum Exit Side) in steps 17 and later.

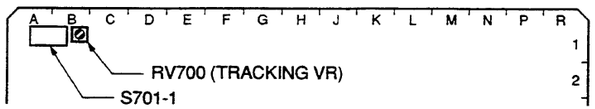
(4) Turn RV700 on the SS-52 board clockwise and adjust the center portion of the RF envelope waveform so that it is 80% of the maximum output level.
At that time, check that the RF envelope waveform satisfies specification 1.

If the level fluctuates, read the average level.Then turn RV700 on the SS-52 board so that the output level in the center portion of the RF envelope waveform is maximum, and check that the fluctuation amounts satisfy specification 2.

If specification 1 and 2 are not satisfied, perform the adjustment (at the Drum Entrance Side or Drum Exit Side) in steps 17 and later.

– To be continued. –

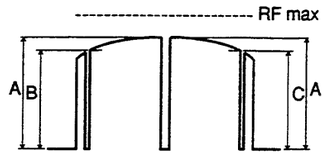
〈SS-52 BOARD, Side A〉



ON: upper position
(TRACKING VR operation disabled)
OFF: lower position
(TRACKING VR operation enabled)

- Alignment Tape: ZR2-1P (00: 00 to 15: 00)

〈Head-to-Tape Contact〉 S701-1 : OFF



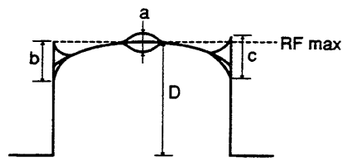
A = RF max × 0.8

Spec. 1: $\frac{B}{A} \times 100 \geqq 70\ \%$

$\frac{C}{A} \times 100 \geqq 70\ \%$

(Output levels (B and C) at the drum entrance side and exit side are more than 70% of the center level (A).)

〈Fluctuation〉 S701-1 : OFF



D= average level

Spec. 2: $\frac{a}{D} \times 100 \leqq 20\ \%$

$\frac{b}{D} \times 100 \leqq 20\ \%$

$\frac{c}{D} \times 100 \leqq 20\ \%$

(Fluctuation amounts (a, b, c) at the drum center portion, entrance side and exit side are less than 20% of the average level (D).)

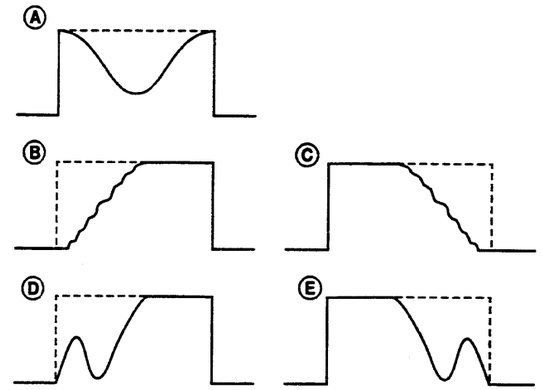
If the output waveform is extremely abnormal condition as shown in Fig.1 after replacing the inner drum assembly, perform the steps 1 to 5 below.

① Remove the upper drum. (Refer to steps 1 through 5 in Section 8-2-1.)
② Clean the drum support's upper drum contacting surface. (Refer to step 7 in Section 8-2-1.)
③ Clean the upper drum's drum support contacting surface. (Refer to step 12 in Section 8-2-1.)
④ Install the upper drum and other removed parts. (Refer to steps 13 through 19 in Section 8-2-1.)
⑤ Check the video tracking again.

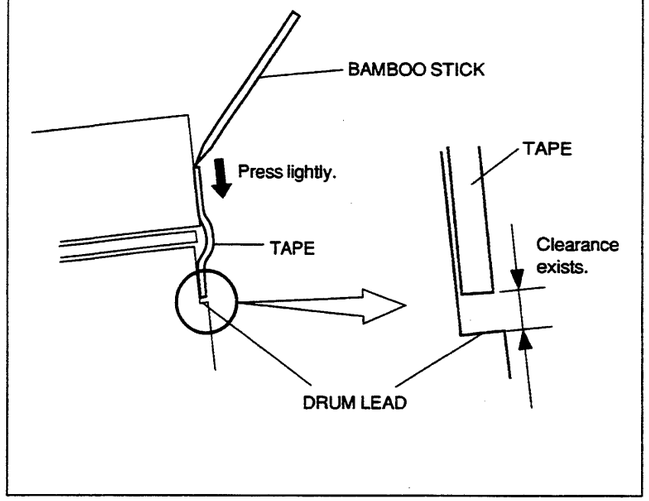
If a bamboo stick is available, it is recommended to observe the waveform while pressing the tape as shown in Fig.2 before performing the steps 1 to 5 above. If the abnormal waveform returns to the normal waveform when pressing down by bamboo stick, it shows that the tape is running apart from the drum lead without touching. In such case, reinstall the upper drum according to the steps 1 to 5 above.

〈Fig. 1〉

* abnormal waveform (example)



〈Fig. 2〉



Video Tracking Check (PLAY)

8-4-3. Video Tracking Adjustment

8. REV×10 Mode

(1) Put S701-1 on the SS-52 board to ON (upper position) and fix the tracking control volume.
(2) Play back the ZR2-1P
(3) Put the unit into the REV×10 mode and check that the RF envelope waveform satisfies specification 3.

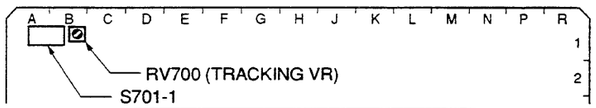
If specification 3 is not satisfied, perform the adjustment (at the Drum Entrance Side or Drum Exit Side) in steps 18 and later.

9. F.FWD and REW Modes

(1) Play back the ZR2-1P
(2) Put the unit into the F.FWD and REW modes and check that no waveform lacking exists in RF envelope waveform. (Spec. 4)

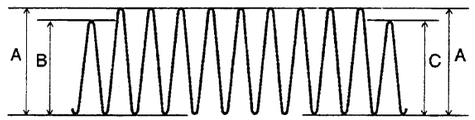
If specification 4 is not satisfied, perform the adjustment (at the Drum Entrance Side or Drum Exit Side) in steps 18 and later.

〈SS-52 BOARD, Side A〉



ON: upper position
(TRACKING VR operation disabled)
OFF: lower position
(TRACKING VR operation enabled)

• Alignment Tape: ZR2-1P



Spec. 3: $\frac{B}{A} \times 100 \geqq 70\ \%$ (DRUM ENTRANCE SIDE)

$\frac{C}{A} \times 100 \geqq 70\ \%$ (DRUM EXIT SIDE)

Video Tracking Check (REV x 10)

• Alignment Tape: ZR2-1P

Spec. 4: No waveform lacking exists.

Video Tracking Check (F. FWD, REW)

10. REW Mode to PLAY Mode

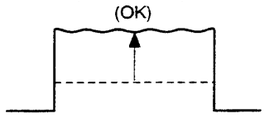
(1) Play back the ZR2-1P (00:00 to 15:00)
(2) Put the unit into the REW mode once. Two or three seconds later, put the unit into PLAY mode.
Check that the RF envelope waveform turns to the maximum level with the even level within 1 second. (Spec. 5-①)

If specification 5-② is not satisfied in waveform A or B shown in the figure, check the tape running at the drum entrance side. (Refer to Section 8-4-2.)

If specification 5-② is not satisfied in waveform C shown in the figure, check the tape running at the drum exit side. (Refer to Section 8-4-2.)

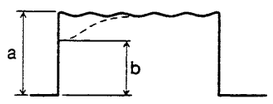
• Alignment Tape: ZR2-1P (00:00~15:00)

(OK)

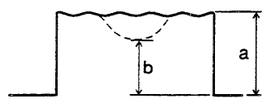


Spec. 5-①: The RF envelope waveform turns to the maximum level with the even level within 1 second.

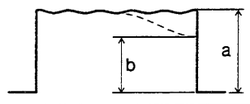
waveform A



waveform B



waveform C



Spec. 5-②: $\frac{b}{a} \times 100 \geqq 70\ \%$

(The output level (b) is more than 70 % of the level in normal PLAY mode (a) and returns it to the level in normal PLAY mode within 1 second.)

Video Tracking Check (REW → PLAY)

8-99

11. VARx-1/30 Mode

(1) Play back the ZR2-1P (00:00 to 15:00).
(2) Put the unit into the VARx-1/30 mode and check that the no waveform lacking exists, the waveform are equal, and no waveform disordered exists. (Spec. 6)

In case of the drum entrance side is no good, perform the tracking adjustment at drum entrance side. (Refer to steps 17 through 19.)
In case of the drum exit side is no good, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

Check that the tape curl at the lower flange of TG-4 is less than 1/10 of the tape width. (Spec. 7)

If the specification 7 is not satisfied, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

12. PLAY Mode to VARx-1/30 Mode

(1) Play back the ZR2-1P (00:00 to 15:00).
(2) Put the unit into the PLAY mode once. Two or three seconds later, put the unit into the VARx-1/30 mode.

Check that the no waveform lacking exists, the waveform are equal, and no waveform disordered exists when changing the mode. (Spec. 6)

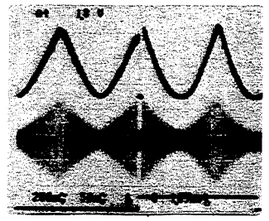
In case of the drum entrance side is no good, perform the tracking adjustment at drum entrance side. (Refer to steps 17 through 19.)
In case of the drum exit side is no good, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

Check that the tape curl at the lower flange of TG-4 is less than 1/10 of the tape width. (Spec. 7)

If the specification 7 is not satisfied, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

• Alignment Tape : ZR2-1P (00:00~15:00)

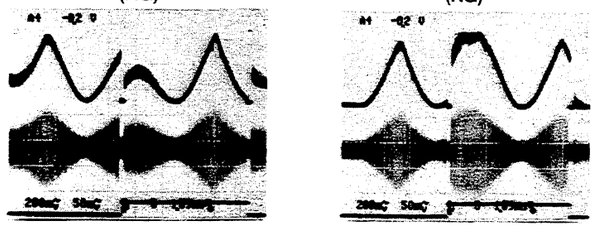
(OK)



Spec. 6: No waveform lacking exists.
The waveform are equal, and no waveform disordered exists.

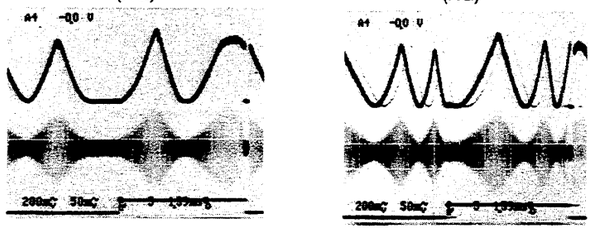
* In case of the drum entrance side is NG (Example):

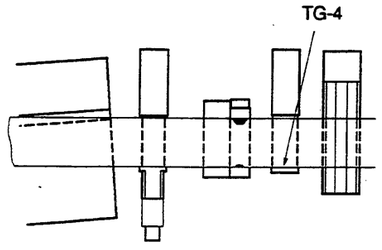
(NG) (NG)



* In case of the drum exit side is NG (Example):

(NG) (NG)





Spec. 7: Lower Flange of TG-4
The tape curl is less than 1/10 of the tape width.

Video Tracking Check (VARx-1/30, VARx-1)

13. VARx-1 Mode

(1) Play back the ZR2-1P (00:00 to 15:00).
(2) Put the unit into the VARx-1 mode, and check that the no waveform lacking exists, the waveform are equal, and no waveform disordered exists. (Spec. 6)

In case of the drum entrance side is no good, perform the tracking adjustment at drum entrance side. (Refer to steps 17 through 19.)
In case of the drum exit side is no good, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

Check that the tape curl at the lower flange of TG-4 is less than 1/10 of the tape width. (Spec. 7)

If the specification 7 is not satisfied, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

14. PLAY Mode to VARx-1 Mode

(1) Play back the ZR2-1P (00:00 to 15:00).
(2) Put the unit into the PLAY mode once. Two or three seconds later, put the unit into the VARx-1 mode.

Check that no waveform lacking exists, the waveform are equal, and no waveform disordered exists when changing the mode. (Spec. 6)

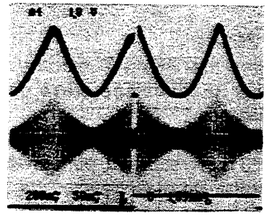
In case of the drum entrance side is no good, perform the tracking adjustment at drum entrance side. (Refer to steps 17 through 19.)
In case of the drum exit side is no good, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

Check that the tape curl at the lower flange of TG-4 is less than 1/10 of the tape width. (Spec. 7)

If the specification 7 is not satisfied, adjust the height of TG-5 first. In case of the drum exit side is no good though TG-5 height adjustment is performed, perform the tracking adjustment at drum exit side. (Refer to steps 20 through 24.)

• Alignment Tape : ZR2-1P (00:00~15:00)

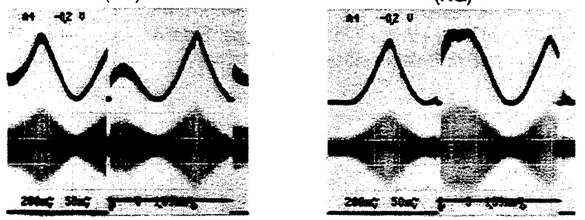
(OK)



Spec. 6: No waveform lacking exists.
The waveform are equal, and no waveform disordered exists.

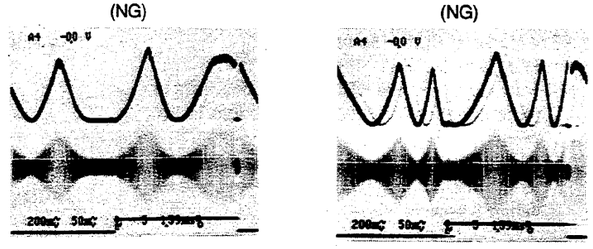
* In case of the drum entrance side is NG (Example):

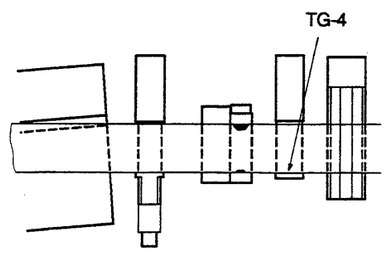
(NG) (NG)



* In case of the drum exit side is NG (Example):

(NG) (NG)





Spec. 7: Lower Flange of TG-4
The tape curl is less than 1/10 of the tape width.

Video Tracking Check (VARx-1/30, VARx-1)

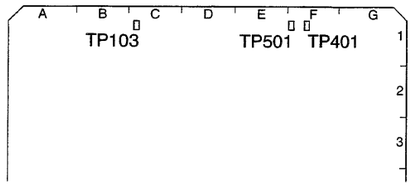
15. Check the Advance Head Head-to-tape Contact

(1) Connect the oscilloscope.
CH-1: TP401/EQ-45 board (Y/ADV AC signal)
CH-2: TP501/EQ-45 board (C/ADV BD signal)
TRIG: TP103/EQ-45 board (Y/ADV AC SEL signal)
(2) Play back the ZR2-1P (20:00 to 25:00).
(3) Put S701-1 on the SS-52 board to ON (upper position) and fix the tracking control volume.
(4) Check that the all channels output the RF envelope waveform.

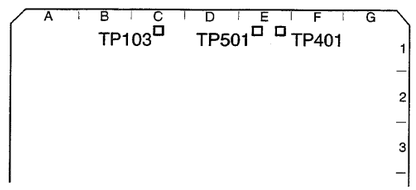
* Connection of the Oscilloscope

CH-1: TP401/EQ-45 board (Y/ADV AC signal)
CH-2: TP501/EQ-45 board (C/ADV BD signal)
TRIG: TP103/EQ-45 board (Y/ADV AC SEL signal)

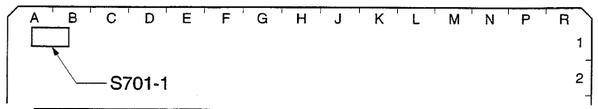
〈EQ-45 BOARD, Side A〉 (Board suffix No. 15 and later)



(Board suffix No. 11, 12, 13, 22, 23, 31, 41)



〈SS-52 BOARD, Side A〉



ON: upper position
OFF: lower position

* Alignment Tape: ZR2-1P (20:00~25:00)

Spec.8: All channels output the RF envelope waveform.

Advance Head Head -to-tape Contact Check

Note

Y/C Head Head-to-tape Contact Check should be performed in the DVW-A510P/CA510P only. In the DVW-510P, it is not required.

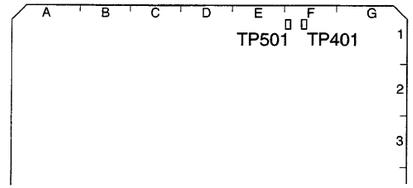
16. Check the Y/C Head Head-to-tape Contact

(1) Connect the Oscilloscope.
CH-1: TP401/EQ-45 board (Y/ADV AC signal)
CH-2: TP501/EQ-45 board (C/ADV BD signal)
TRIG: TP819/SS-52 board (1/2 VD signal)
(2) Take out the ZR2-1P.
(3) Set the CR5-1B PS and put a weight on the cassette so that it does not rise up.
(4) Play back the CR5-1B PS (2:00 and later).
(5) Put S701-1 on the SS-52 board to ON (upper position) and fix the tracking control volume.
(6) Check that the all channels output the RF envelope waveform.

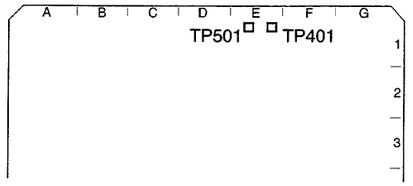
* Connection of the Oscilloscope

CH-1: TP401/EQ-45 board (Y/ADV AC signal)
CH-2: TP501/EQ-45 board (C/ADV BD signal)
TRIG: TP819/SS-52 board (1/2 VD signal)

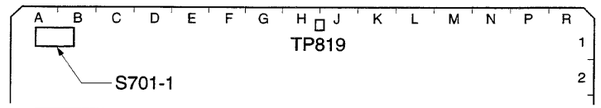
〈EQ-45 BOARD, Side A〉 (Board suffix No. 15 and later)



(Board suffix No. 11, 12, 13, 22, 23, 31, 41)



〈SS-52 BOARD, Side A〉



ON: upper position
OFF: lower position

* Alignment Tape: CR5-1B PS (2:00 and later)

Spec.8: All channels output the RF envelope waveform.

Y/C Head Head -to-tape Contact Check (only DVW-A510P/CA510P)

Adjustment

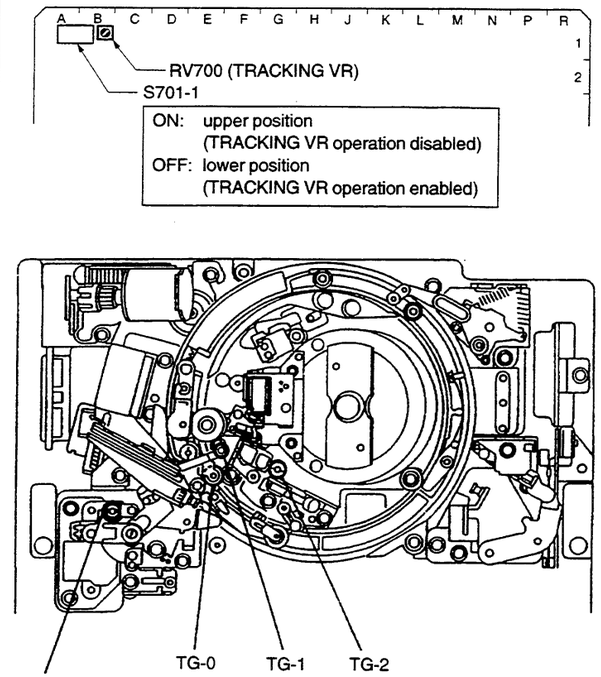
Drum Entrance Side

17. Adjust the Tracking at Drum Entrance Side

(1) Play back the ZR2-1P (00:00 to 15:00).
(2) Put S701-1 on the SS-52 board to OFF (lower position) so that the tracking control volume can be operated.
(3) Turn RV700 on the SS-52 board clockwise and adjust the center portion of the RF envelope waveform so that it is 80% of the maximum output level.
(4) Loosen the upper flange of TG-2 so that the tape does not come in contact with the upper flange of TG-2.
(5) Turn the height adjustment nut of TG-1 so that the RF envelope waveform is as shown in Fig.1.
(6) Turn the upper flange of TG-2 and adjust the height of TG-2 so that the RF envelope waveform is flat. (Fig. 2)

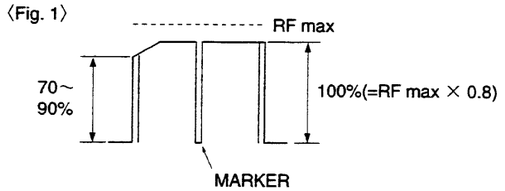
– To be continued. –

〈SS-52 BOARD, Side A〉

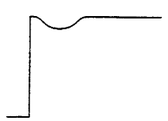


• Alignment Tape: ZR2-1P (00: 00 to 15:00)

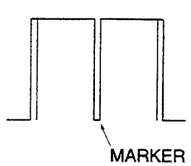
〈Fig. 1〉



If the pressure against the tape at TG-1, 2 are too much, the waveform become as shown in the right figure. (NG)



〈Fig. 2〉



If the waveform is not flat, perform the check and adjustment below.
① Clean the drum lead with a bamboo stick. (Refer to Section 7-1-4.)
② Press down the tape by bamboo stick and check that the tape is running without aparting from the drum lead.
③ Adjust the height of TG-2 so that the RF envelope waveform is nearly flat within the range of the specification shown in the Fig. 3. At this time, do not overpress the tape at TG-2.

(7) Check the tape running at the drum entrance side in the following modes.
- PLAY mode
- REV × 10 mode
- F.FWD mode
- REW mode
- REV × 1 mode
- VAR × –1/30 mode

If the tape curl does not satisfy the specification at either TG-0, TG-1 or TG-2, perform the following adjustments while observing the waveform.
① Change the pressure against the tape at TG-1 and TG-2 within the range of the specification shown in the Fig. 1.
- If the tape curl at TG-1 exceeds the specification described in Section 8-4-2, increase the pressure by turning the upper flange of TG-2 clockwise.
- If the tape curl at TG-2 exceeds the specification described in Section 8-4-2, increase the pressure by turning the height adjustment nut of TG-1 clockwise.

② Perform the tracking adjustment again. (Refer to step (1) through (7) mentioned above.)

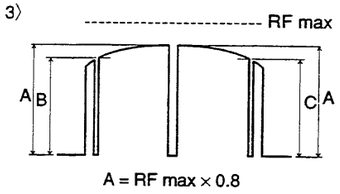
18. Recheck the Video Tracking

Refer to steps 7 through 14. (page 8-98 to 8-100)

Caution

After adjustment is completed, be sure to put S701-1 on the SS-52 board to ON (upper position), and put S2101-7, 8 on the SS-52 board to OFF (lower position).

〈Fig. 3〉



$\frac{B}{A} \times 100 \geqq 70\,\%$

$\frac{C}{A} \times 100 \geqq 70\,\%$

〈Tape Running Check〉

Spec. 1: ① TG-0
The tape runs without any curl at the upper and lower flanges.

② TG-1 (S TENSION REGULATOR)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

③ TG-2 (ENTRANCE GUIDE)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

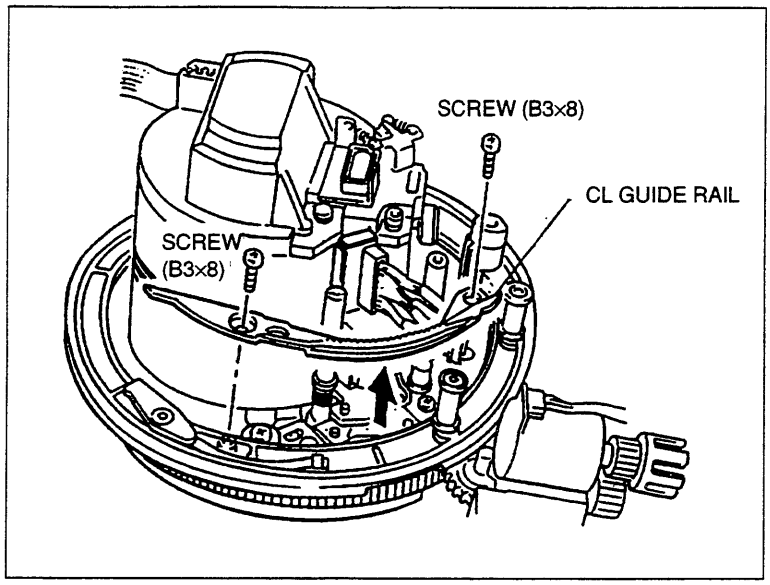
④ LEAD OF DRUM ENTRANCE SIDE
The tape runs without any curl at the lead.

Tracking Adjustment at Drum Entrance Side

Drum Exit Side

19. Remove the CL Guide Rail

Remove the two screws, then remove the CL guide rail.



Removal/Installation of the CL Guide Rail

20. Adjust the Tracking at Drum Exit Side

(1) Play back the ZR2-1P (00:00 to 15:00).
(2) Put S701-1 on the SS-52 board to OFF (lower position) so that the tracking control volume can be operated.
(3) Turn RV700 on the SS-52 board clockwise and adjust the center portion of the RF envelope waveform so that it is 80% of the maximum output level.
(4) Turn the upper flange of TG-3 counterclockwise by one to two turns so that the tape does not come in contact with the upper flange of TG-3.
(5) Turn the upper flange of TG-4 clockwise so that the tape does not come in contact with the lower flange of TG-4.
(6) Turn the zenith adjustment screw of the audio/TC head and adjust the RF envelope waveform so that it is 0 to 30% of the maximum output level. (Fig. 1)

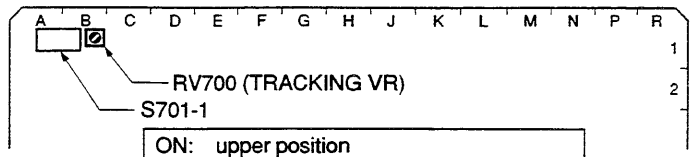
At this time, check that the tape never touch both the upper flange of TG-3 and the lower flange of TG-4.
If the tape touches either flanges, repeat step (4) or (5).
If the tape follows the flanges in step (4) or (5), perform the following adjustment because the symptom indicates the too much tension either at upper of lower part of the tape caused by audio/TC head zenith.

- If the tape follows the upper flange at TG-3: Turn the zenith adjustment screw counterclockwise.
- If the tape follows the lower flange at TG-4: Turn the zenith adjustment screw clockwise.

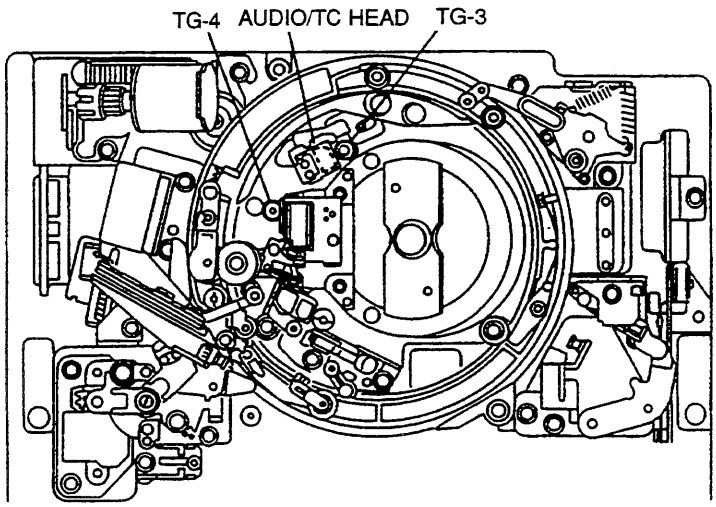
(7) Turn the upper flange of TG-3 so that it comes in contact with the tape and so that the RF envelope waveform is flat. (Fig. 2)
At that time, the tape does not contact with the lower flange of TG-4.

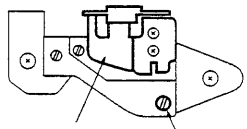
– To be continued. –

〈SS-52 BOARD, Side A〉



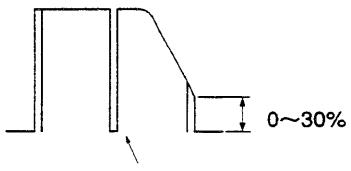
ON: upper position
(TRACKING VR operation disabled)
OFF: lower position
(TRACKING VR operation enabled)



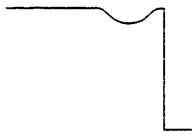


- Alignment Tape: ZR2-1P (00:00~15:00)

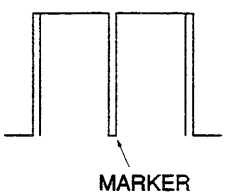
〈Fig. 1〉



If the pressure against the tape at TG-3 is too much, the waveform become as shown in the right figure. (NG)



〈Fig. 2〉



If the waveform is not flat, perform the check and adjustment below.

① Clean the drum lead with a bamboo stick. (Refer to Section 7-1-4.)

② Press down the tape by bamboo stick and check that the tape is running without aparting from the drum lead.

③ Adjust the height of TG-3 so that the RF envelope waveform is nearly flat within the range of the specification shown in the Fig.3. At this time, do not overpress the tape at TG-3.

(8) Adjust the height of TG-4 so that the lower flange of TG-4 comes in contact with the tape.

(9) Check the tape running at the drum exit side in the following modes.

- PLAY mode
- REV × 10 mode
- F.FWD mode
- REW mode
- REV × 1 mode
- VAR × –1/30 mode

If the tape curl does not satisfy the specification at TG-3, perform the following adjustments while observing the waveform.

① Change the zenith of the audio/TC head within the range of the specification shown in Fig. 1.

② Perform the tracking adjustment again. (Refer to step (1) through (9) mentioned above.)

21. Recheck the Video Tracking

Refer to steps 7 through 14. (Page 8-98 through 8-100)

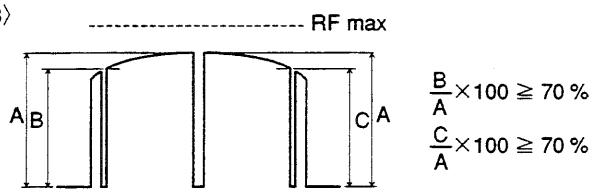
22. Install the CL Guide Rail

Install the CL guide rail with two screws.

Caution

After adjustment is completed, be sure to put S701-1 on the SS-52 board to ON (upper position), and put S2101-7, 8 on the SS-52 board to OFF (lower position).

〈Fig. 3〉



A = RF max × 0.8

〈Tape Running Check〉

Spec. 2: ⑤ LEAD OF DRUM EXIT SIDE
The tape runs without any curl at the lead.

⑥ TG-3 (EXIT GUIDE)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

⑦ TG-4
The tape runs in contact with the lower flange.
The tape curl is less than 1/10 of the tape width.

⑧ TG-5 (THREADING ROLLER)
The tape runs without any curl at the upper and lower flanges.

Tracking Adjustment at Drum Exit Side

8-4-4. CTL Head Height Adjustment

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

- Tape guide adjustment driver (MW-261): J-6322-610-A

Preparation

1. **Turn the Power Off**

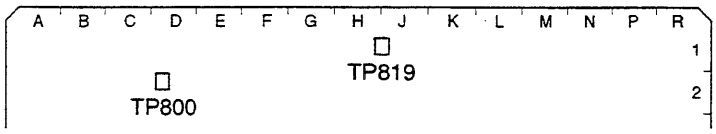
2. **Connect the Oscilloscope**
   CH-1: TP800/SS-52 board (CTL signal)
   TRIG: TP819/SS-52 board (1/2 VD signal)

3. **Set the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

* Connection of the Oscilloscope

CH-1: TP800/SS-52 board (CTL signal)
TRIG: TP819/SS-52 board (1/2 VD signal)

〈SS-52 BOARD, Side A〉



Preparation

Check

4. **Turn the Power On**

5. **Play Back the Alignment Tape**
   Play back the ZR2-1P.

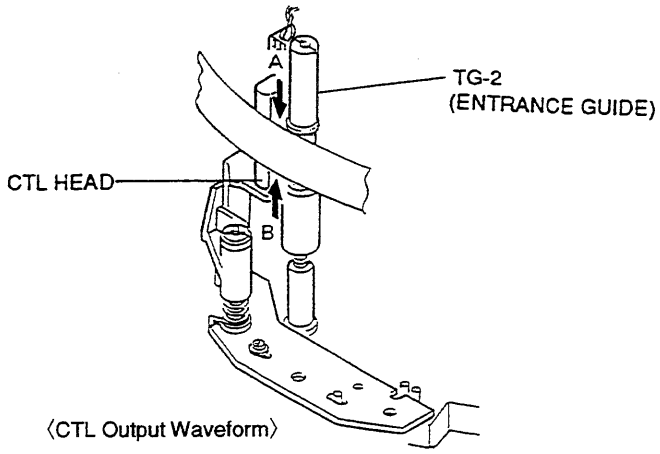
6. **Check the CTL Head Height**
   (1) Check that the level decreases when portion A of the tape shown in the figure is pressed down.

   If the level increases, perform step 7.

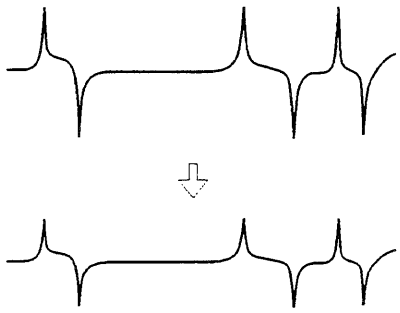
   (2) Check that the level decreases when portion B of the tape is pushed up.

   If the level increases, perform step 8.

* Alignment Tape : ZR2-1P



〈CTL Output Waveform〉



Spec.: The level decreases when pressing down and pushing up the alignment tape.

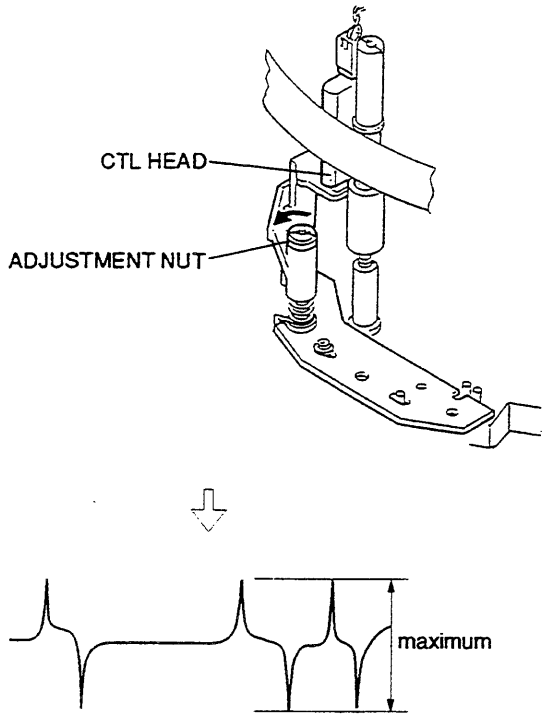
CTL Head Height Check

Adjustment

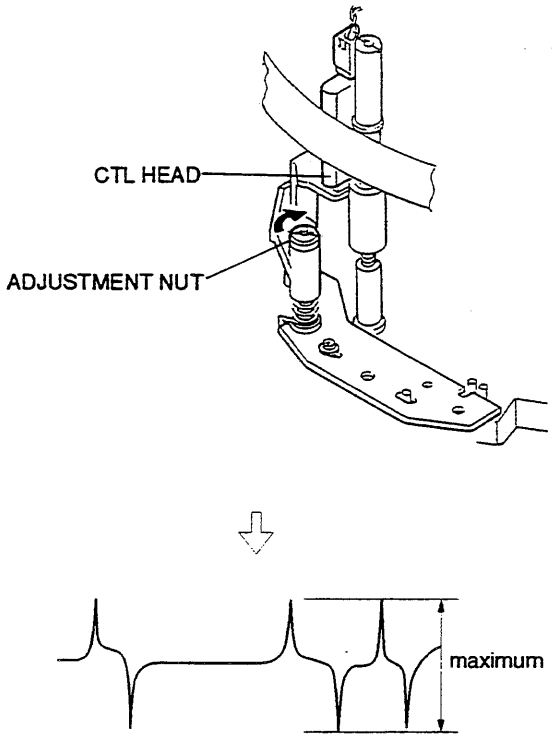
7. **In Case the Level Increases when the Tape is Pressed Down (Fig. 1)**
   Turn the adjustment nut counterclockwise and adjust so that the output waveform is maximum.

8. **In Case the Level Increases when the Tape is Pushed Up (Fig. 2)**
   Turn the adjustment nut clockwise and adjust so that the output waveform is maximum.

〈Fig. 1〉



〈Fig. 2〉



CTL Head Height Adjustment

8-4-5. CTL Head Position Adjustment

Note

The CTL head position adjustment is closely related to the audio/TC head position adjustment.
Be sure to confirm the audio/TC head position when the CTL head position is adjusted.

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: TP2502/SS-52 board (ENV A/C signal)
   CH-2: TP819/SS-52 board (1/2 VD signal)
   CH-3: TP103/EQ-45 board (ADV AC SEL signal)
   TRIG: TP819/SS-52 board (1/2 VD signal)

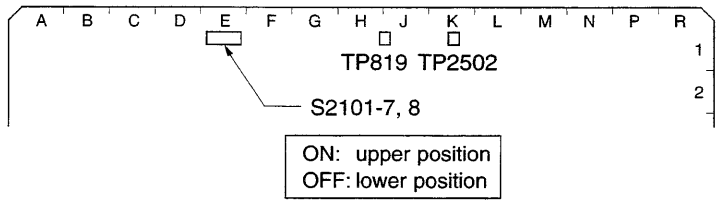
3. **Put S2101-7, 8 on the SS-52 Board to ON (upper position).**

4. **Set the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

* Connection of the Oscilloscope

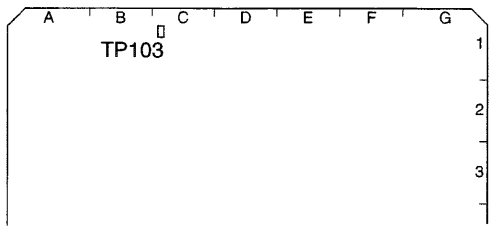
CH-1: TP2502/SS-52 board (ENV A/C signal)
CH-2: TP819/SS-52 board (1/2 VD signal)
CH-3: TP103/EQ-45 board (ADV AC SEL signal)
TRIG: TP819/SS-52 board (1/2 VD signal)

〈SS-52 BOARD, Side A〉

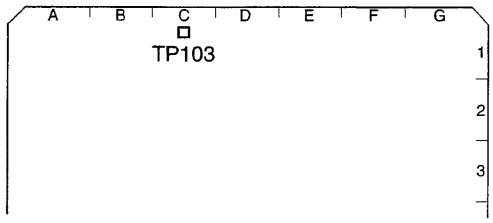


ON: upper position
OFF: lower position

〈EQ-45 BOARD, Side A〉 (Board suffix No. 15 and later)



(Board suffix No. 11, 12, 13, 22, 23, 31, 41)



Preparation

Check

5. Turn the Power On

6. Play Back the Alignment Tape
Play back the ZR2-1P (00:00 to 15:00).

7. Check the CTL Head Position

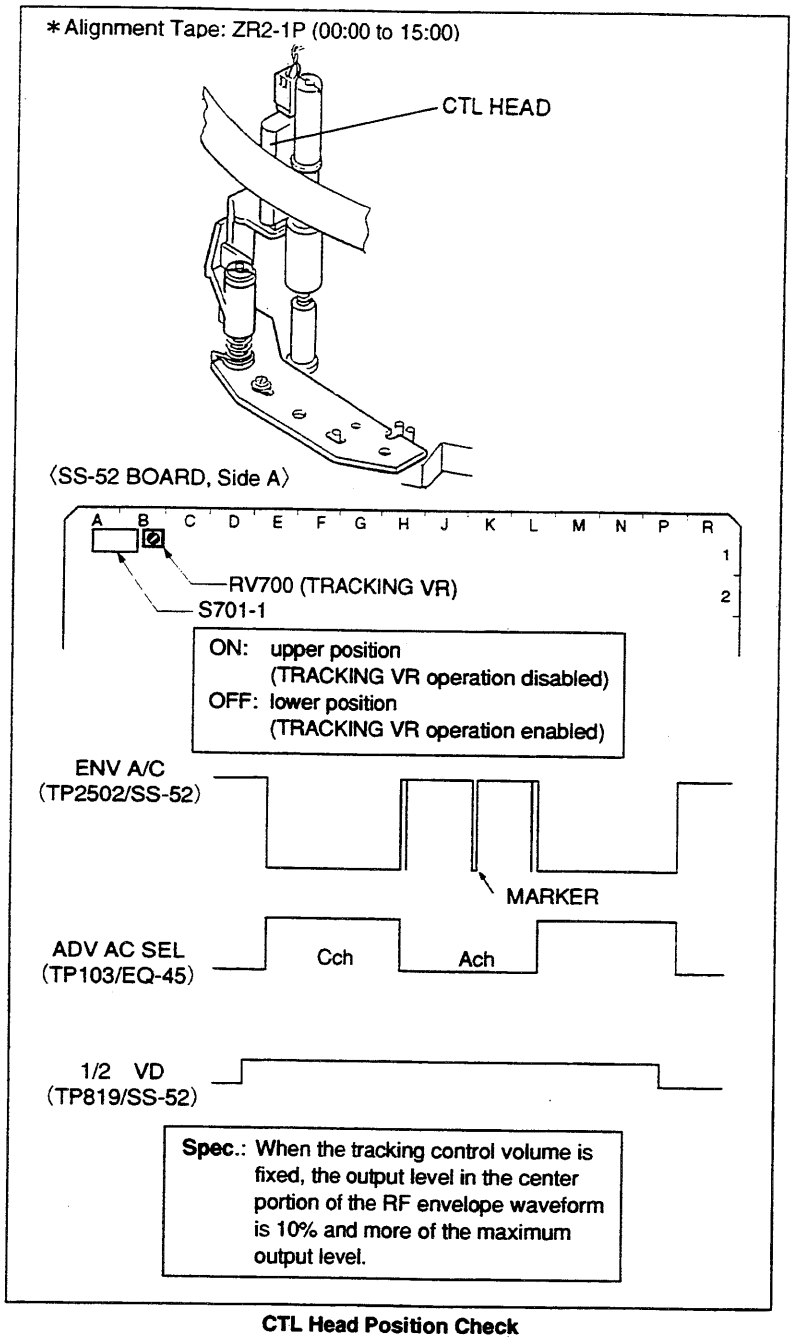
(1) Put S701-1 on the SS-52 board to OFF (lower position) so that the tracking control volume can be operated.

(2) Turn RV700 (tracking control volume) on the SS-52 board so that the output level in the center portion of the RF envelope waveform is maximum. At that time, check that the marker is located in the rising portion of 1/2 VD signal.

(3) Put S701-1 on the SS-52 board to ON (upper position) and fix the tracking control volume.

(4) Check that the output level in the center portion of the RF envelope waveform satisfies the specification.

If the specification is not satisfied, perform steps 8 and later.
If it is satisfied, put S2101-7, 8 on the SS-52 board to OFF (lower position).



CTL Head Position Check

Adjustment

8. Loosen the Screw
Loosen the fixing screw of the CTL head assembly by 1/4 to 1/2 turn.

9. Adjust the CTL Head Position
(1) Put the unit into the STILL mode. At this time, the peak level of RF envelope waveform is 100%.
(2) Insert a 3 mm flatbladed screwdriver into the notch of the CTL head assembly.
(3) Put the unit into the PLAY mode. Adjust the CTL head assembly position so that the output level in the center portion is 10% and more, and the marker of RF envelope waveform is located in the rising portion of 1/2 VD signal. (Fig. 2)
At this time, check that the impedance roller of TG-2 rotates smoothly. If not, perform the step (1) through (3) mentioned above again.

10. Tighten the Screw
Tighten the screw loosened in step 8.

11. Recheck the CTL Head Position
Refer to steps 6 and 7.

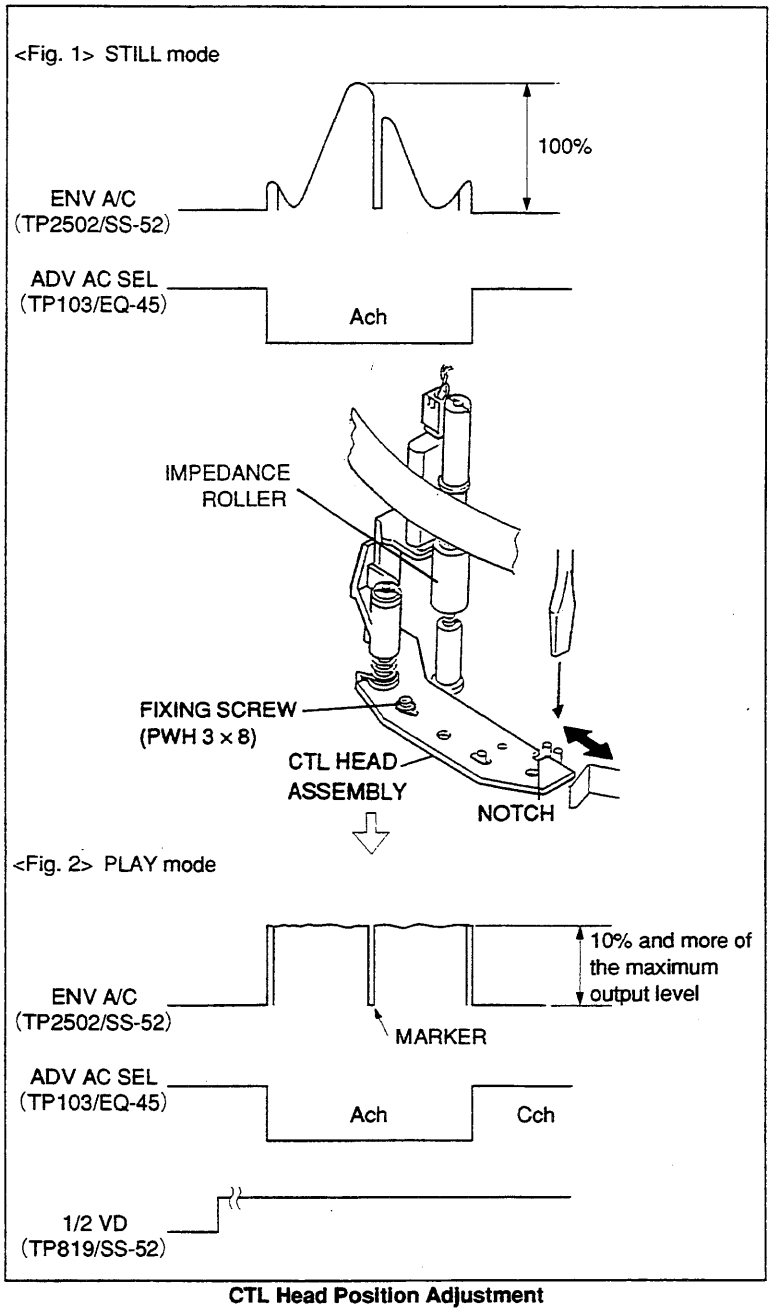
12. Adjust the Offset Level of Advance Head
Refer to Section 5-7.
(A022 : HEAD OFFSET LEVEL)

13. Store the Adjustment Data
Refer to Section 5-7.
(A023 : NV-RAM CONTROL)

In case the adjustment is performed

14. Adjust the Audio/TC Head Position
Refer to Section 8-4-9.

Caution
After adjustment is completed, be sure to put S701-1 on the SS-52 board to ON (upper position) and put S2101-7, 8 to OFF (lower position).



CTL Head Position Adjustment

8-4-6. Audio/TC Head Height Adjustment

For DVW-A510P/CA510P

Note

The audio/TC head height adjustment is closely related to the azimuth adjustment, head-to-tape contact adjustment, and head position adjustment.
Be sure to perform adjustments (or checks) according to "In case the adjustment is performed" in this section when the audio/TC head height is adjusted.

Tools

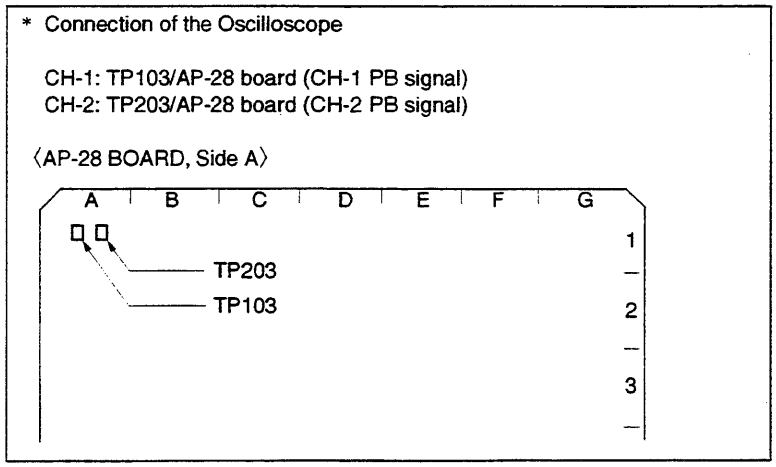
- Alignment tape CR8-1A PS: 8-960-098-45
- Oscilloscope

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: TP103/AP-28 board (CH-1 PB signal)
   CH-2: TP203/AP-28 board (CH-2 PB signal)

3. **Set the Alignment Tape**
   Set the CR8-1A PS and put a weight on the cassette so that it does not rise up.



Preparation (DVW-A510P/CA510P)

Check

4. **Turn the Power On**

5. **Play Back the Alignment Tape**
   Play back the 1 kHz, 0 VU signal portion (8:00 to 10:00) on the CR8-1A PS.

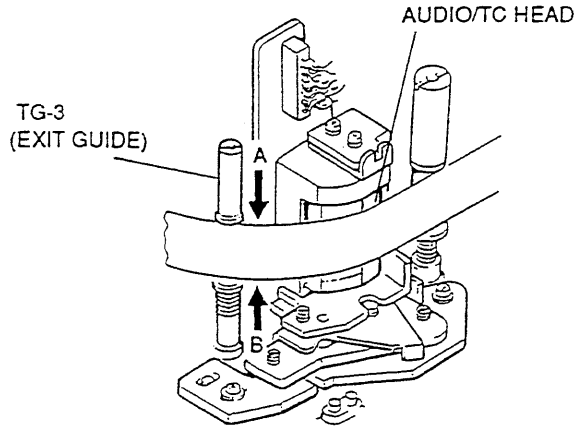
6. **Check the Audio/TC Head Height**
   (1) Check that both levels in CH-1 and CH-2 decrease when portion A of the tape shown in the figure is pressed down.

   If both levels increase, perform step 7.

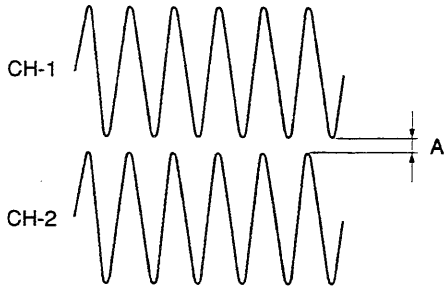
   (2) Check that both levels in CH-1 and CH-2 decrease when portion B of the tape is pushed up.

   If both levels increase, perform step 8.

* Alignment Tape: CR8-1A PS(8:00 to 10:00)



〈Audio Output Waveform〉



Spec. : The portion A widens when pressing down and pushing up the alignment tape.

Audio/TC Head Height Check (DVW-A510P/CA510P)

Adjustment

7. **In Case both Levels Increase when the Tape is Pressed Down (Fig. 1)**
   Turn the height adjustment screw clockwise and adjust so that both output waveforms in CH-1 and CH-2 are maximum.

8. **In Case both Levels Increase when the Tape is Pushed Up (Fig. 2)**
   Turn the height adjustment screw counterclockwise and adjust so that both output waveforms in CH-1 and CH-2 are maximum.

In case the adjustment is performed

9. **Adjust the Audio/TC Head Azimuth**
   Refer to Section 8-4-7 (For DVW-A510P/CA510P).

10. **Adjust the Audio/TC Head Head-to-tape Contact**
    Refer to Section 8-4-8 (For DVW-A510P/CA510P).

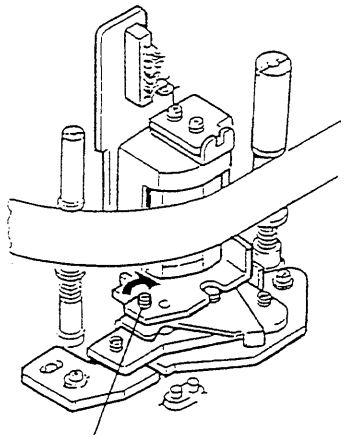
11. **Check the Audio/TC Head Azimuth**
    Refer to Section 8-4-7 (For DVW-A510P/CA510P).

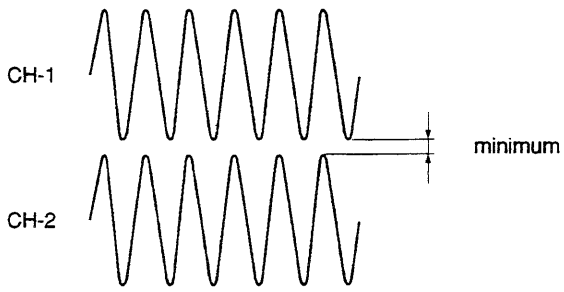
12. **Adjust the Audio/TC Head Position**
    Refer to Section 8-4-9.

13. **Check the Audio/TC Head Height**
    Refer to steps 5 and 6 in this section.

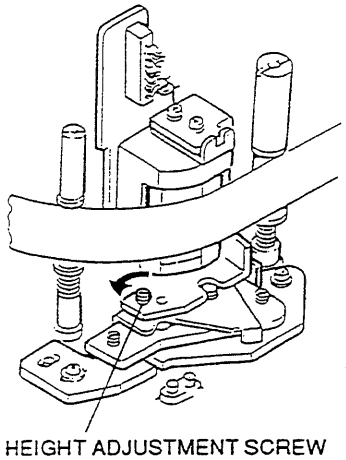
14. **Check the Audio/TC Head Azimuth**
    Refer to Section 8-4-7 (For DVW-A510P/CA510P).

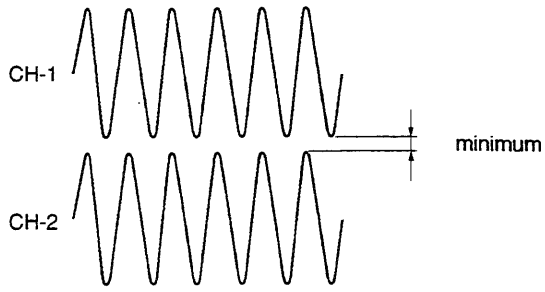
〈Fig. 1〉





〈Fig. 2〉





For DVW-510P

Note

The audio/TC head height adjustment is closely related to the azimuth adjustment, head-to-tape contact adjustment, and head position adjustment.
Be sure to perform adjustments (or checks) according to "In case the adjustment is performed" in this section when the audio/TC head height is adjusted.

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: AUDIO OUTPUT CUE connector/ connector panel
   or
   TP701/CUE-1 board (CUE OUT signal)

3. **Play Back the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

Check

4. **Turn the Power On**

5. **Play Back the Alignment Tape**
   Play back the 1 kHz, 0 VU signal portion (00:00 to 15:00) on the ZR2-1P.

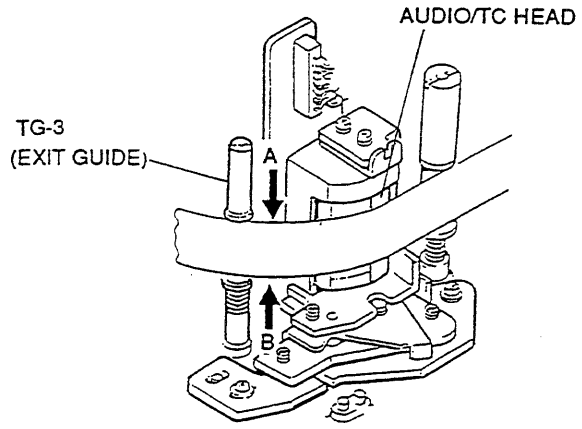
6. **Check the Audio/TC Head Height**
   (1) Check that the level decreases when portion A of the tape shown in the figure is pressed down.

   If the level increases, perform step 7.

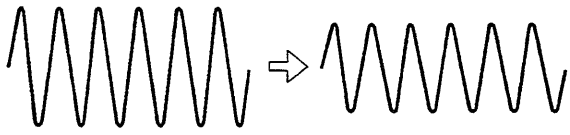
   (2) Check that the level decreases when portion B of the tape is pushed up.

   If the level increases, perform step 8.

* Alignment Tape: ZR2-1P (00:00 to 15:00)



〈Cue Output Waveform〉



Spec. : The level decreases when pressing down and pushing up the alignment tape.

Audio/TC Head Height Check (DVW-510P)

Adjustment

7. **In Case the Level Increases when the Tape is Pressed Down (Fig. 1)**
   Turn the height adjustment screw clockwise and adjust so that the output waveform is maximum.

8. **In Case the Level Increases when the Tape is Pushed Up (Fig. 2)**
   Turn the height adjustment screw counterclockwise and adjust so that the output waveform is maximum.

In case the adjustment is performed

9. **Adjust the Audio/TC Head Azimuth**
   Refer to Section 8-4-7 (For DVW-510P).

10. **Adjust the Audio/TC Head Head-to-tape Contact**
    Refer to Section 8-4-8 (For DVW-510P).

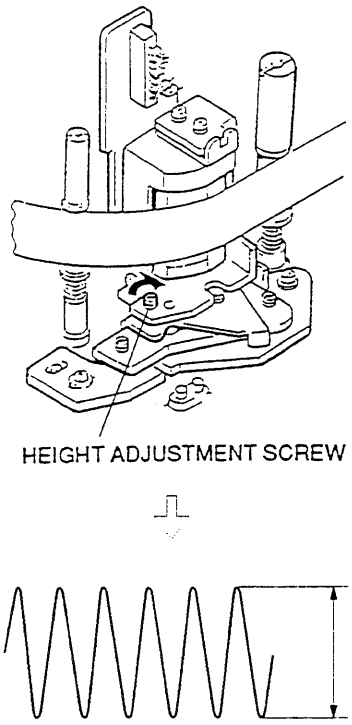
11. **Check the Audio/TC Head Azimuth**
    Refer to Section 8-4-7 (For DVW-510P).

12. **Adjust the Audio/TC Head Position**
    Refer to Section 8-4-9.

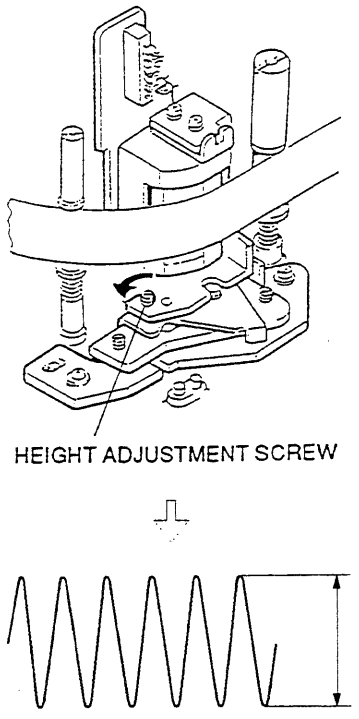
13. **Check the Audio/TC Head Height**
    Refer to steps 5 and 6 in this section.

14. **Check the Audio/TC Head Azimuth**
    Refer to Section 8-4-7 (For DVW-510P).

〈Fig. 1〉



〈Fig. 2〉



Audio/TC Head Height Adjustment (DVW-510P)

8-4-7. Audio/TC Head Azimuth Adjustment

For DVW-A510P/CA510P

Note

The audio/TC head azimuth adjustment is closely related to the head-to-tape contact adjustment, head position adjustment, and head height adjustment.
Be sure to perform adjustments (or checks) according to "In case the adjustment is performed" in this section when the audio/TC head azimuth is adjusted.

Tools

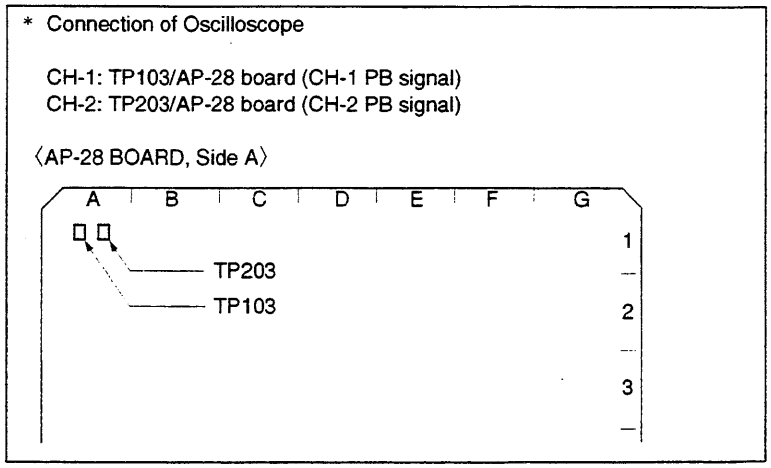
- Alignment tape CR8-1A PS: 8-960-098-45
- Oscilloscope

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: TP103/AP-28 board (CH-1 PB signal)
   CH-2: TP203/AP-28 board (CH-2 PB signal)

3. **Set the Alignment Tape**
   Set the CR8-1A PS and put a weight on the cassette so that it does not rise up.



Preparation (DVW-A510P/CA510P)

Check

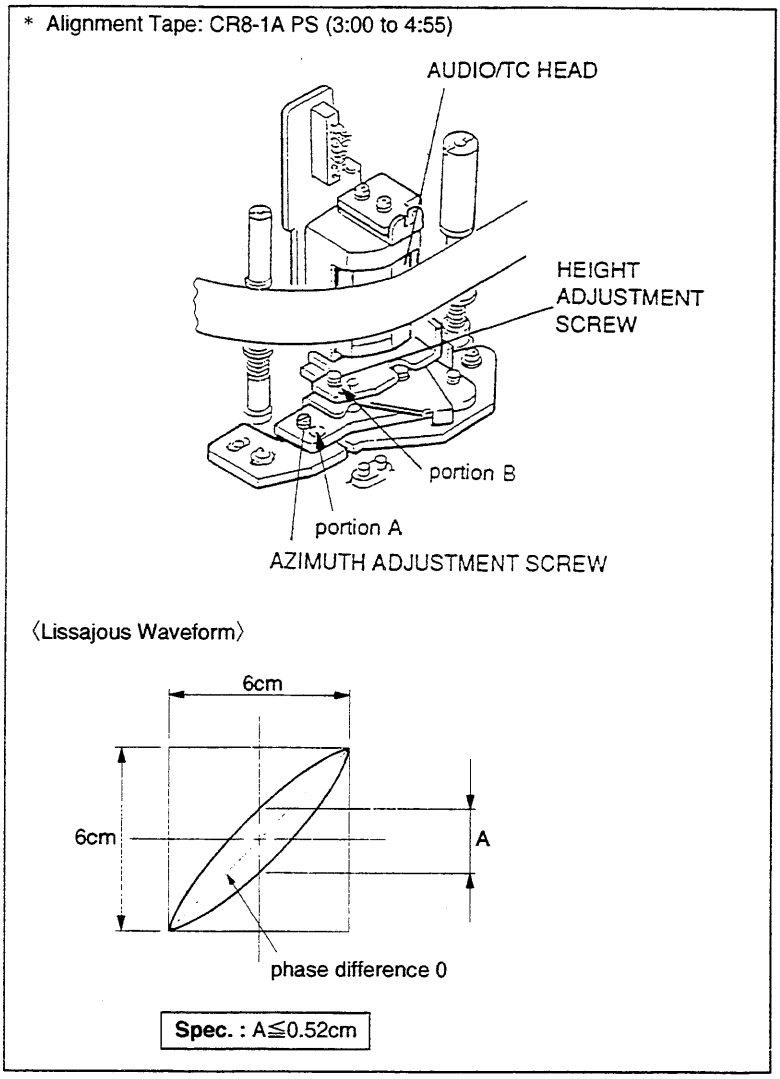
4. Turn the Power On

5. Play Back the Alignment Tape
Play back the 10 kHz, -10 VU signal portion (3:00 to 4:55) on the CR8-1A PS.

6. Check the Audio/TC Head Azimuth
(1) Output a lissajous waveform so that the amplitudes in the horizontal and vertical directions are 6 cm each.
(2) Check that the vertical amplitude at the center point in the horizontal direction satisfies the specification.

If the specification is not satisfied, perform steps 7 and later.

(3) Strike the portions A and B shown in the figure lightly with the tip of a screwdriver. Then check that the specification is satisfied.



Audio/TC Head Azimuth Check (DVW-A510P/CA510P)

Adjustment

7. **Adjust the Audio/TC Head Azimuth**
   (1) Turn the azimuth adjustment screw clockwise and adjust so that the specification is satisfied.

   (2) Strike the portions A and B shown in the figure lightly with the tip of a screwdriver. Then check that the specification is satisfied.

In case the adjustment is performed

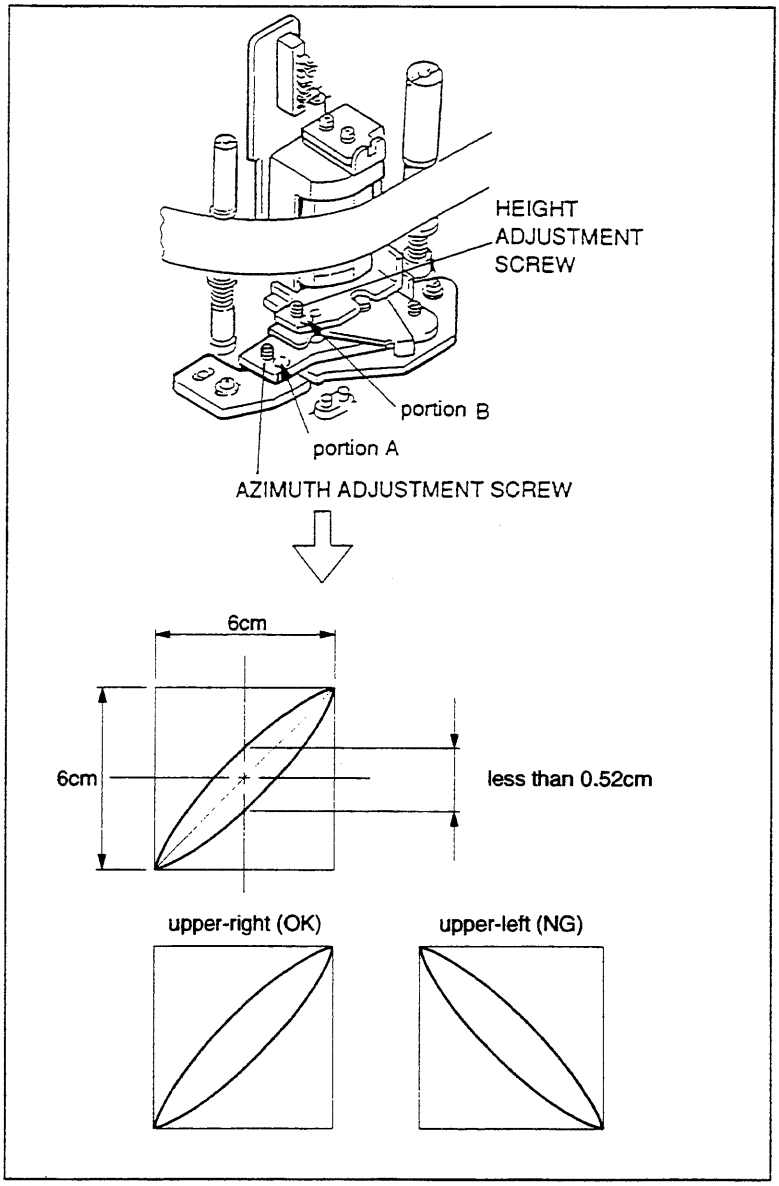
8. **Adjust the Audio/TC Head Head-to-tape Contact**
   Refer to Section 8-4-8 (For DVW-A510P/CA510P).

9. **Check the Audio/TC Head Azimuth**
   Refer to steps 5 and 6 in this section.

10. **Adjust the Audio/TC Head Position**
    Refer to Section 8-4-9.

11. **Check the Audio/TC Head Height**
    Refer to Section 8-4-6 (For DVW-A510P/CA510P).

12. **Check the Audio/TC Head Azimuth**
    Refer to steps 5 and 6 in this section.



Audio/TC Head Azimuth Adjustment (DVW-A510P/CA510P)

For DVW-510P

Note

The audio/TC head azimuth adjustment is closely related to the head-to-tape contact adjustment, head position adjustment, and head height adjustment.
Be sure to perform adjustments (or checks) according to "In case the adjustment is performed" in this section when the audio/TC head azimuth is adjusted.

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: AUDIO OUTPUT CUE connector/
   connector panel
   or
   TP701/CUE-1 board (CUE OUT signal)

3. **Set the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

Adjustment

4. **Turn the Power On**

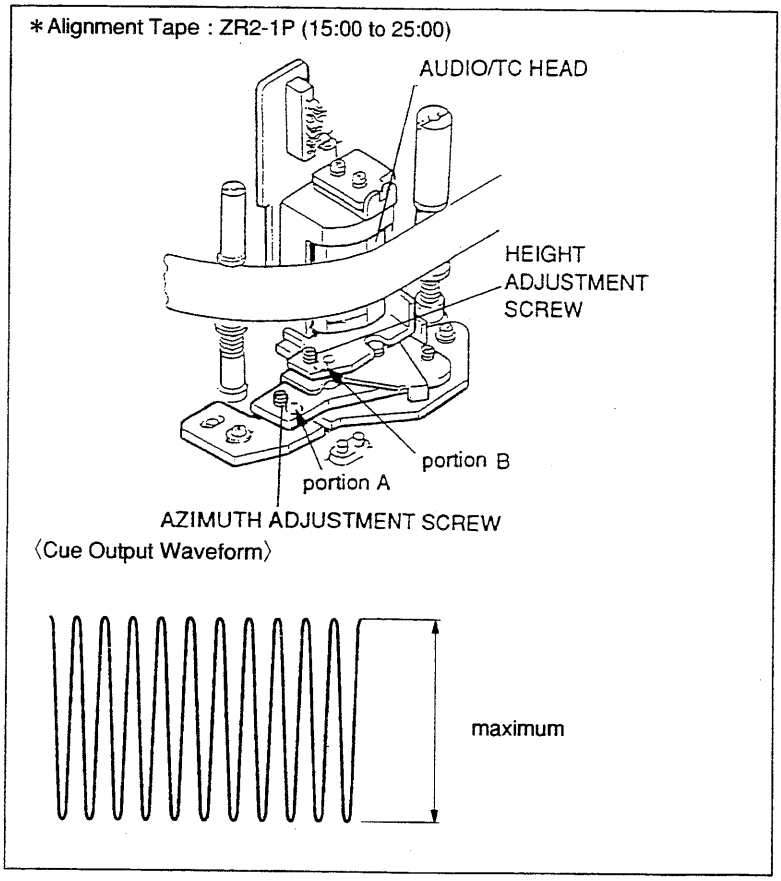
5. **Play Back the Alignment Tape**
   Play back the 12 kHz, 0 VU signal portion (15:00 to 25:00) on the ZR2-1P.

6. **Adjust the Audio/TC Head Azimuth**
   (1) Turn the azimuth adjustment screw and adjust so that the output waveform is maximum.
   (2) Strike the portions A and B shown in the figure lightly with the tip of a screwdriver. Then the level remains maximum.

7. **Adjust the Audio/TC Head Head-to-tape Contact**
   Refer to Section 8-4-8 (For DVW-510P).

8. **Adjust the Audio/TC Head Position**
   Refer to Section 8-4-9.

9. **Check the Audio/TC Head Height**
   Refer to Section 8-4-6 (For DVW-510P).



Audio/TC Head Azimuth Adjustment (DVW-510P)

8-4-8. Audio/TC Head Head-to-tape Contact Adjustment

For DVW-A510P/CA510P

Note

The audio/TC head head-to-tape contact adjustment is closely related to the head position adjustment, head height adjustment, and head azimuth adjustment.
Be sure to perform adjustments (or checks) according to "In case the adjustment is performed" in this section when the audio/TC head head-to-tape contact is adjusted.

Tools

- Alignment tape CR8-1A PS: 8-960-098-45
- Oscilloscope

- Torque screwdriver (6 kg•cm) (JB-5251): J-6252-510-A
- Torque screwdriver's bit (+2 mm, l= 75 mm): J-6323-420-A

Preparation

1. **Turn the Power Off**

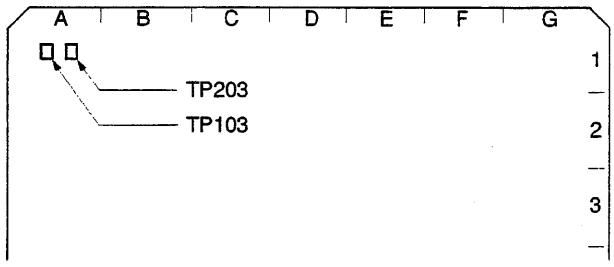
2. **Connect the Oscilloscope**
   CH-1: TP103/AP-28 board (CH-1 PB signal)
   CH-2: TP203/AP-28 board (CH-2 PB signal)

3. **Set the Alignment Tape**
   Set the CR8-1A PS and put a weight on the cassette so that it does not rise up.

* Connection of the Oscilloscope

CH-1: TP103/AP-28 board (CH-1 PB signal)
CH-2: TP203/AP-28 board (CH-2 PB signal)

〈AP-28 BOARD, Side A〉



Preparation (DVW-A510P/CA510P)

Check

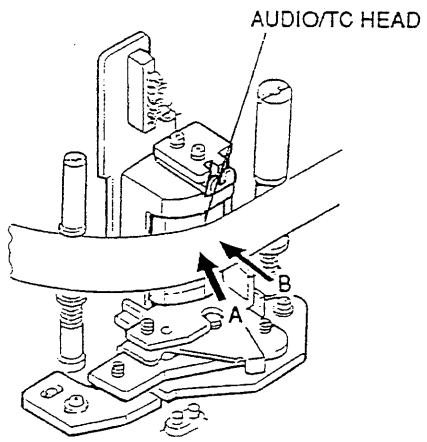
4. **Turn the Power On**

5. **Play Back the Alignment Tape**
   Play back the 10 kHz, -10 VU signal portion (3:00 to 4:55) on the CR8-1A PS.

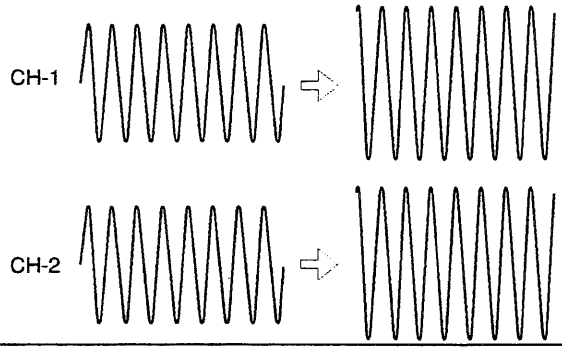
6. **Check the Audio/TC Head Head-to-tape Contact**
   (1) Push portions A and B of the tape shown in the figure slightly.
   (2) Check that both increase values of the output levels in CH-1 and CH-2 satisfy the specification.

   If the specification is not satisfied, perform step 7 and later.

* Alignment Tape : CR8-1A PS (3:00 to 4:55)



〈Audio Output Waveform〉



Spec. : Both increase values of the output levels in CH-1 and CH-2 are within 5%.

Audio/TC Head Head-to-tape Contact Check (DVW-A510P/CA510P)

Adjustment

7. **Loosen the Screws**
   Loosen the two head fixing screws by 1/4 to 1/2 turn.

8. **Adjust the Audio/TC Head Head-to-tape Contact**
   (1) Insert a 2 mm flatbladed screwdriver into the notch of the adjustment plate.
   (2) Adjust the audio/TC head position so that the output waveform is maximum.

9. **Tighten the Screws**
   Tighten the two fixing screws loosened in step 7.

   Tightening torque: 19.6×10^{-2} N•m (2 kgf•cm)

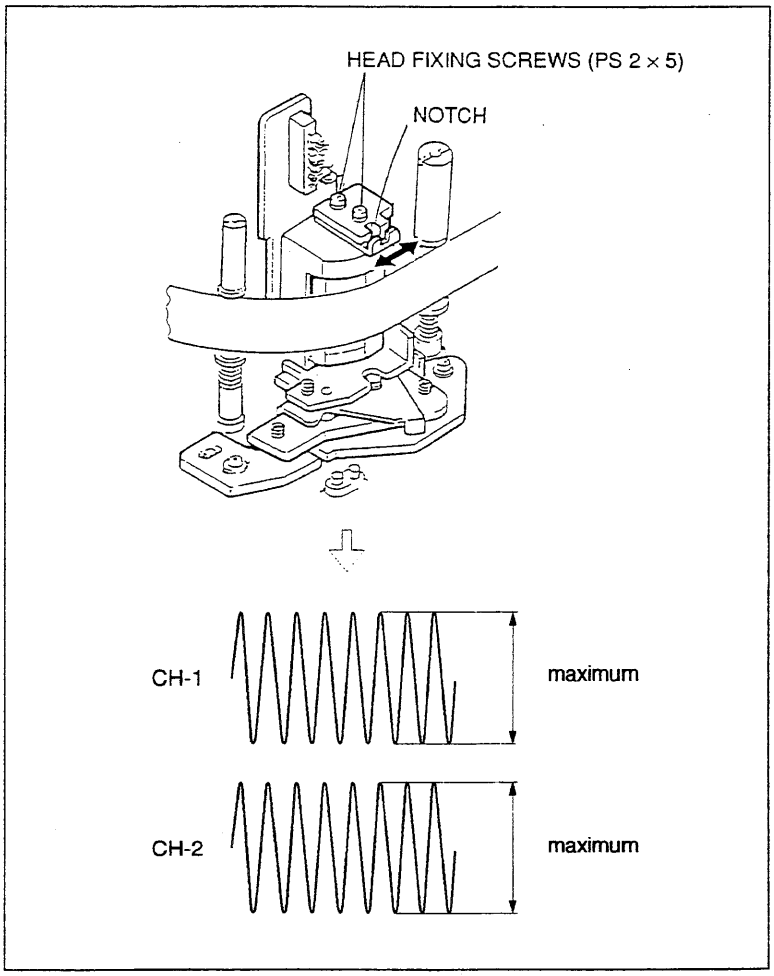
10. **Recheck the Audio/TC Head Head-to-tape Contact**
    Refer to steps 5 and 6 in this section.

In case the adjustment is performed

11. **Check the Audio/TC Head Position**
    Refer to Section 8-4-9.

12. **Check the Audio/TC Head Height**
    Refer to Section 8-4-6 (For DVW-A510P/CA510P).

13. **Check the Audio/TC Head Azimuth**
    Refer to Section 8-4-7 (For DVW-A510P/CA510P).



Audio/TC Head Head-to-tape Contact Adjustment (DVW-A510P/CA510P)

For DVW-510P

Note

The audio/TC head head-to-tape contact adjustment is closely related to the head position adjustment, head height adjustment, and head azimuth adjustment.
Be sure to perform adjustments (or checks) according to "In case the adjustment is performed" in this section when the audio/TC head head-to-tape contact is adjusted.

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

- Torque screwdriver (6 kg•cm)(JB-5251): J-6252-510-A
- Torque screwdriver's bit (+2 mm, l= 75 mm): J-6323-420-A

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: AUDIO OUTPUT CUE connector/
   connector panel
   or
   TP701/CUE-1 board (CUE OUT signal)

3. **Set the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

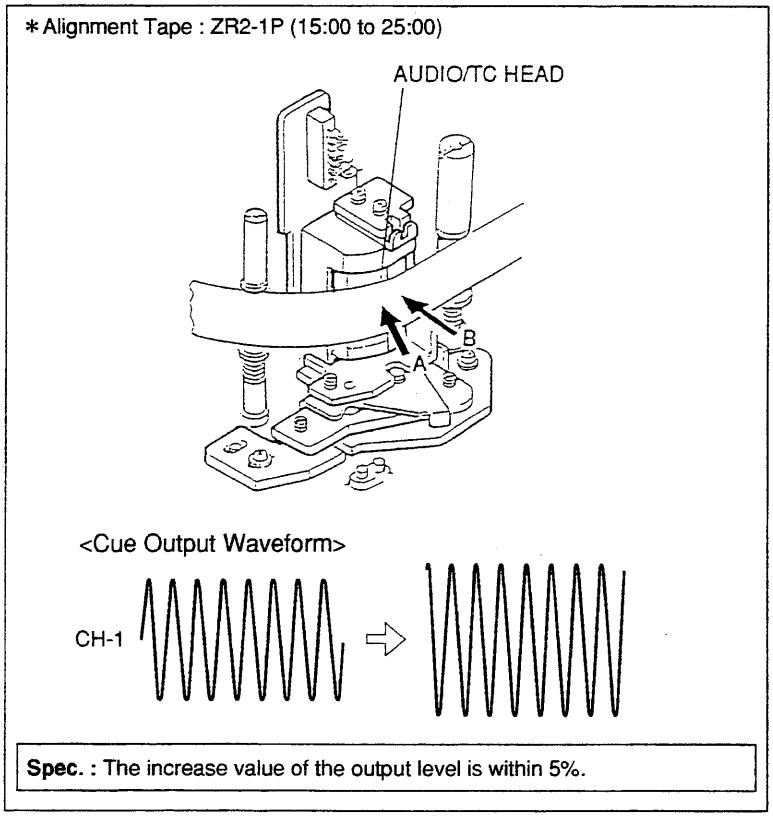
Check

4. **Turn the Power On**

5. **Play Back the Alignment Tape**
   Play back the 12 kHz, 0 VU signal portion (15:00 to 25:00) on the ZR2-1P.

6. **Check the Audio/TC Head Head-to-tape Contact**
   (1) Push portions A and B of the tape shown in the figure slightly.
   (2) Check that the increase value in the output level satisfies the specification.

   If the specification is not satisfied, perform step 7 and later.



Audio/TC Head Head-to-tape Contact Check (DVW-510P)

Adjustment

7. **Loosen the Screws**
   Loosen the two head fixing screws by 1/4 to 1/2 turn.

8. **Adjust the Audio/TC Head Head-to-tape Contact**
   (1) Insert a 2 mm flatbladed screwdriver into the notch of the adjustment plate.
   (2) Adjust the audio/TC head position so that the output waveform is maximum.

9. **Tighten the Screws**
   Tighten the two fixing screws loosened in step 7.

   Tightening torque: 19.6×10^{-2} N•m (2 kgf•cm)

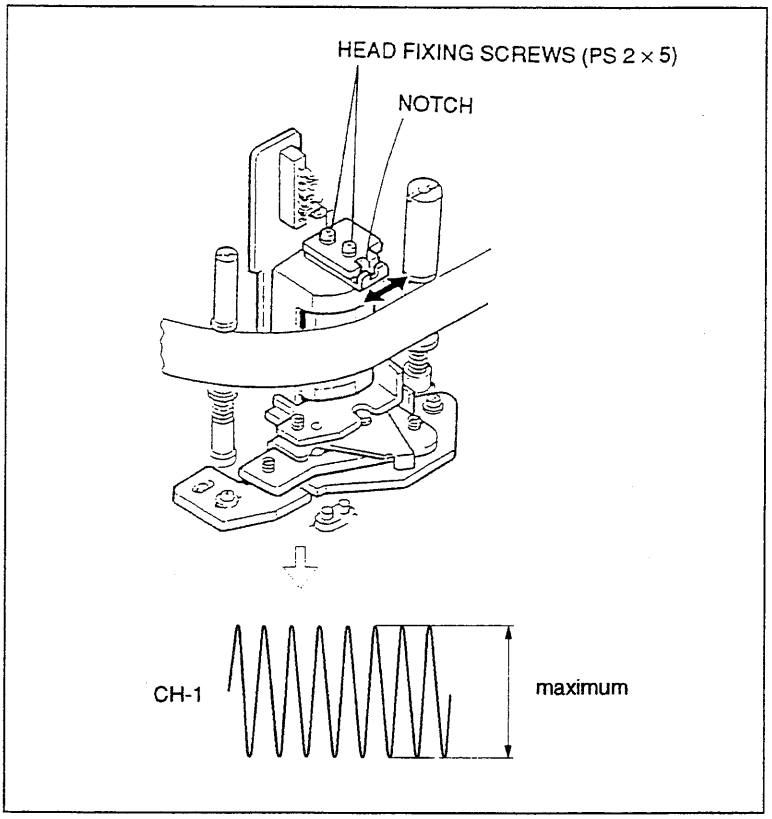
10. **Recheck the Audio/TC Head Head-to-tape Contact**
    Refer to steps 5 and 6 in this section.

In case the adjustment is performed

11. **Check the Audio/TC Head Position**
    Refer to Section 8-4-9.

12. **Check the Audio/TC Head Height**
    Refer to Section 8-4-6 (For DVW-510P).

13. **Check the Audio/TC Head Azimuth**
    Refer to Section 8-4-7 (For DVW-510P).



Audio/TC Head Head-to-tape Contact Adjustment (DVW-510P)

8-4-9. Audio/TC Head Position Adjustment

Notes

- The CTL head position adjustment must have been completed before performing this adjustment. The audio/TC head position is adjusted with the CTL head position as reference.
- The audio/TC head position adjustment is closely related to the head height adjustment, head azimuth adjustment, and head-to-tape contact adjustment. Be sure to perform adjustments (or checks) according to "In case the adjustment is performed" in this section when the audio/TC head position is adjusted.

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: TP815/SS-52 board (CTL PULSE signal)
   CH-2: TP2800/SS-52 board (PB LTC signal)

3. **Set the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

Check

4. **Turn the Power On**

5. **Play Back the Alignment Tape**
   Play back the ZR2-1P (00:00 to 15:00).

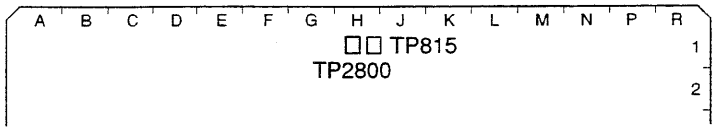
6. **Check the Audio/TC Head Position**
   Check that the positional relationship between the rising edges of CTL and TC signals satisfies the specification.

   If the specification is not satisfied, perform steps 7 and later.

* Connection of the Oscilloscope

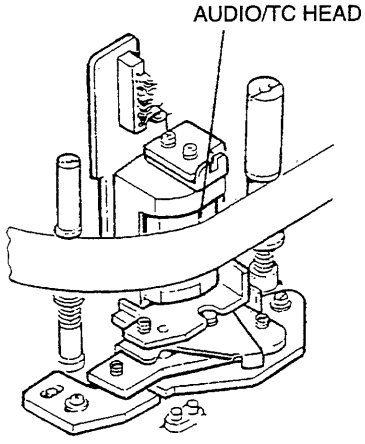
CH-1: TP815/SS-52 board (CTL PULSE signal)
CH-2: TP2800/SS-52 board (PB LTC signal)

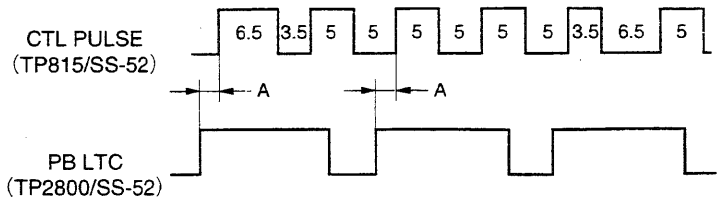
〈SS-52 BOARD, Side A〉



Preparation

* Alignment Tape: ZR2-1P (00:00 to 15:00)





Spec.: A = 0 ± 400 µsec

Audio/TC Head Position Check

Adjustment

7. **Remove the CL Guide Rail**
   Remove the two screws, then remove the CL guide rail.

8. **Loosen the Screws**
   Loosen the two fixing screws of the audio/TC head assembly by 1/4 to 1/2 turn.

9. **Adjust the Audio/TC Head Position**
   (1) Insert a 3 mm flatbladed screwdriver into the notch of the audio/TC head assembly.
   (2) Adjust the audio/TC head assembly position so that the specification is satisfied.

10. **Tighten the Screws**
    Tighten the two screws loosened in step 8.

11. **Recheck the Audio/TC Head Position**
    Refer to steps 5 and 6 in this section.

12. **Install the CL Guide Rail**
    Install the CL guide rail with two screws.

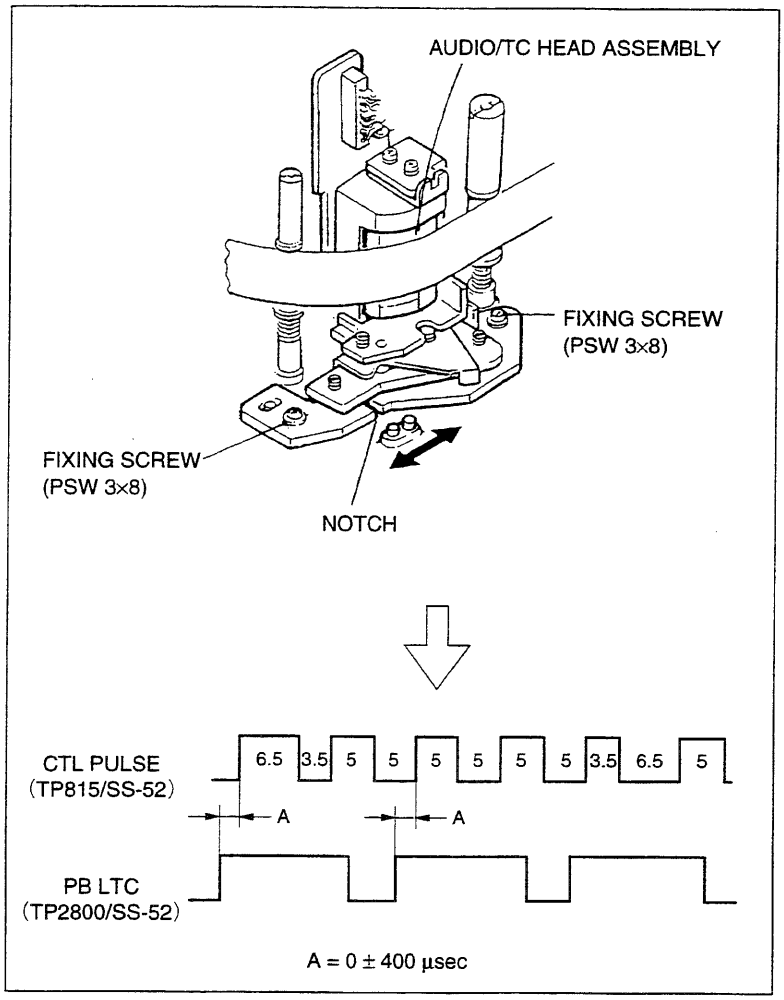
In case the adjustment is performed

13. **Check the Audio/TC Head Height**
    Refer to Section 8-4-6 (For DVW-A510P/CA510P or For DVW-510P).

14. **Check the Audio/TC Head Azimuth**
    Refer to Section 8-4-7 (For DVW-A510P/CA510P or For DVW-510P).

15. **Check the Audio/TC Head Head-to-tape Contact**
    Refer to Section 8-4-8 (For DVW-A510P/CA510P or For DVW-510P).

16. **Check the Audio/TC Head Position**
    Refer to steps 5 and 6 in this section.



Audio/TC Head Position Adjustment

8-4-10. Audio Level Adjustment in REV Mode

For DVW-A510P/CA510P

Tools

- Alignment tape CR8-1A PS: 8-960-098-45
- Oscilloscope

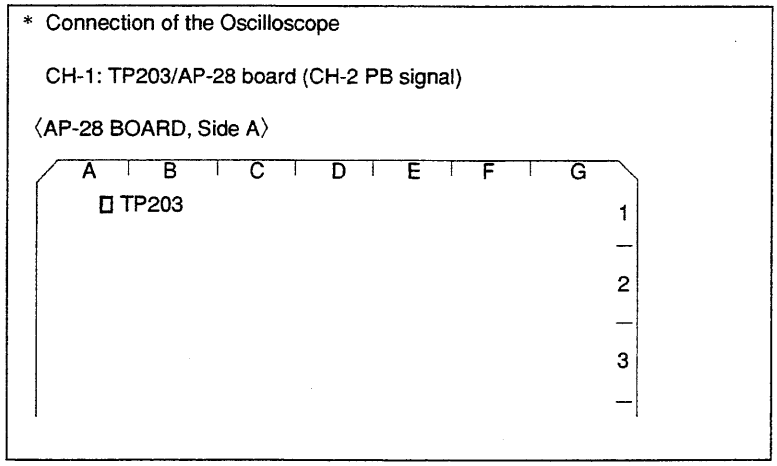
- Digital Betacam cassette BCT-D32 (S cassette)
- Adjustment mirror (circular): J-6080-029-A
- Tape guide adjustment driver (MW-261): J-6322-610-A

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: TP203/AP-28 board (CH-2 PB signal)

3. **Set the Alignment Tape**
   Set the CR8-1A PS and put a weight on the cassette so that it does not rise up.



Preparation (DVW-A510P/CA510P)

Check

4. **Turn the Power On**

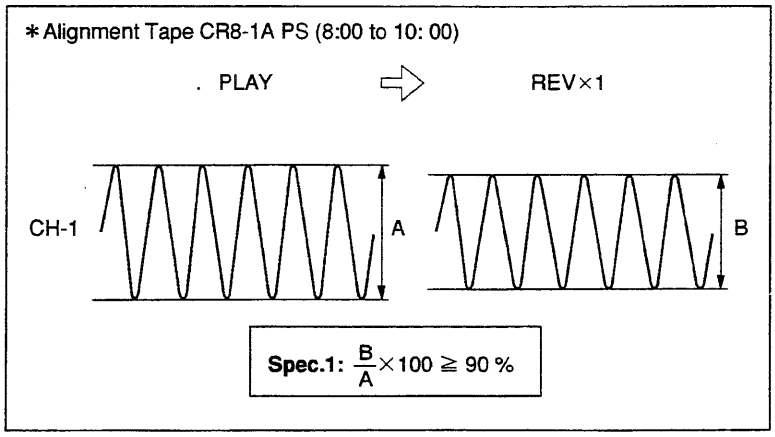
5. **Play Back the Alignment Tape**
   Play back the 1 kHz, 0 VU signal portion (8:00 to 10:00) on the CR8-1A PS.

6. **Check the Audio Output Level**
   Check the audio output level A in CH-1.

7. **Put the Unit into the REV × 1 Mode**

8. **Check the Audio Output Level**
   Check that the audio output level B in CH-1 satisfies specification 1.

   If specification 1 is not satisfied, perform steps 9 and later.



Audio Level Check in REV Mode (DVW-A510P/CA510P)

Adjustment

9. Adjust the TG-5 (Threading Roller) Height

(1) Play back the 1 kHz, 0VU signal portion (8:00 to 10:00) on the CR8-1A PS.
(2) Put the unit into the REV x 1 mode.
(3) In case the level increases when portion A of the tape shown in the figure is pressed down, turn the upper flange of TG-5 clockwise using a tape guide adjustment driver.
In case the level increases when portion B is pushed up, turn the upper flange of TG-5 counterclockwise.
(4) Check the audio output level satisfies specification 1. (Refer to steps 5 through 8.)

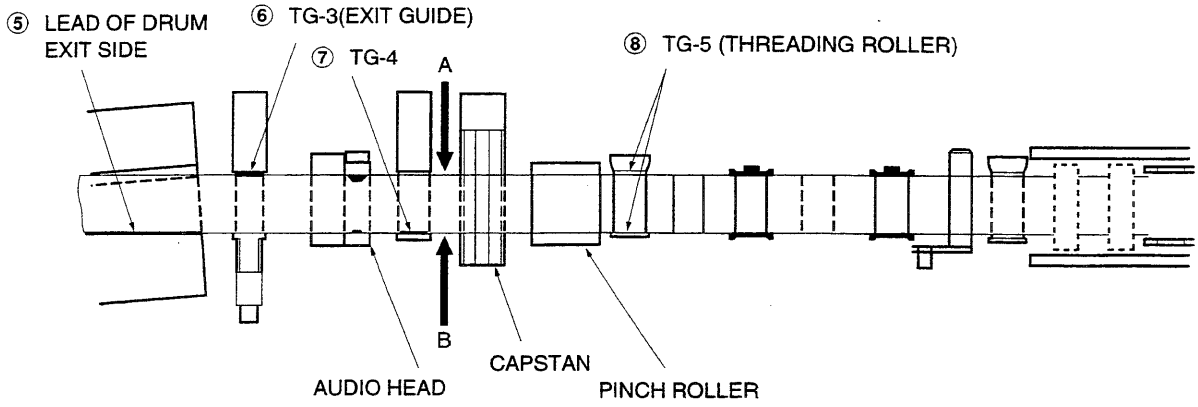
If the specification 1 is not satisfied, repeat steps (1) through (4) mentioned above.

10. Check the Tape Running at Drum Exit Side

In the modes below, check that the tape running condition satisfies specification 2.
(1) PLAY mode
(2) REV × 10 mode
(3) REV × 1 mode

If specification 2 is not satisfied, adjust the tape guides height at the drum exit side. (Refer to steps 12 through 14 (at the Drum Exit Side) in Section 8-4-2.)

If the height of the tape guide is adjusted, perform the video tracking check. (Refer to Section 8-4-3.)



Spec. 2: ⑤ LEAD OF DRUM EXIT SIDE
The tape runs without any curl at the lead.

⑥ TG-3 (EXIT GUIDE)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

⑦ TG-4
The tape runs in contact with the lower flange.
The tape curl is less than 1/10 of the tape width.

⑧ TG-5 (THREADING ROLLER)
The tape runs without any curl at the upper and lower flanges.

Audio Level Adjustment in REV Mode (DVW-A510P/CA510P)

For DVW-510P

Tools

- Alignment tape ZR2-1P: 8-960-073-61
- Oscilloscope

- Digital Betacam cassette BCT-D32 (S cassette)
- Adjustment mirror (circular): J-6080-029-A
- Tape guide adjustment driver (MW-261): J-6322-610-A

Preparation

1. **Turn the Power Off**

2. **Connect the Oscilloscope**
   CH-1: AUDIO OUTPUT CUE connector/
   connector panel
   or
   TP701/CUE-1 board (CUE OUT signal)

3. **Set the Alignment Tape**
   Set the ZR2-1P and put a weight on the cassette so that it does not rise up.

Check

4. **Turn the Power On**

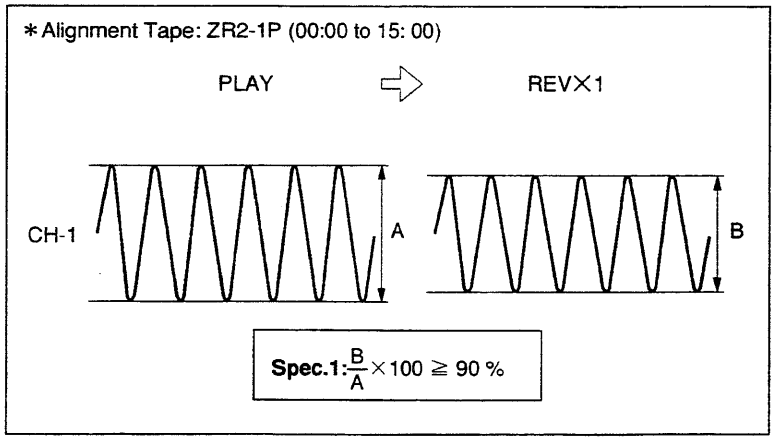
5. **Play Back the Alignment Tape**
   Play back the 1 kHz, 0 VU signal portion (00:00 to 15:00) on the ZR2-1P.

6. **Check the Cue Output Level**
   Check the cue output level A.

7. **Put the Unit into the REV × 1 Mode**

8. **Check the Cue Output Level**
   Check that the cue output level B satisfies specification 1.

   If specification 1 is not satisfied, perform steps 9 and later.



Audio Level Check in REV Mode (DVW-510P)

Adjustment

9. Adjust the TG-5 (Threading Roller) Height

(1) Play back the 1 kHz, 0VU signal portion (00:00 to 15:00) on the ZR2-1P.
(2) Put the unit into the REV x 1 mode.
(3) In case the level increases when portion A of the tape shown in the figure is pressed down, turn the upper flange of TG-5 clockwise using a tape guide adjustment driver.
In case the level increases when portion B is pushed up, turn the upper flange of TG-5 counterclockwise.
(4) Check the cue output level satisfies specification 1. (Refer to steps 5 through 8.)

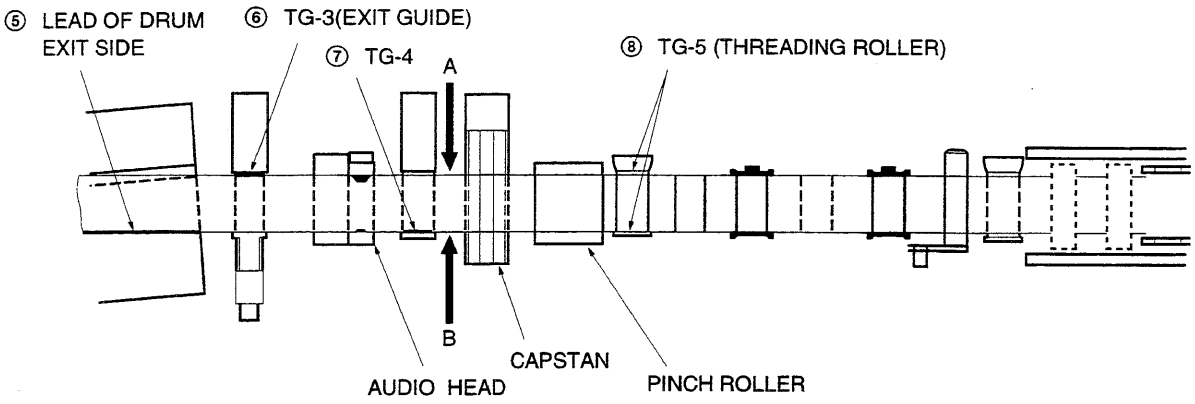
If the specification 1 is not satisfied, repeat steps (1) through (4) mentioned above.

10. Check the Tape Running at Drum Exit Side

In the modes below, check that the tape running condition satisfies specification 2.
(1) PLAY mode
(2) REV × 10 mode
(3) REV × 1 mode

If specification 2 is not satisfied, adjust the tape guides height at the drum exit side. (Refer to steps 12 through 14 (at the Drum Exit Side) in Section 8-4-2.)

If the height of the tape guide is adjusted, perform the video tracking check. (Refer to Section 8-4-3.)



Spec. 2: ⑤ LEAD OF DRUM EXIT SIDE
The tape runs without any curl at the lead.

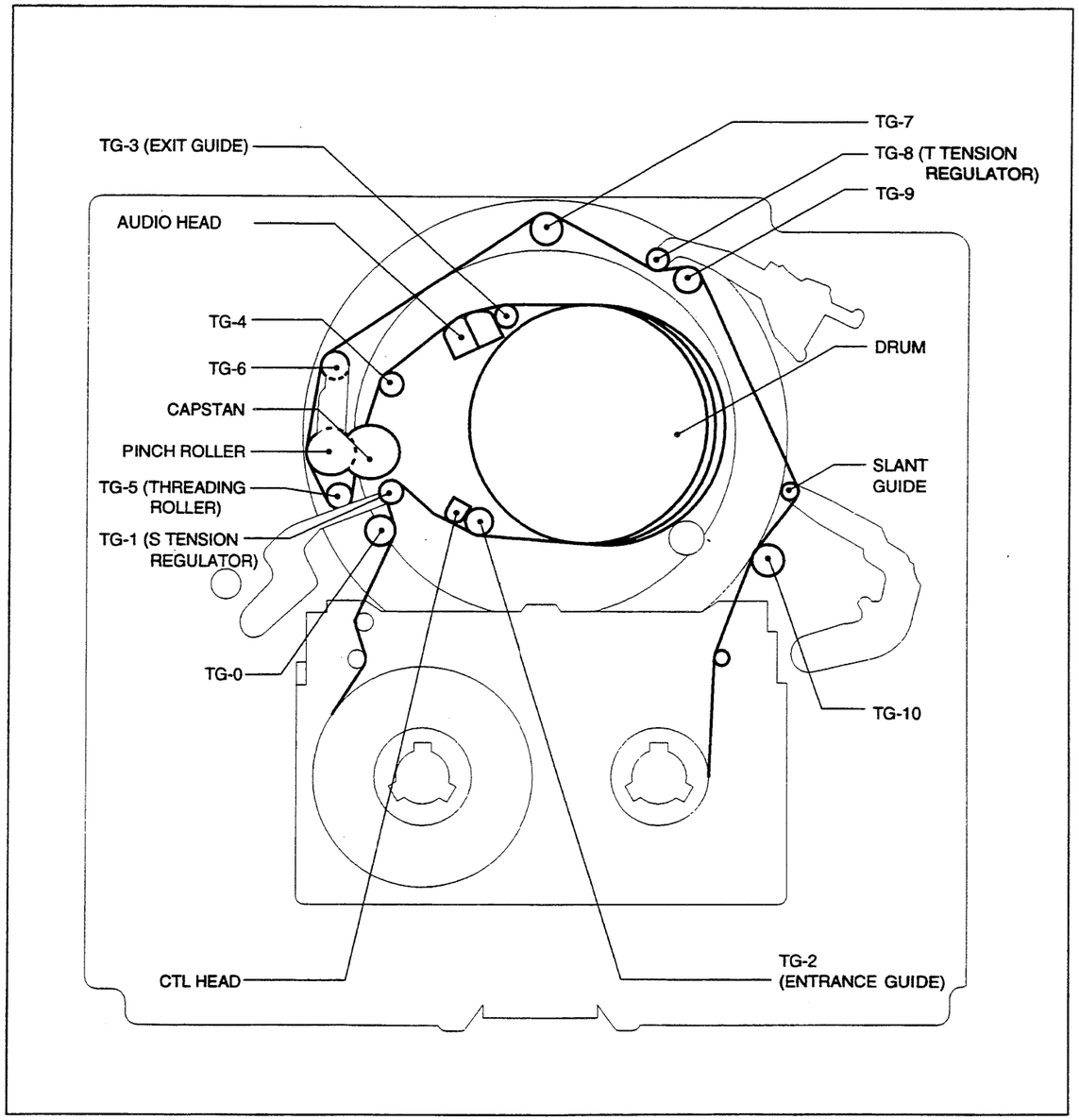
⑥ TG-3 (EXIT GUIDE)
The tape runs in contact with the upper flange.
The tape curl is less than 1/10 of the tape width.

⑦ TG-4
The tape runs in contact with the lower flange.
The tape curl is less than 1/10 of the tape width.

⑧ TG-5 (THREADING ROLLER)
The tape runs without any curl at the upper and lower flanges.

Audio Level Adjustment in REV Mode (DVW-510P)

Parts Location of the Tape Running System



8-5. SERVO/DT AND RF ADJUSTMENT

Adjustment of each item is performed by using maintenance mode. Refer to section 5 for how to operate the maintenance mode.

[Equipment]

- Analog Component Signal Generator (Tektronix TSG-300 or equivalent)
- Analog Composit Signal Generator (Tektronix TSG-271 or equivalent)
- Alignment Tape ZR2-1P (Part No. 8-960-073-61)
- Alignment Tape ZR5-1P (Part No. 8-960-073-51)
- Alignment Tape CR5-1B PS (Part No. 8-960-096-91)

Alignment Tape ZR2-1P (Part No. 8-960-073-61)

Contents

TIME min.:sec.	CTL TRACK	CUE TRACK	VIDEO/AUDIO TRACK
00 : 00 (7 : 3 PULSE) 15 : 00	CTL	1 kHz, 0 VU	4 MHz (A CH only)
20 : 00	CTL	12 kHz, 0 VU	A,C CH - 4 MHz B,D CH - 8 MHz
25 : 00	CTL	12 kHz, 0 VU	16 MHz (All CH)
27 : 00	CTL	———	50% FLAT FIELD (All CH)

Alignment Tape CR5-1B PS (Part No. 8-960-096-91)

Contents

TIME min.:sec.	VIDEO TRACK	AFM	CTL
0 : 00	RF Sweep	No Signal	CTL
2 : 00	60% H Sweep (CTDM)		
5 : 00	Pulse & Bar (CTDM)		
8 : 00	60% Multi Burst		
11 : 00	Pulse & Bar		
14 : 00	100% Color Bars	400 Hz SINE WAVE 25 kHz DEVIATION	
16 : 30		75 kHz DEVIATION	
17 : 00	50% Bowtie & 10T	No Signal	
19 : 00	Line 17 Signal		
22 : 00	Quad Phase		
24 : 00	Flat Field		
26 : 00	100% Color Bars with Dropout		
28 : 00	Composite H Sweep with VISC		
30 : 00			

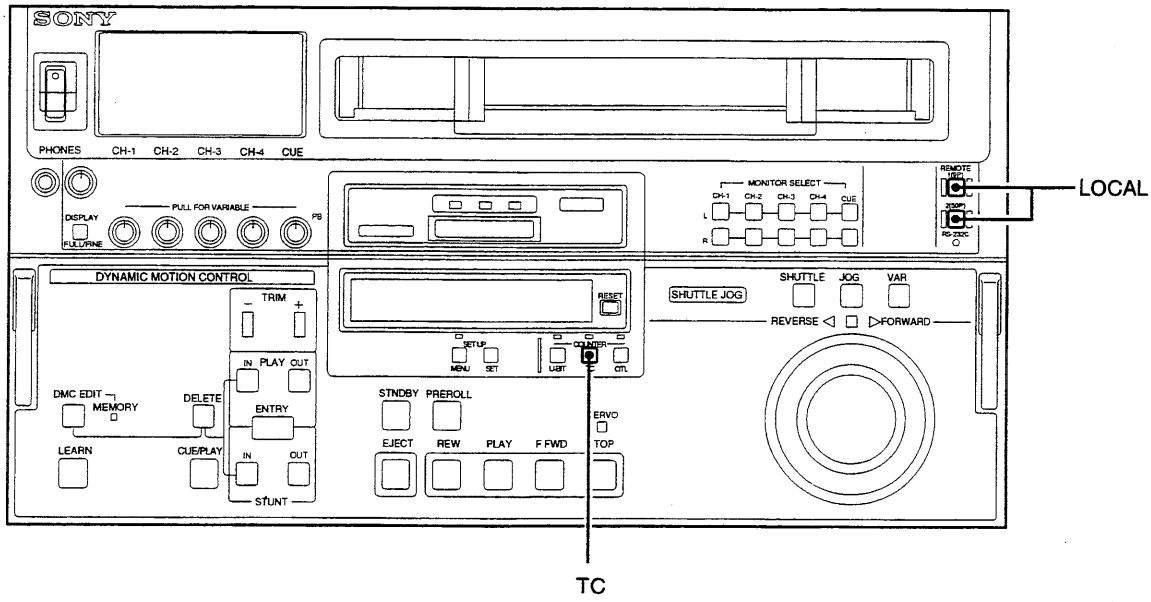
Alignment Tape ZR5-1P (Part No. 8-960-073-51)

Contents

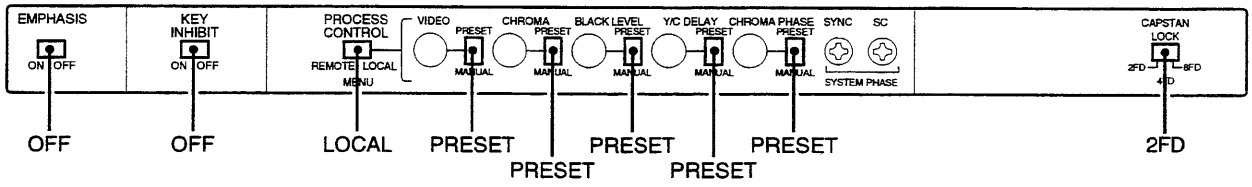
TIME min.:sec.	CTL	VIDEO	D-AUDIO	CUE	TIME min.:sec.
00 : 00					00 : 00
				1 kHz 0 VU	
			1 kHz -20 dB FS	Blank	01 : 25
		Color Bars (100%)			01 : 30
02 : 00				1 kHz -20 VU	
				Blank	02 : 25
					02 : 30
				3 kHz -20 VU	
				Blank	02 : 55
			1 kHz 0 dB FS		03 : 00
				7 kHz -20 VU	
				Blank	03 : 25
					03 : 30
				10 kHz -20 VU	
				Blank	03 : 55
04 : 00					04 : 00
				12 kHz -20 VU	
				Blank	04 : 25
					04 : 30
			-∞ dB FS	90 Hz -20 VU	
				Blank	04 : 55
					05 : 00
06 : 00					
			20 Hz -20 dB FS	Repeat	
08 : 00					
			20 kHz -20 dB FS		
10 : 00					10 : 00
		Ramp	Repeat	Repeat	
20 : 00					20 : 00

[Switch Setting]

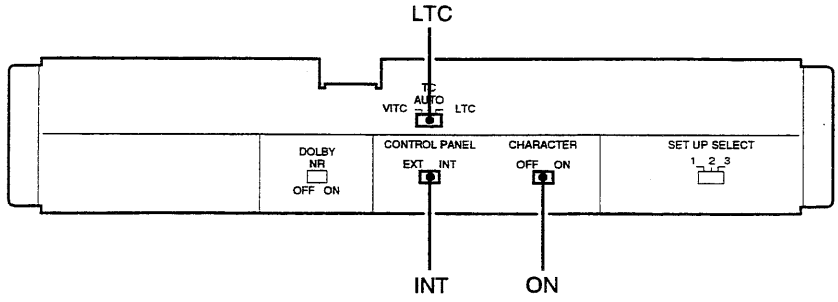
Upper/Lower Control Panel



Sub Control Panel



System Setup Panel



How to operate the maintenance mode

Push ⑧ S300(DIAG/ADJUST 1) (M-1) on the SS-52 board to enter the maintenance mode.

How to enter the next menu:

Press the ⑥ JOG button once. (Enters JOG mode.)
Turn the ⑦ search dial to move the * mark to a desired item.
Press the ③ SET button.

How to exit the current menu or the maintenance mode:

Press the ② MENU button.

How to operate a tape (e.g. PLAY) in the manual adjustment or other items:

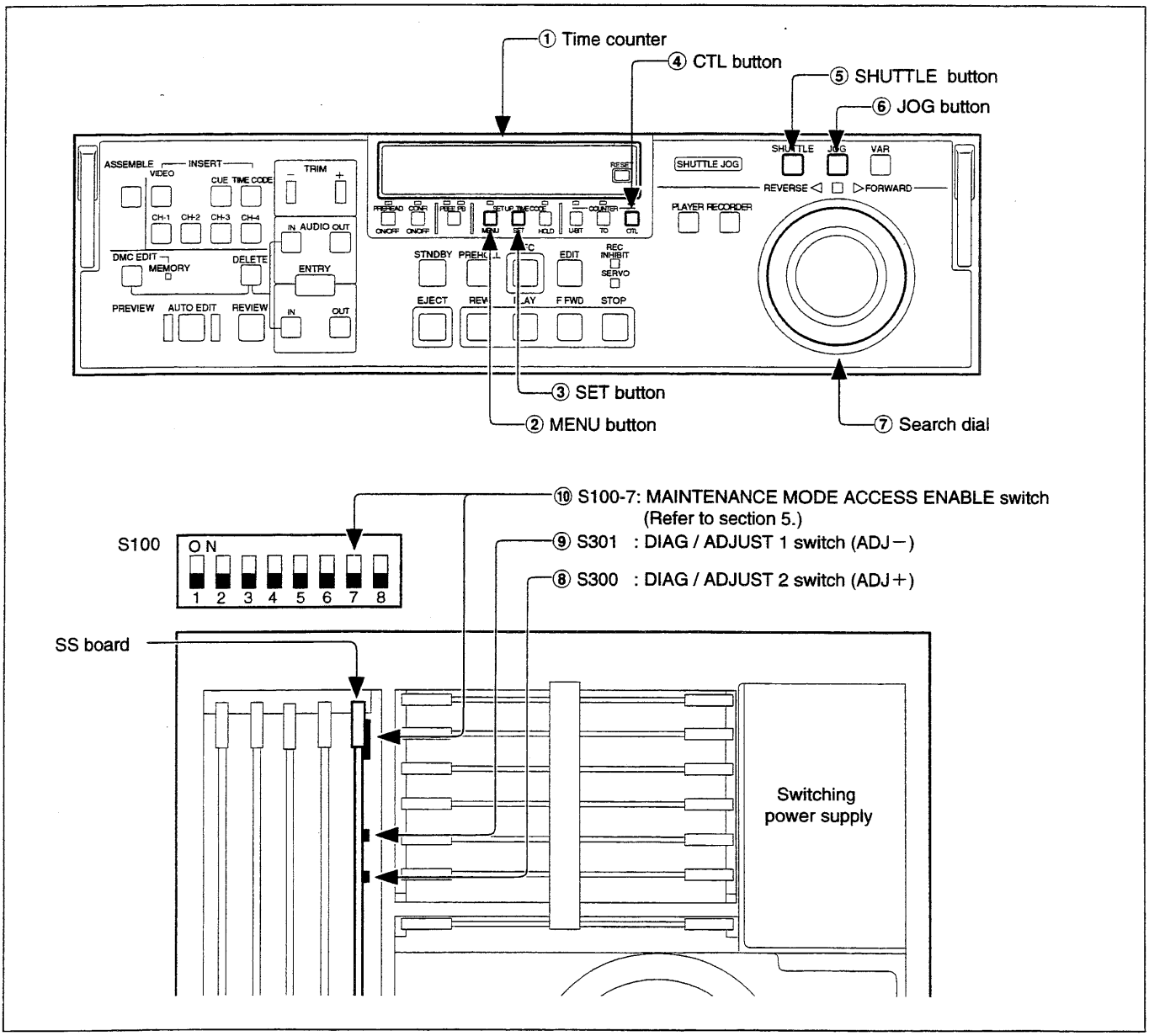
Press the ③ SET button to exit the maintenance mode temporarily. (A tape can be operated in this condition.)
Press the ② MENU button to return to the maintenance mode.

How to change the data (adjust the level) manually:

Turn the ⑦ search dial to move the * mark to the item wishing to be adjusted.
Turn the ⑦ search dial while pressing the ⑥ JOG button.

How to save the data:

Turn the ⑦ search dial to move the * mark to "A??: NV-RAM CONTROL".
Press the ③ SET button.
Turn the ⑦ search dial to move the * mark to "SAVE ALL ADJUST DATA".
Press the ③ SET button.



8-5-1. Drum Phase Adjustment

(1) Prepare the alignment tape ZR2-1P which is cue upped the 00:25:00:00 portion by the time code.

(2) Press S300 switch on the SS-52 board to enter the maintenance mode.

(3) Move the * mark to "A0 : SERVO/DT ADJUST" by the search dial.

(4) Press the SET button to enter "A0 : SERVO/DT ADJUST" mode.

From this time on, operate the menu in the same way.

(5) Enter "A00-01 : SERVO ADJUST" menu.

(6) Enter "A011 : RF SWITCHING POS.".

(7) Select "AUTO" by turning the search dial while pressing the JOG button.

(8) Insert the alignment tape ZR2-1P as instructed by monitor display and execute the automatic adjustment.

(9) After adjustment is completed, "ADJUST COMPLETE" is displayed.

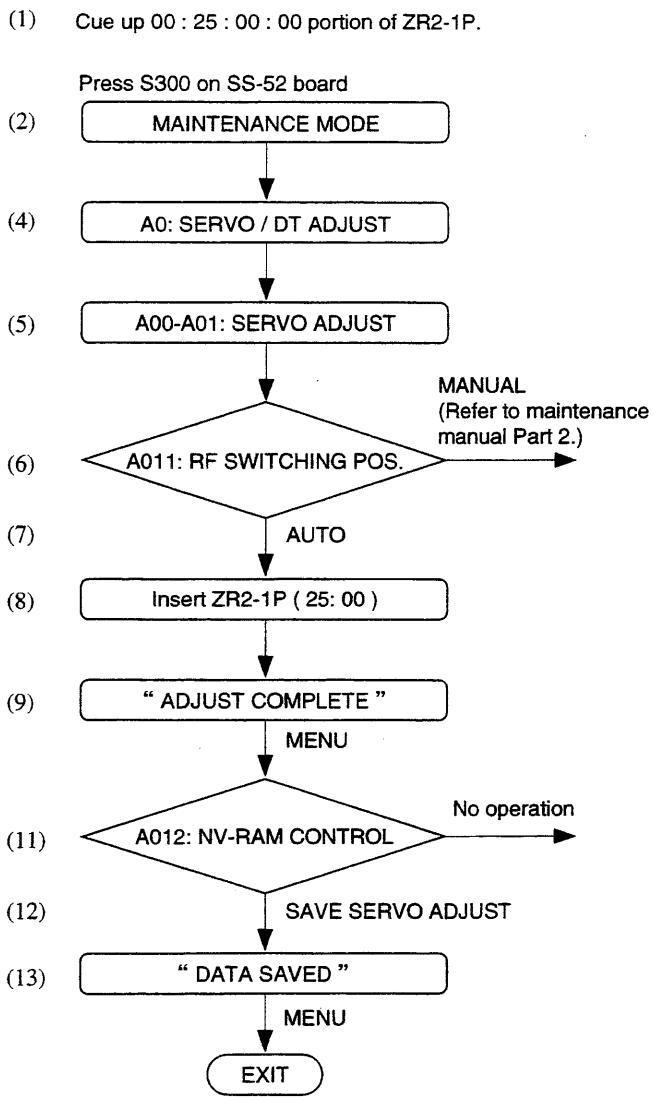
(10) Press the MENU button to return to the SERVO ADJUST display.

(11) Enter "A012 : NV-RAM CONTROL" menu.

(12) Select "SAVE SERVO ADJUST DATA".

(13) After adjustment data are saved in NV-RAM completely, "DATA SAVED" is displayed.

(14) Press the MENU button several times to return to the operation mode.



Note

When adjustment is incomplete at "A011 : RF SWITCH POS", error message is displayed. As for error message, refer to section 5-7-1. Servo System Adjustment Mode.

8-5-2. Digital DT Adjustment

(1) Insert the alignment tape ZR5-1P.

(2) Press S300 switch on the SS-52 board to enter the maintenance mode.

(3) Move the * mark to "A0 : SERVO/DT ADJUST" by the search dial.

(4) Press the SET button to enter "A0 : SERVO/DT ADJUST" mode.

From this time on, operate the menu in the same way.

(5) Enter "A02 : DIGITAL DT ADJUST" menu.

(6) Enter "A021 : DRIVE GAIN".

(7) Select "Start auto adjust".

(8) Put the unit into the STILL mode by pressing the JOG button as instructed by monitor display.

(9) After adjustment is completed, "ADJUST COMPLETE" is displayed.

(10) Press the MENU button to return to the DIGITAL ADJUST display.

(11) Enter "A022:HEAD OFFSET LEVEL".

(12) Select "Start auto adjust".

(13) Put the unit into the PLAY mode by pressing the PLAY button as instructed by monitor display.

(14) After adjustment is completed, "ADJUST COMPLETE" is displayed.

(15) Press the MENU button to return to DIGITAL ADJUST display.

(16) Enter "A023 : NV-RAM CONTROL".

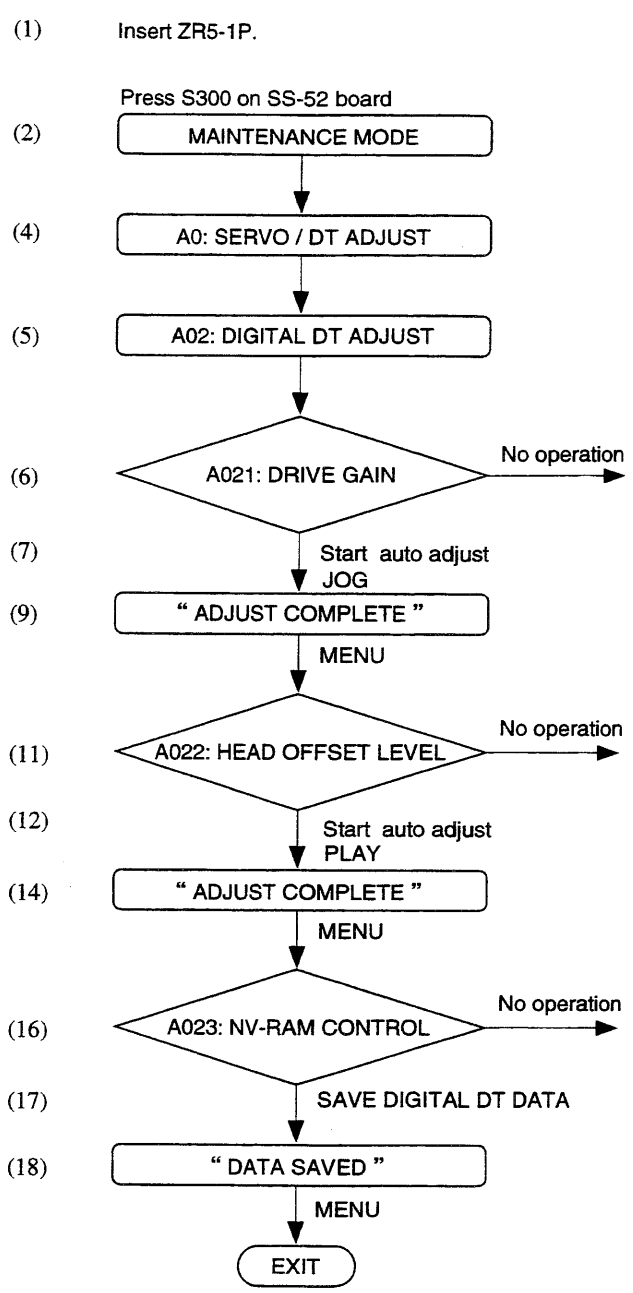
(17) Execute "SAVE DIGITAL DT ADJUST".

(18) After adjustment data are saved in NV-RAM completely, "DATA SAVED" is displayed.

(19) Press the MENU button several times to return to the operation mode.

Note

When adjustment is incomplete at "A021 : DRIVE GAIN" or "A022 : HEAD OFFSET LEVEL", "ADJUST INCOMPLETE" is displayed. Refer to section 5-2-6. Digital DT System Check.



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8-5-3. Analog DT Adjustment (For DVW-A510P/CA510P)

(1) Insert the alignment tape CR5-1B PS, and cue up the color bars signal portion (00:14:00:00).

(2) Press the S300 switch on the SS-52 board to enter the maintenance mode.

(3) Move the * mark to " A0 : SERVO/DT ADJUST" by the search dial.

(4) Press the SET button to enter " A0 : SERVO/DT ADJUST".

From this time on, operate the menu in the same way.

(5) Enter "A03 : ANALOG DT ADJUST" menu.

(6) Enter "A030 : HEAD OFFSET LEVEL".

(7) Select "Start auto adjust".

(8) Put the unit into the PLAY mode by pressing the PLAY button as instructed by monitor display.

(9) After adjustment is completed, "ADJUST COMPLETE" is displayed.

(10) Press the MENU button to return to ANALOG DT ADJUST display.

(11) Enter "A031 : DRIVE GAIN".

(12) Select "Start auto adjust".

(13) Set to VAR+3 times speed mode as instructed by monitor display, (Press VAR button on the control panel and turn the search dial clockwise.)

(14) After adjustment is completed, "ADJUST COMPLETE" is displayed.

(15) Press the JOG button on the control panel.

(16) Press the MENU button to return to ANALOG DT ADJUST display.

(17) Enter "A032 : NV-RAM CONTROL".

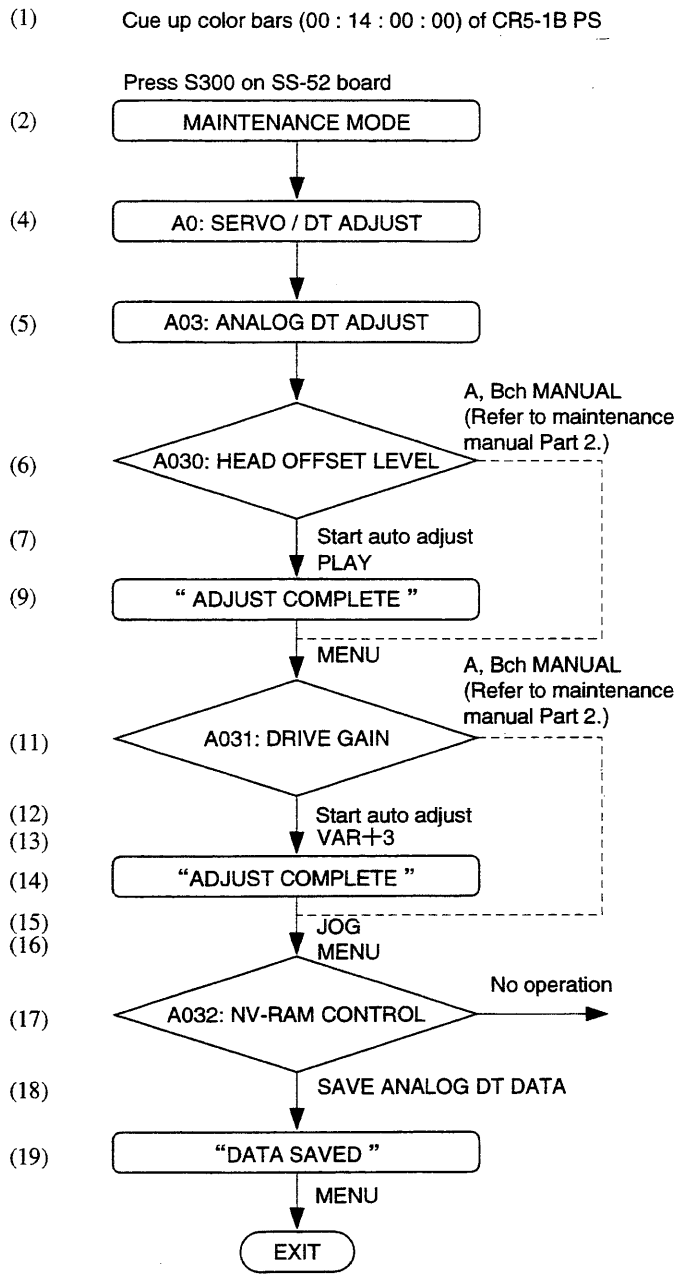
(18) Select "SAVE ANALOG DT DATA".

(19) After adjustment data are saved in NV-RAM completely, "DATA SAVED" is displayed.

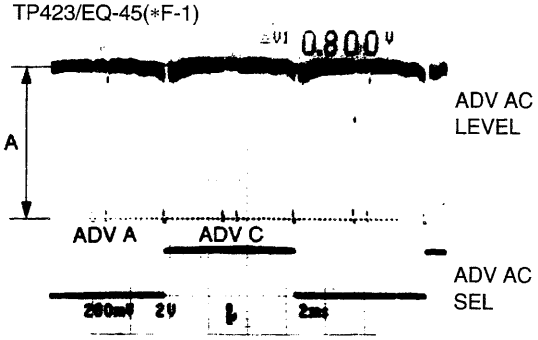
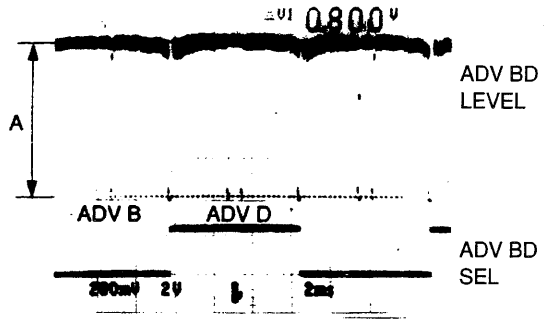
(20) Press the MENU button several times to return to the operation mode.

Note

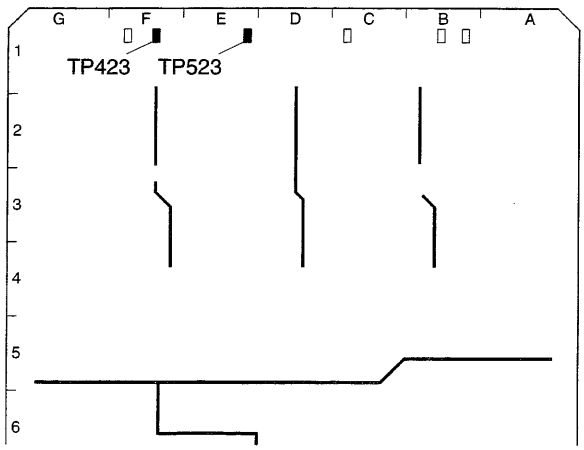
- Never eject the tape untill the data saved. If ejecting, re-adjust.
- When adjustment is incomplete at "A030 : HEAD OFFSET LEVEL", or "A031 : DRIVE GAIN", "ADJUST INCOMPLETE" is displayed. Refer to section 5-2-7. Analog DT System Check.



8-5-4. ADV Envelope Level Adjustment (EQ-45 Board suffix No. 15 and later)

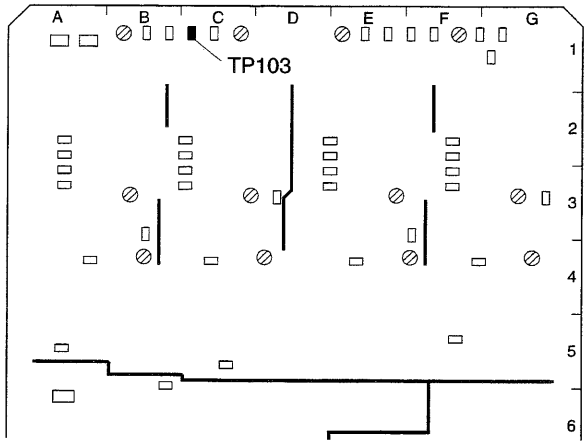
Preparations for adjustment	Specifications	Adjustments
• Enter "A19:ADV LEVEL" menu in the "A1:RF ADJUST" mode in the maintenance mode. **Step 1** • Connect CH1 and CH2 of the oscilloscope to TP103 and TP423 on the EQ-45 board. • Play back the alignment tape ZR5-1P.	Oscilloscope TP423/EQ-45(*F-1)  A = 800 ±100 mV	A19:ADV LEVEL Ach LEVEL ↓ Level Adjustment ↓ Cch LEVEL ↓ Level Adjustment TRIG:TP103/EQ-45(C-1)
Step 2 • Connect CH1 and CH2 of the oscilloscope to TP523 and TP103 on the EQ-45 board. • Play back the alignment tape ZR5-1P.	Oscilloscope TP523/EQ-45(*E-1)  A = 800 ±100 mV	Bch LEVEL ↓ Level Adjustment ↓ Dch LEVEL ↓ Level Adjustment TRIG:TP103/EQ-45(C-1)
Step 3 • Enter "AIF:NV-RAM CONTROL" menu. • Save adjustment data.		AIF:NV-RAM CONTROL SAVE ALL ADJUST DATA

Board suffix No. 15 and later



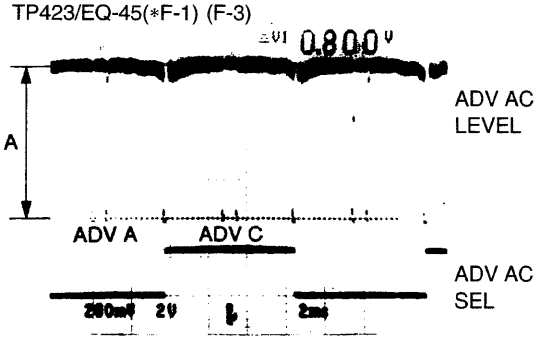
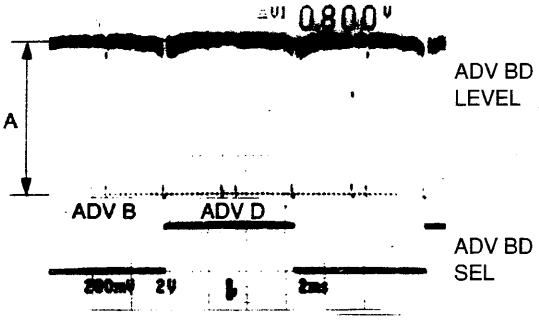
* : B SIDE

Board suffix No. 15 and later

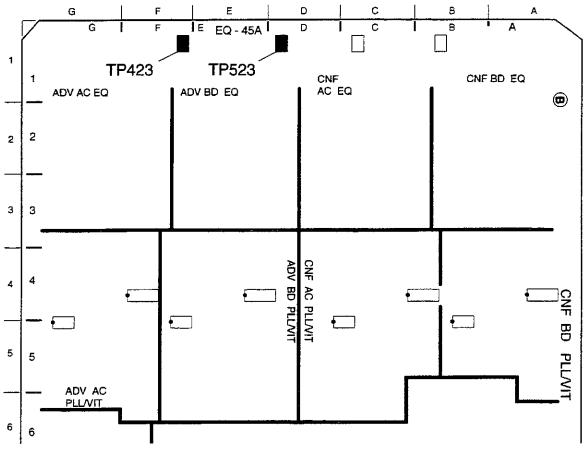


A SIDE

8-5-4. ADV Envelope Level Adjustment (EQ-45 Board suffix No. 11, 12, 13, 22, 23, 31, 41)

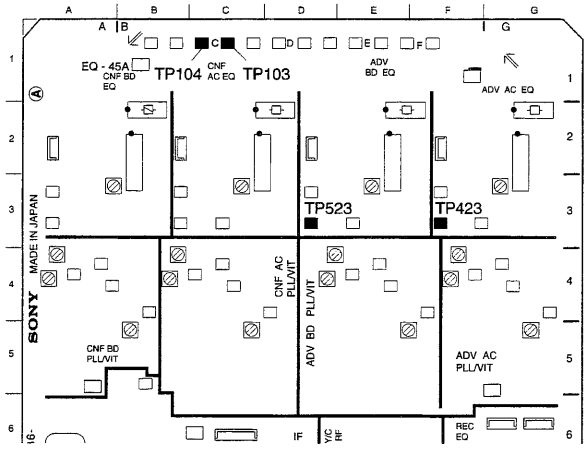
Preparations for adjustment	Specifications	Adjustments
• Enter "A19:ADV LEVEL" menu in the "A1:RF ADJUST" mode in the maintenance mode. **Step 1** • Connect CH1 and CH2 of the oscilloscope to TP103 and TP423 on the EQ-45 board. • Play back the alignment tape ZR5-1P.	Oscilloscope TP423/EQ-45(∗F-1) (F-3)  A = 800 ±100 mV	A19:ADV LEVEL Ach LEVEL ↓ Level Adjustment ↓ Cch LEVEL ↓ Level Adjustment TRIG:TP103/EQ-45(C-1)
Step 2 • Connect CH1 and CH2 of the oscilloscope to TP104 and TP523 on the EQ-45 board. • Play back the alignment tape ZR5-1P.	Oscilloscope TP523/EQ-45(∗D-1) (D-3)  A = 800 ±100 mV	Bch LEVEL ↓ Level Adjustment ↓ Dch LEVEL ↓ Level Adjustment TRIG:TP104/EQ-45(C-1)
Step 3 • Enter "AIF:NV-RAM CONTROL" menu. • Save adjustment data.		AIF:NV-RAM CONTROL SAVE ALL ADJUST DATA

Board suffix No. 13, 23, 31, 41



∗ : B SIDE

Board suffix No. 11, 12, 22



A SIDE

8-5-5. Playback Equalizer Adjustment

(1) Insert the alignment tape ZR5-1P.

(2) Press S300 switch on the SS-52 board to enter the maintenance mode.

(3) Move the * mark to "A1 : RF ADJUST" by the search dial.

(4) Press the SET button to enter "A1 : RF ADJUST" mode.

From this time on, operate the menu in the same way.

(5) Enter "A12 : ADV EQUALIZER" menu.

(6) Select "Auto" by turning the search dial while pressing the JOG button.

(7) Press the SET button to execute the automatic adjustment.

(8) After adjustment is completed, "Adjust Complete" is displayed.

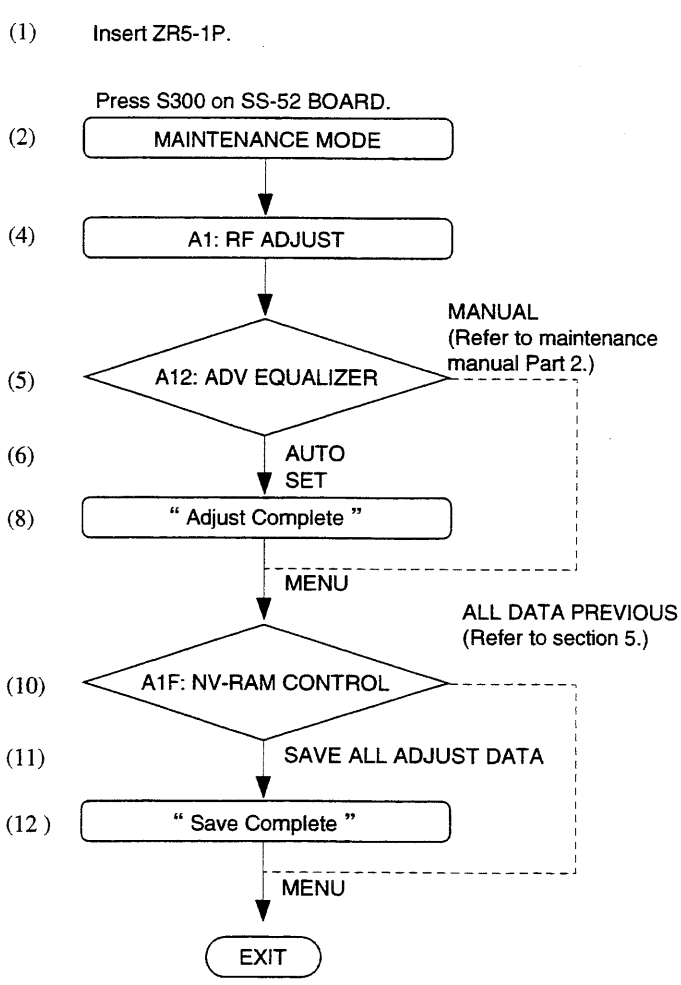
(9) Press the MENU button to return to RF ADJUST MODE display.

(10) Enter "A1F : NV-RAM CONTROL".

(11) Select "SAVE ALL ADJUST DATA".

(12) After adjustment data are saved in NV-RAM completely, "Save Complete" is displayed.

(13) Press the MENU button twice to return to the maintenance mode.



8-6. ADJUSTMENT AFTER DRUM REPLACEMENT (For DVW-A500P/A510P/CA510P)

[Item List]

No.	ITEMS	BOARDS	ADJUSTMENTS	NOTES
1	EQ RF (METAL Y)	DM-89	A30: RF GAIN M-Y-A,B	TP100
	(OXIDE Y)	DM-89	A30: RF GAIN O-Y-A,B	TP100
	(METAL C)	DM-89	A30: RF GAIN M-C-A,B	TP300
	(OXIDE C)	DM-89	A30: RF GAIN O-C-A,B	TP300
	DATA SAVE		A3F: NV-RAM CONTROL	
2	DM OMC LIM BAL (METAL Y)	DM-89	RV105, RV106	TP105
	(OXIDE Y)	DM-89	RV107, RV108	TP105
	(METAL C)	DM-89	RV305, RV306	TP305
	(OXIDE C)	DM-89	RV307, RV308	TP305
3	DEMOD LIM BAL (Y)	DM-89	RV502	TP501
	(C)	DM-89	RV702	TP8
4	PB F RESP (METAL Y)	DM-89	A32: EQ1 METAL-Y-A, B	COMPONENT Y
	(OXIDE Y)	DM-89	A32: EQ1 OXIDE-Y-A, B	COMPONENT Y
	(METAL C)	DM-89	A32: EQ1 METAL-C-A, B	COMPONENT R/B
	(OXIDE C)	DM-89	A32: EQ1 OXIDE-C-A, B	COMPONENT R/B
	DATA SAVE		A3F: NV-RAM CONTROL	
5	DM RF (METAL Y)	DM-89	A31: RF LEVEL M-Y-A, B	TP3
	(OXIDE Y)	DM-89	A31: RF LEVEL O-Y-A, B	TP3
	(METAL C)	DM-89	A31: RF LEVEL M-C-A, B	TP7
	(OXIDE C)	DM-89	A31: RF LEVEL O-C-A, B	TP7
	DATA SAVE		A3F: NV-RAM CONTROL	
6	DM RF ENVELOPE CHECK	DM-89	RV205	TP203
		DM-89	RV405	TP403
7	TBC Y/C DELAY (METAL)	TBC-24	RV500	COMPONENT
	(OXIDE)	TBC-24	RV501	COMPONENT
8	Y and C ERROR OFFSET	TBC-24	RV401	COMPOSITE
		TBC-24	RV601	COMPOSITE
9	AFM RF LEVEL	AP-28	RV301	TP401, TP451

[Equipment]

- Oscilloscope (TEKTRONIX 2465B or equivalent)
- Signal Generator
  Analog Composite SG (TEKTRONIX TSG-271 or equivalent)
- Spectrum Analyzer
- PAL Waveform/Vector Monitor (TEKTRONIX 1751 or equivalent)
- Component Waveform Monitor (TEKTRONIX WFM300A or equivalent)

- Alignment Tape CR5-2A PS (part No. 8-960-098-44)

Contents

TIME min. : sec.	VIDEO TRACK
0 : 00	75% Color Bars
3 : 00	60% Multi Barst Y: 0.5, 1.0, 2.0, 3.0, 4.1, 4.5 MHz C: 0.2, 0.5, 1.0, 1.5, 2.0 MHz
6 : 00	50% Bowtie & 10T
9 : 00	Pulse & Bar
11 : 00	Quad Phase
13 : 00	C-Monoscope Switching position is shifted.
15 : 00	

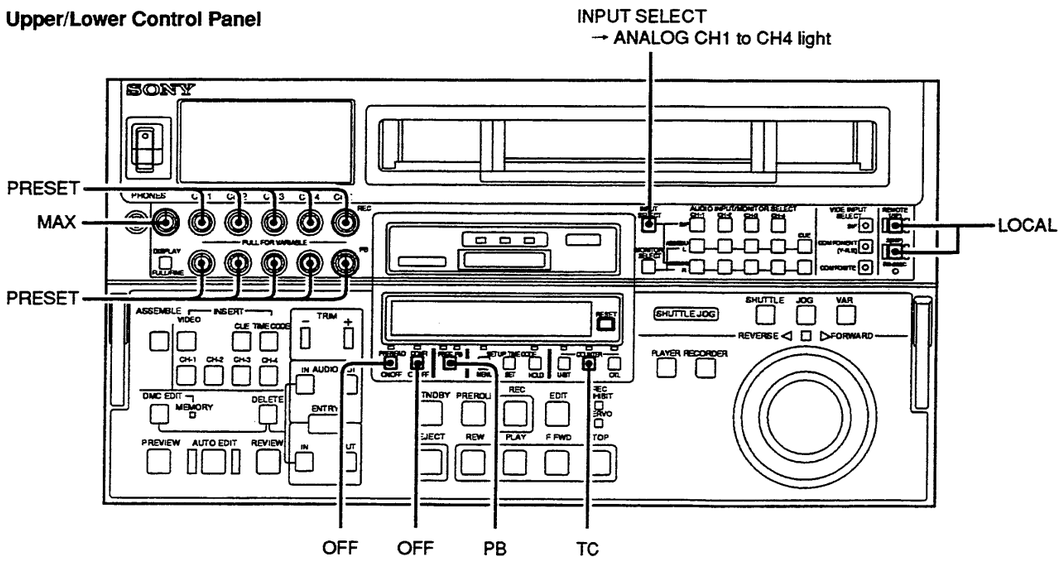
- Alignment Tape CR5-1B PS (part No. 8-960-096-91)

Contents

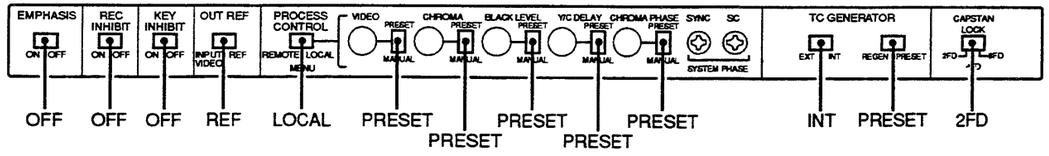
TIME min.: sec.	VIDEO TRACK	AFM	CTL
0 : 00	RF Sweep	No Signal	CTL
2 : 00	60% H Sweep (CTDM)		
5 : 00	Pulse & Bar (CTDM)		
8 : 00	60% Multi Burst		
11 : 00	Pulse & Bar		
14 : 00	100% Color Bars	400 Hz SINE WAVE 25 kHz DEVIATION	
16 : 30		75 kHz DEVIATION	
17 : 00	50% Bowtie & 10T	No Signal	
19 : 00	Line 17 Signal		
22 : 00	Quad Phase		
24 : 00	Flat Field		
26 : 00	100% Color Bars with Dropout		
28 : 00	Composite H Sweep with VISC		
30 : 00			

[Switch Setting]

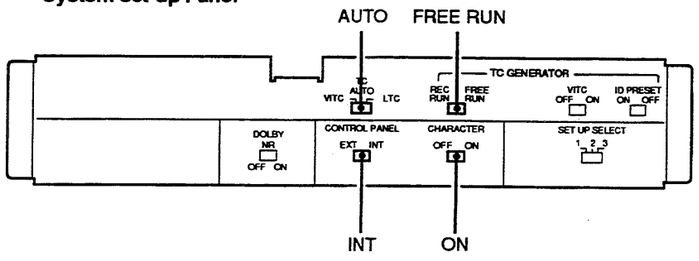
Upper/Lower Control Panel



Sub Control Panel



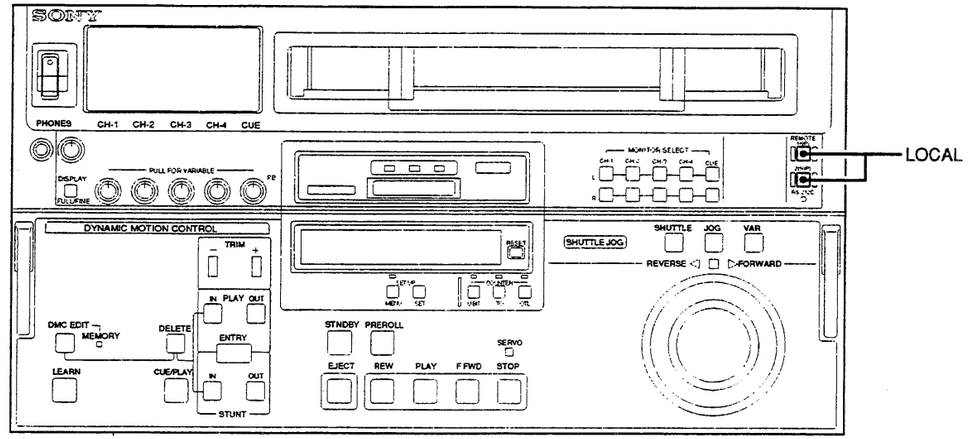
System Set-up Panel



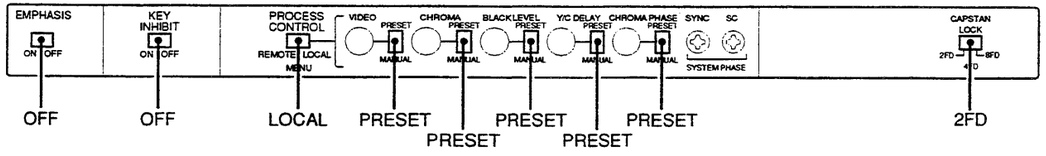
8-6. ADJUSTMENT AFTER DRUM REPLACEMENT (For DVW-A500P/A510P/CA510P)

[Switch Setting]

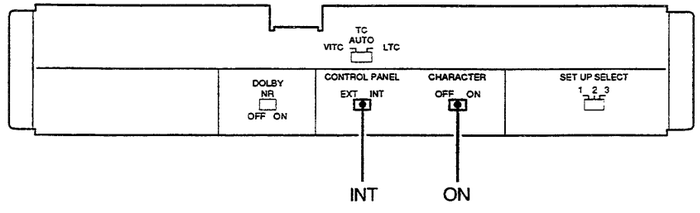
Upper/Lower Control Panel



Sub Control Panel



System Set-up Panel



How to operate the maintenance mode

Push ⑧ S300(DIAG/ADJUST 1) (M-1) on the SS-52 board to enter the maintenance mode.

How to enter the next menu:

Press the ⑥ JOG button once. (Enters JOG mode.)
Turn the ⑦ search dial to move the * mark to a desired item.
Press the ③ SET button.

How to exit the current menu or the maintenance mode:

Press the ② MENU button.

How to operate a tape (e.g. PLAY) in the manual adjustment or other items:

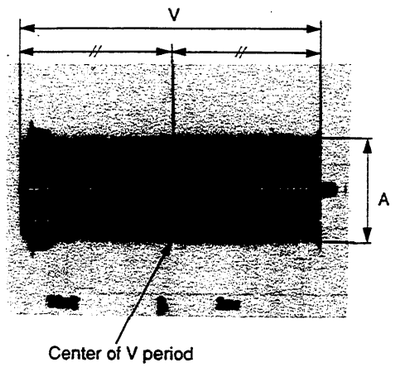
Press the ③ SET button to exit the maintenance mode temporarily. (A tape can be operated in this condition.)
Press the ② MENU button to return to the maintenance mode.

How to change the data (adjust the level) manually:

Turn the ⑦ search dial to move the * mark to the item wishing to be adjusted.
Turn the ⑦ search dial while pressing the ⑥ JOG button.

How to save the data:

Turn the ⑦ search dial to move the * mark to "A?F: NV-RAM CONTROL".
Press the ③ SET button.
Turn the ⑦ search dial to move the * mark to "SAVE ALL ADJUST DATA".
Press the ③ SET button.

	Preparations for adjustment	Specifications	Adjustments	
⑧	• Enter "A30: EQ VR" menu in the	Oscilloscope	A30: EQ VR	
⑦③	"A3:BETACAM PB ADJUST" in	TP101/DM-89(F-7)		
⑦③	the maintenance mode.		RF GAIN METAL-Y-A	⑦
	Step 1		↓	
	• Connect CH-1 and CH-2 of the		Level Adjustment	⑥⑦
	oscilloscope to TP101 and TP4		↓	
③	on the DM-89 board.		RF GAIN METAL-Y-B	⑦
PLAY	• Play back the flat field signal		↓	
②	portion (24:00-26:00) of the		Level Adjustment	⑥⑦
	alignment tape CR5-1B PS.			•
				•
				•

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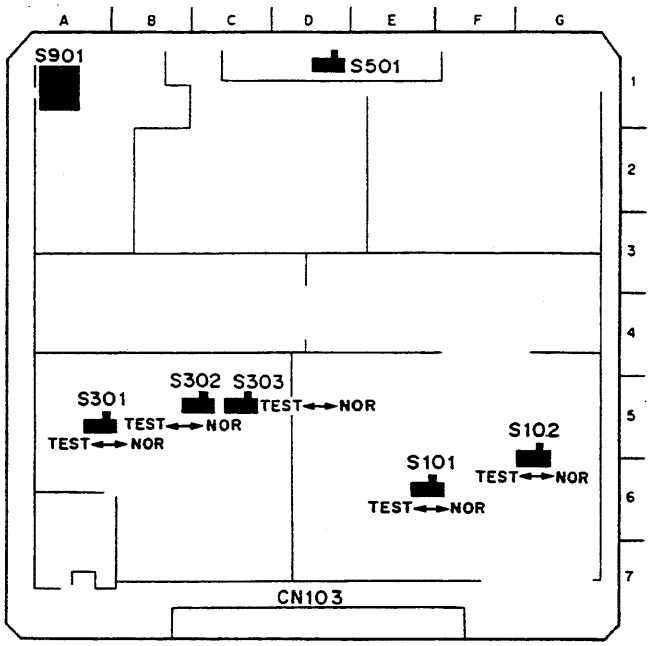
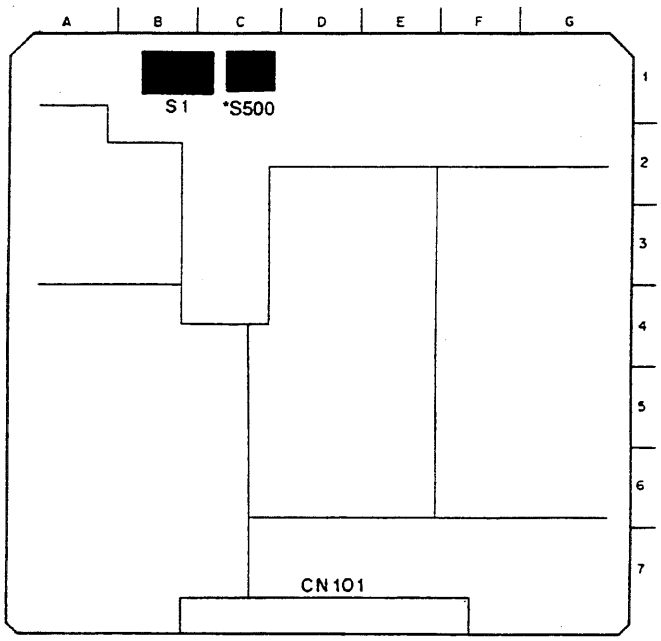
DM-89 board (A side)



When adjustment is performed, return the settings of the switch to factory settings as shown below.

SWITCH No.		Name	FACTORY SETTING
S101		Y-RF LPF & EQ TEST (Y-RF low-pass filter & equalizer test)	NORMAL POSITION
S102		Y-DO DET TEST (Y-dropout detector test)	NORMAL POSITION
S301		C-RF LPF & EQ TEST (C-RF low-pass filter & equalizer test)	NORMAL POSITION
S302		C-DO DET METAL TEST (C-dropout detector metal tape test)	NORMAL POSITION
*S303 Not on the board Suffix No.13 and higher		C-DO DET OXIDE TEST (C-dropout detector oxide tape test)	NORMAL POSITION
S501		NON LINEAR ON/ OFF (Non-linear equalization on/off selection)	ON (DEFAULT POSITION)
S901	1	RF ADJUSTING SWITCH	OFF (OPEN)
	2	FACTORY USE	OFF (OPEN)
	3	FACTORY USE	OFF (OPEN)
	4	FACTORY USE	OFF (OPEN)

TBC-23 board (A side)

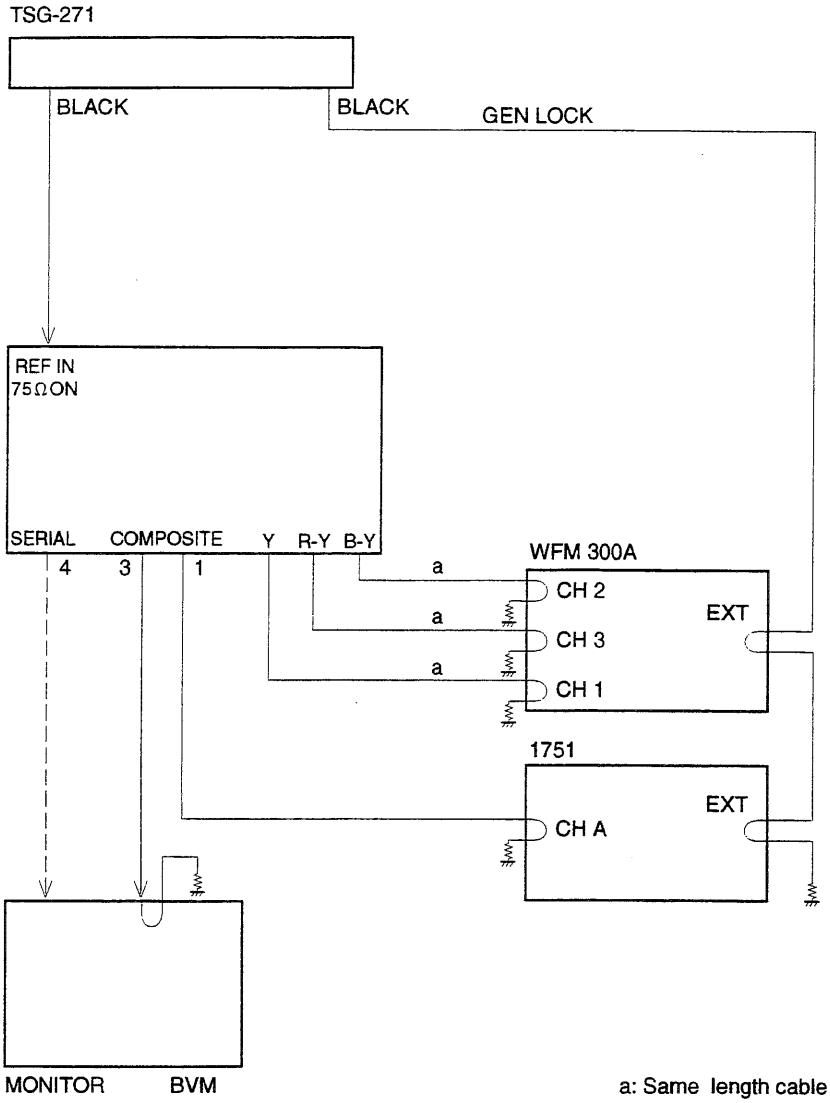


When adjustment is performed, return the settings of the switch to factory settings as shown below.

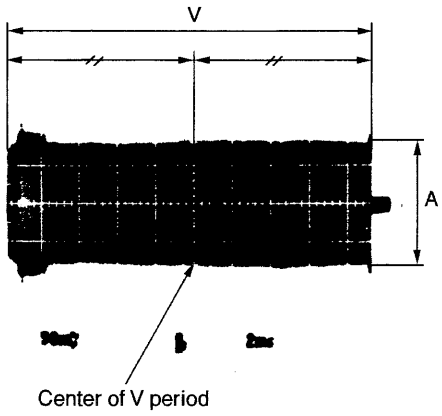
SWITCH No.		Name	FACTORY SETTING
S1	1	Y MUTE	OFF (OPEN)
	2	C MUTE	OFF (OPEN)
	3	———	OFF (OPEN)
	4		
	5	COMB	OFF (OPEN)
	6	TBC TEST	OFF (OPEN)
	7	———	OFF (OPEN)
	8	VIDEO PHASE	OFF (OPEN)
*S500 On the board Suffix No.13 and higher	1	———	OFF (OPEN)
	2	———	OFF (OPEN)
	3	———	OFF (OPEN)
	4	———	OFF (OPEN)

[Connection]

Connect some equipments as follows unless otherwise specified.



8-6-1. EQ RF Output Level Adjustment

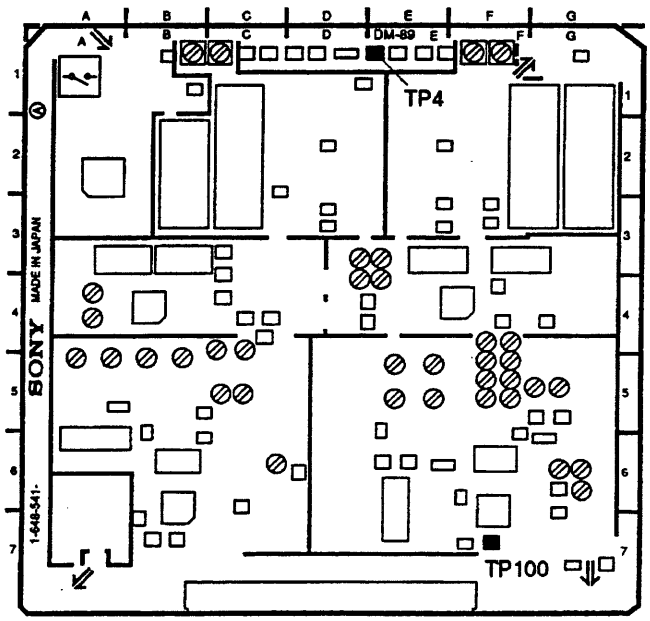
Preparations for adjustment	Specifications	Adjustments
• Enter "A30: EQ VR" menu in the "A3:BETACAM PB ADJUST" in the maintenance mode. **Step 1** • Connect CH-1 and CH-2 of the oscilloscope to TP4 and TP100 (*TP101) on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Oscilloscope TP100 (*TP101)/DM-89(F-7)  A = 380 ±20 mV p-p (*A = 150 ±10 mV p-p)	A30: EQ VR RF GAIN METAL-Y-A ↓ Level Adjustment ↓ RF GAIN METAL-Y-B ↓ Level Adjustment TRIG:TP4/DM-89(E-1)

Continues to next page.

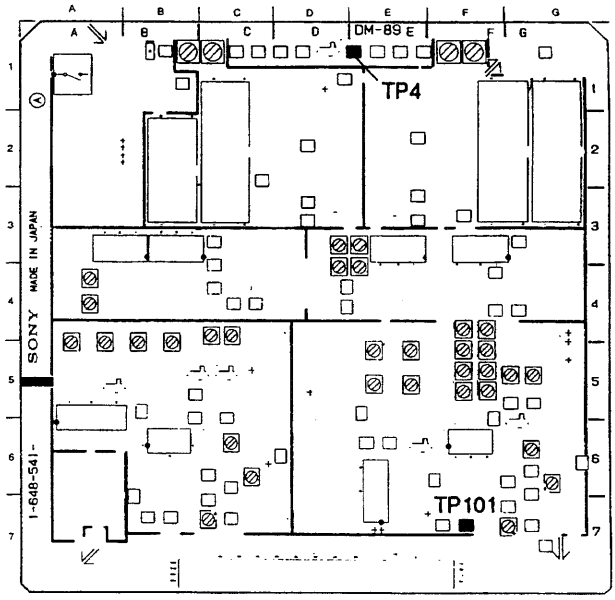
Note

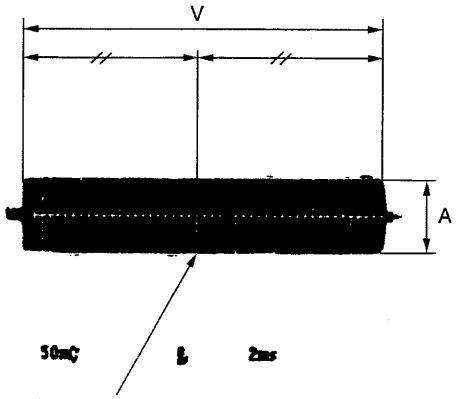
*; For suffix No. 11/12 of the DM-89 Board

Board suffix No. 13 and later



Board suffix No. 11, 12

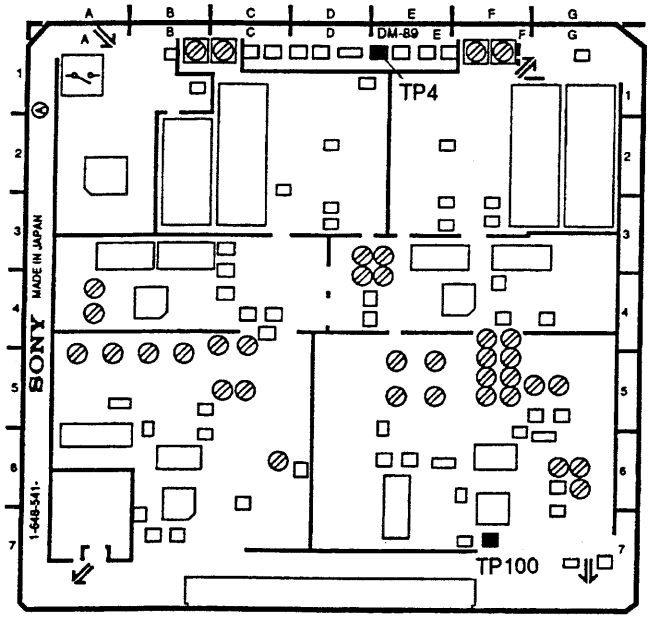


Preparations for adjustment	Specifications	Adjustments
Step 2 • Connect CH-1 and CH-2 of the oscilloscope to TP4 and TP100 (*TP101) on the DM-89 board. • Play back the color bars signal portion (0:00-3:00) of the alignment tape CR5-2A PS.	Oscilloscope TP100 (*TP101)/DM-89(F-7)  Center of V period A = 250 ± 20 mV p-p (*A = 100 ± 10 mV p-p)	RF GAIN OXIDE-Y-A ↓ Level Adjustment ↓ RF GAIN OXIDE-Y-B ↓ Level Adjustment TRIG:TP4/DM-89(E-1)

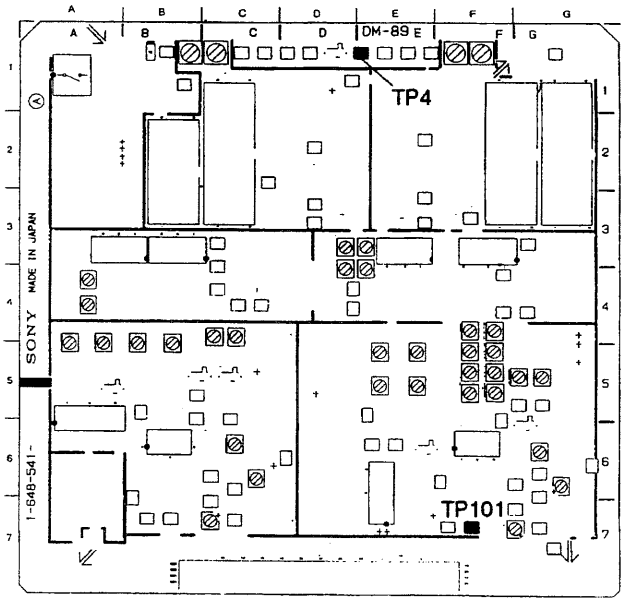
Note

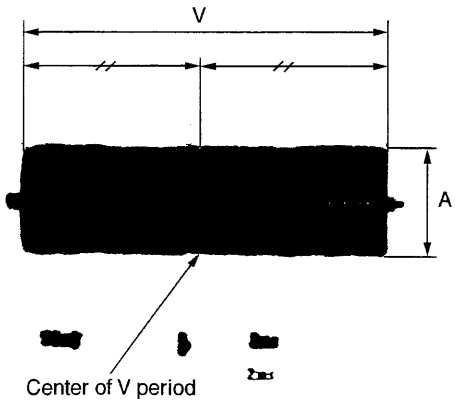
*; For suffix No. 11/12 of the DM-89 Board

Board suffix No. 13 and later



Board suffix No. 11, 12



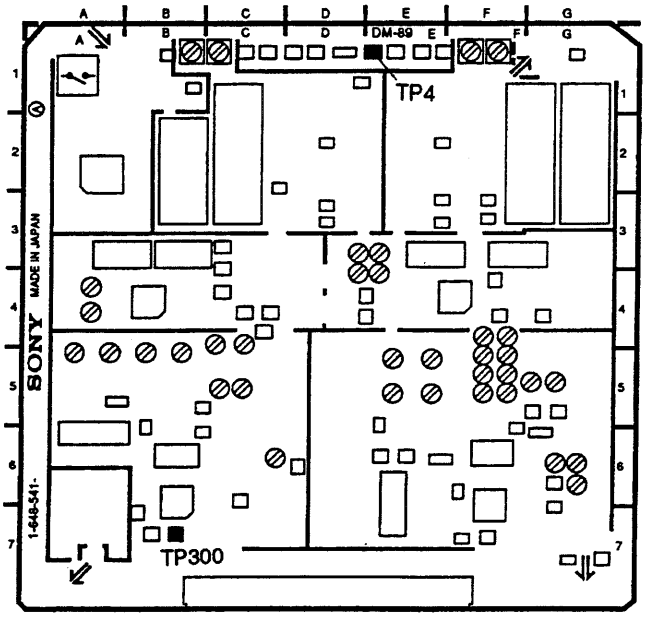
Preparations for adjustment	Specifications	Adjustments
Step 3 • Connect CH-1 and CH-2 of the oscilloscope to TP4 and TP300 (*TP301) on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Oscilloscope TP300 (*TP301)/DM-89(F-7)  A = 380 ± 20 mV p-p (*A = 150 ± 10 mV p-p)	RF GAIN METAL-C-A ↓ Level Adjustment ↓ RF GAIN METAL-C-B ↓ Level Adjustment TRIG:TP4/DM-89(E-1)

Continues to next page.

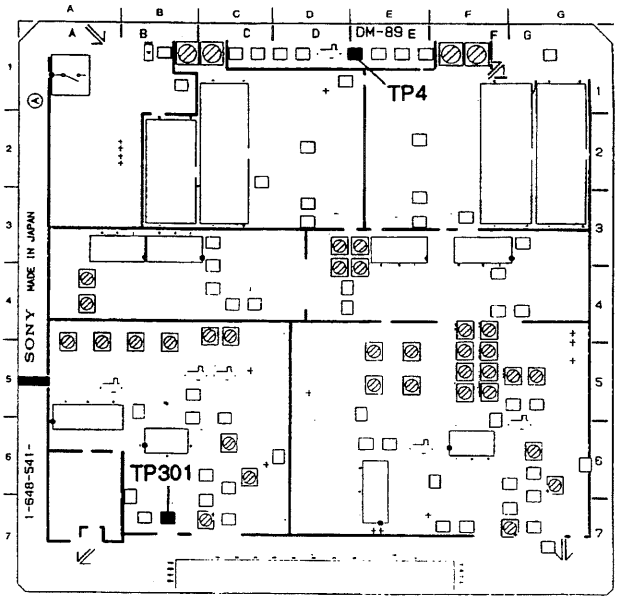
Note

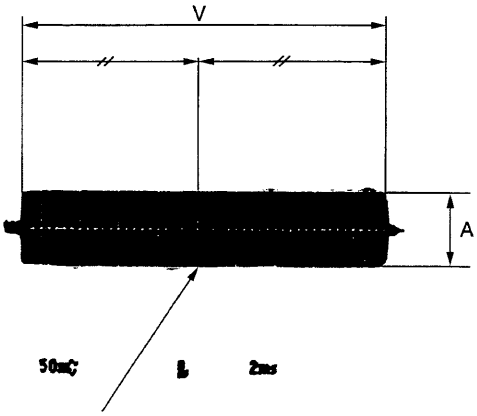
*; For suffix No. 11/12 of the DM-89 Board

Board suffix No. 13 and later



Board suffix No. 11, 12

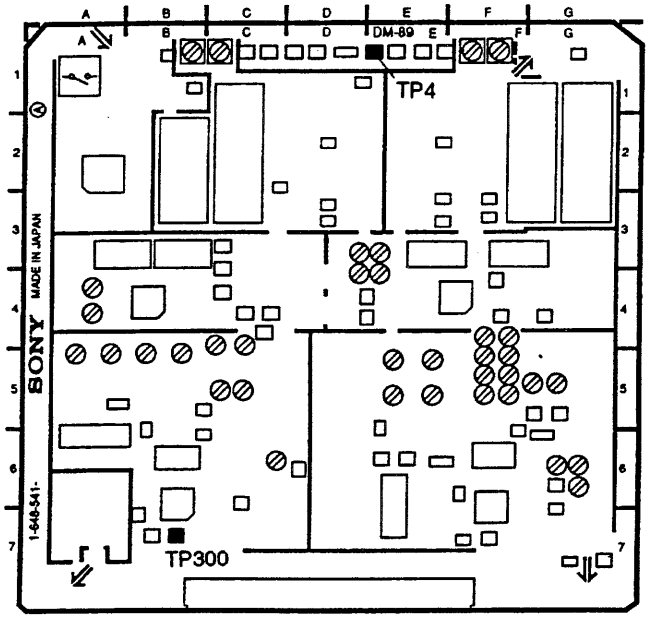


Preparations for adjustment	Specifications	Adjustments
Step 4 • Connect CH-1 and CH-2 of the oscilloscope to TP4 and TP300 (*TP301) on the DM-89 board. • Play back the color bars signal portion (0:00-3:00) of the alignment tape CR5-2A PS.	Oscilloscope TP300 (*TP301)/DM-89(F-7)  Center of V period A = 250 ± 20 mV p-p (*A = 100 ± 10 mV p-p)	RF GAIN OXIDE-C-A ↓ Level Adjustment ↓ RF GAIN OXIDE-C-B ↓ Level Adjustment ↓ MENU TRIG:TP4/DM-89(E-1)
Step 5 • Enter "A3F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A3F: NV-RAM CONTROL SAVE ALL ADJUST DATA SET ↓ MENU ⋮ MENU Press several times.

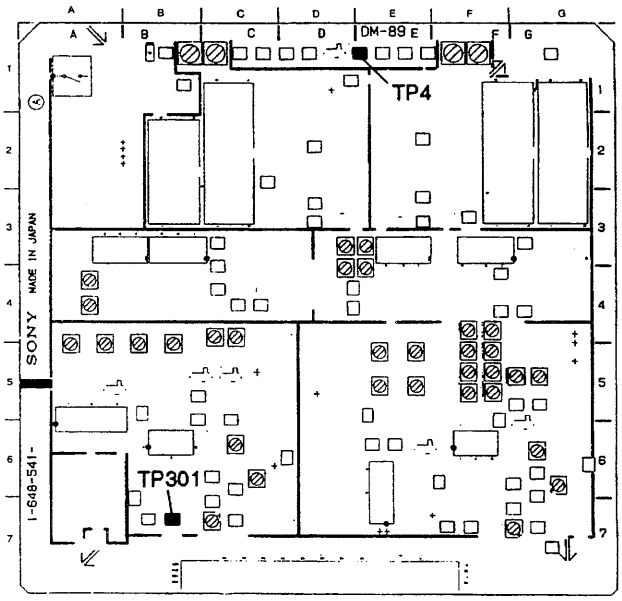
Note

*; For suffix No. 11/12 of the DM-89 Board

Board suffix No. 13 and later

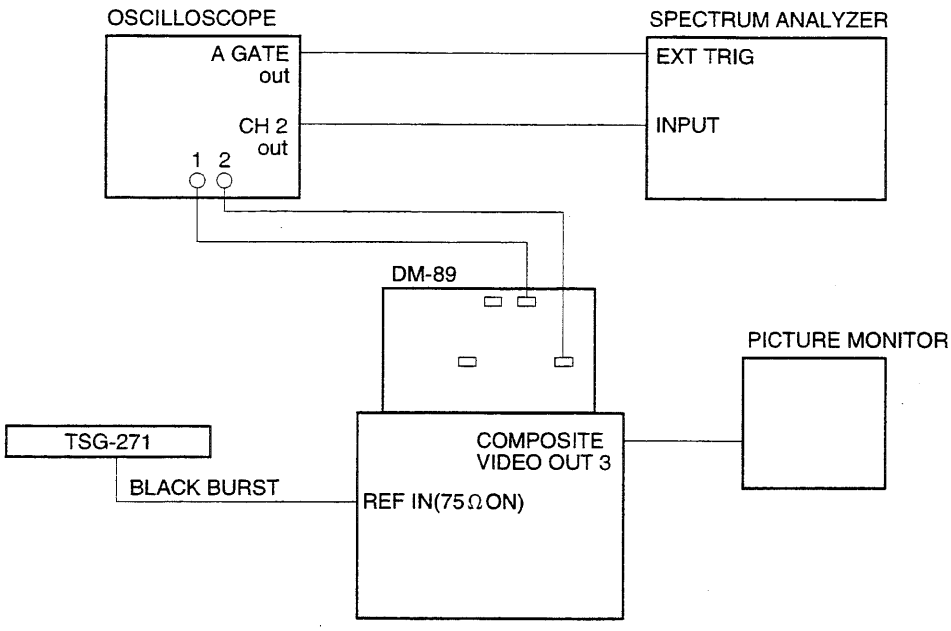


Board suffix No. 11, 12



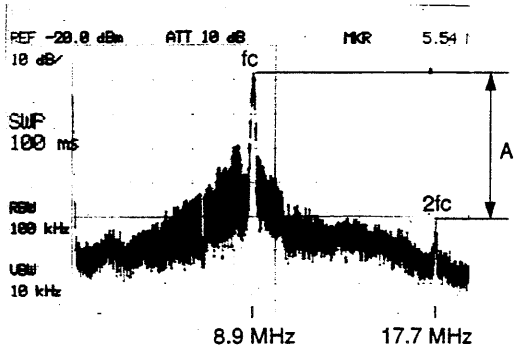
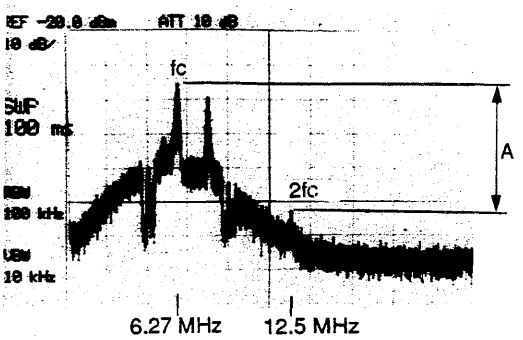
8-6-2 (1). DM OMC Limiter Balance Adjustment

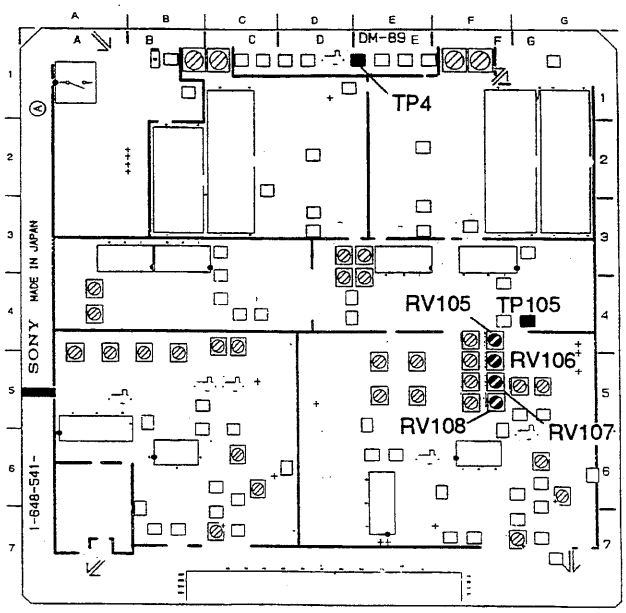
[**Connection**]

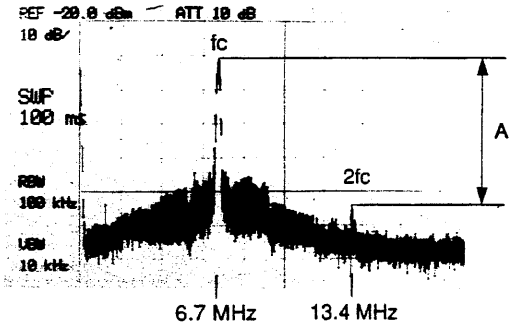
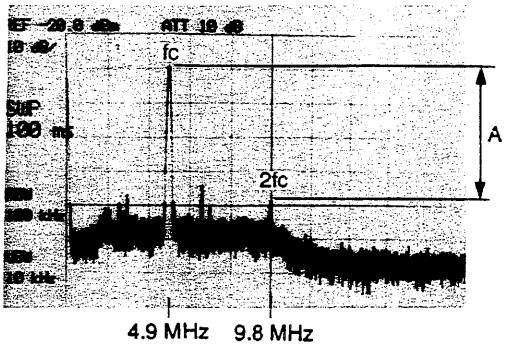


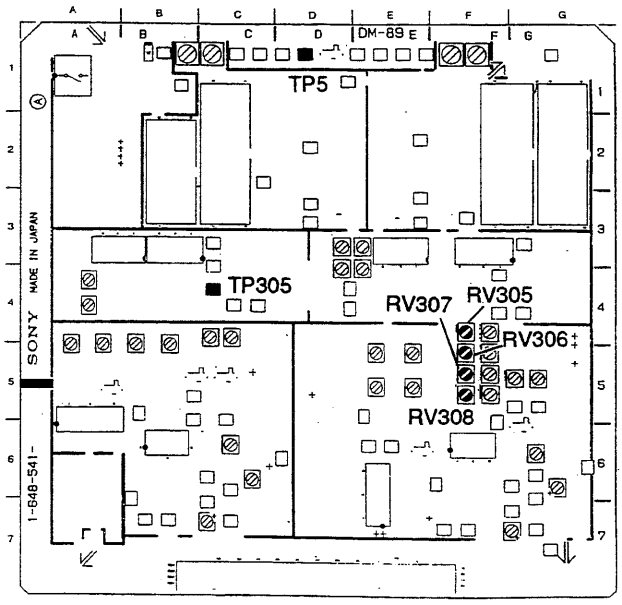
Note

In case spectrum analyzer is not available, refer to 8-6-2 (2).

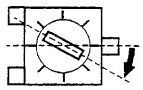
Preparations for adjustment	Specifications	Adjustments
Connect the spectrum analyzer to OUT terminal of the oscilloscope. • Spectrum analyzer setting CENTER FREQ: 10 MHz SPAN: 20 MHz RBW: 100 kHz VBW: 10 kHz SWP TIME: 100 ms **Step 1** • Connect CH-1 and CH-2 of the oscilloscope to TP4 and TP105 on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Spectrum analyzer TP105/DM-89(G-4)  8.9 MHz 17.7 MHz A ≧ 40 dB	(M-Y OMC LIM BALANCE) ⊘RV105/DM-89(F-4) ⊘RV106/DM-89(F-5) TRIG: TP4/DM-89(E-1)
Step 2 • Connect CH-1 and CH-2 of the oscilloscope to TP4 and TP105 on the DM-89 board. • Play back the pulse & bar signal portion (9:00-11:00) of the alignment tape CR5-2A PS.	Spectrum analyzer TP105/DM-89(C-4)  6.27 MHz 12.5 MHz A ≧ 35 dB	(O-Y OMC LIM BALANCE) ⊘RV107/DM-89(F-5) ⊘RV108/DM-89(F-5) TRIG:TP4/DM-89(E-1)

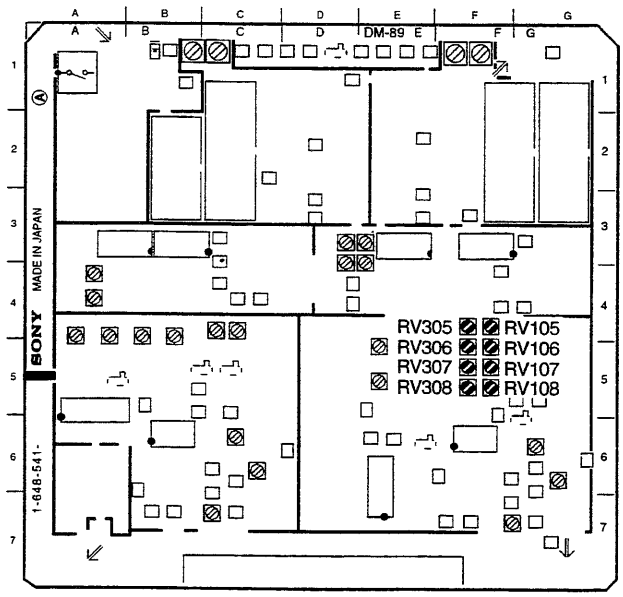


Preparations for adjustment	Specifications	Adjustments
Step 3 • Connect CH-1 and CH-2 of the oscilloscope to TP5 and TP305 on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Spectrum analyzer TP305/DM-89(C-4)  A ≧ 40 dB	(M-C OMC LIM BALANCE) ●RV305/DM-89(F-4) ●RV306/DM-89(F-5) TRIG: TP5/DM-89(D-1)
Step 4 • Connect CH-1 and CH-2 of the oscilloscope to TP5 and TP305 on the DM-89 board. • Play back the pulse & bar signal portion (9:00-11:00) of the alignment tape CR5-2A PS.	Spectrum analyzer TP305/DM-89(C-4)  A ≧ 35 dB	(O-C OMC LIM BALANCE) ●RV307/DM-89(F-5) ●RV308/DM-89(F-5) TRIG: TP5/DM-89(D-1)

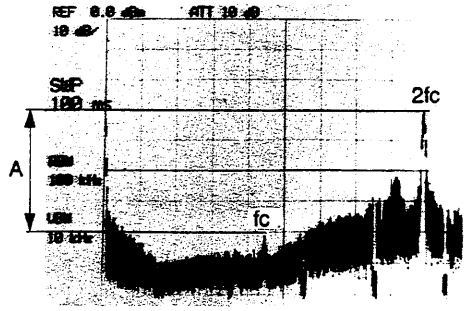
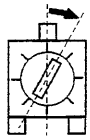


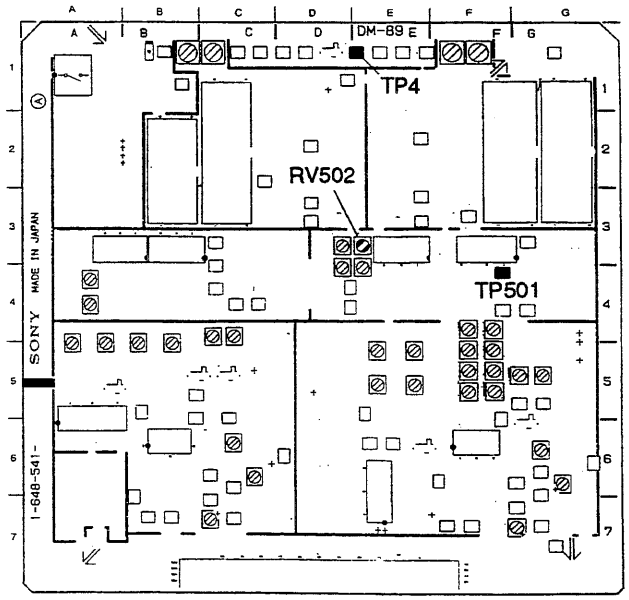
8-6-2 (2). DM OMC Limiter Balance Adjustment...When Spectrum analyzer is not used.

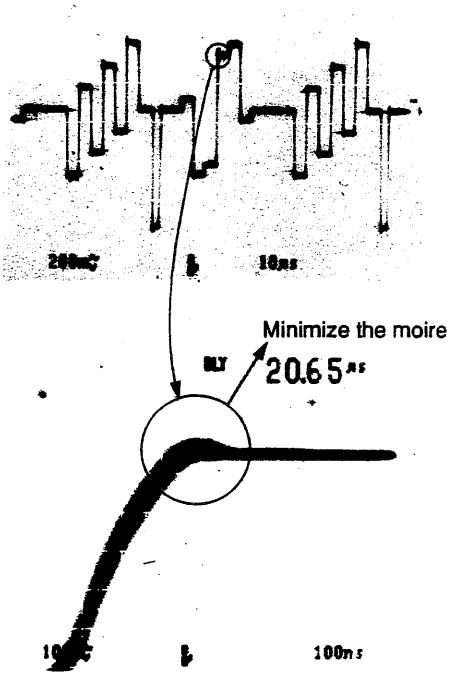
Preparations for adjustment	Specifications	Adjustments
• Set RVs as shown right figure.		Y; ●RV105/DM-89(F-4) ●RV106/DM-89(F-5) ●RV107/DM-89(F-5) ●RV108/DM-89(F-5) C; ●RV305/DM-89(F-4) ●RV306/DM-89(F-5) ●RV307/DM-89(F-5) ●RV308/DM-89(F-5)

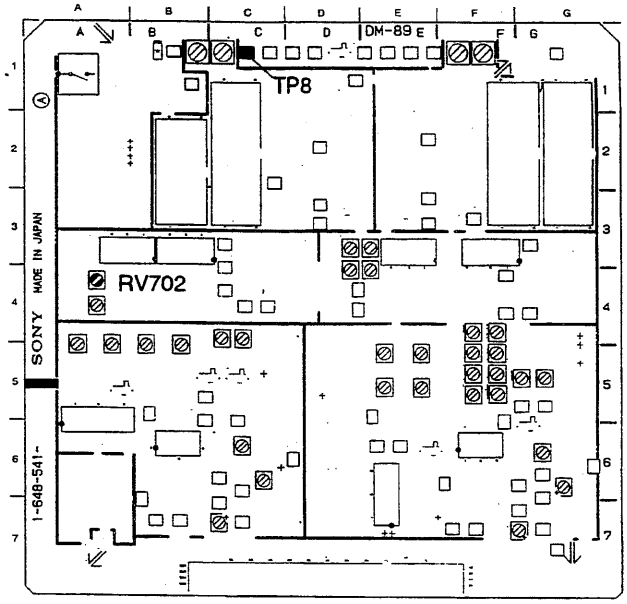


8-6-3. Demodulator Limiter Balance Adjustment

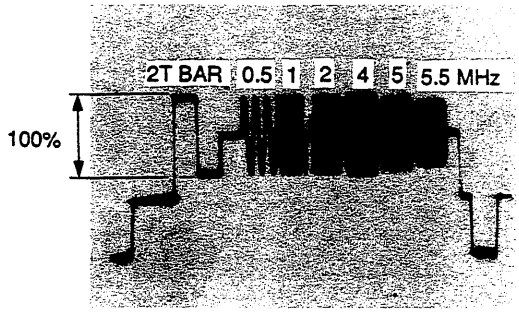
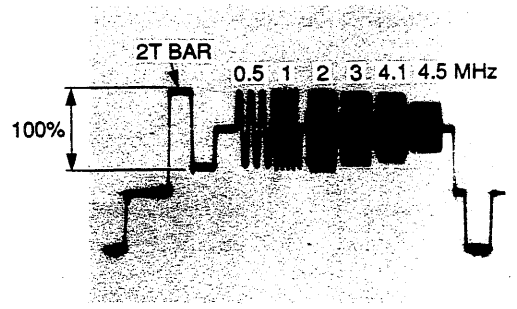
Preparations for adjustment	Specifications	Adjustments
Step 1 • Connect CH-1 and CH-2 of the oscilloscope to TP4 and TP501 on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Spectrum analyzer TP501/DM-89(F-4)  Maximize the A. (Minimize the fc.)	(Y DEMOD BALANCE) ●RV502/DM-89(E-3) TRIG: TP4/DM-89 (E-1)
Incase spectrum analyzer is not available, set RV502 as shown right figure.		



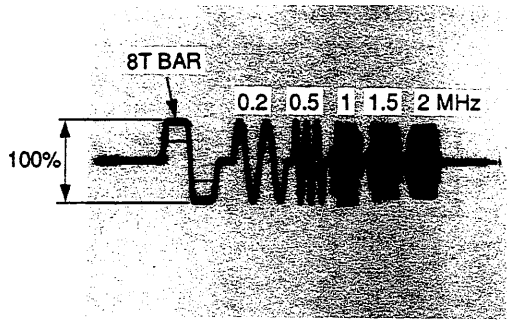
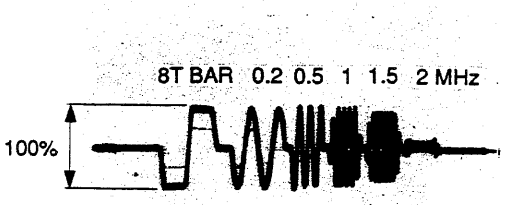
Preparations for adjustment	Specifications	Adjustments
Step 2 • Connect CH-2 of the oscilloscope to TP8 on the DM-89 board. • Play back the color bars signal portion (14:00-16:30) of the alignment tape CR5-1B PS.	Oscilloscope TP8/DM-89(C-1)  	(C DEMOD BALANCE) ⊘RV702/DM-89(A-4)



8-6-4. PB Frequency Response Adjustment

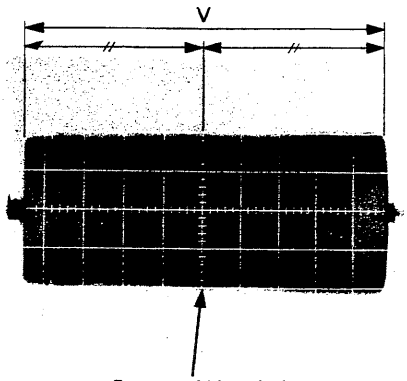
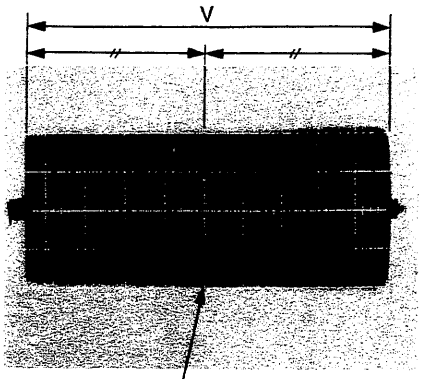
Preparations for adjustment	Specifications	Adjustments
• Enter "A32:DM VR 1" menu in the "A3:BETACAM PB ADJUST" in the maintenance mode. • Connect the waveform monitor or the oscilloscope to COMPONENT Y OUTPUT connector (terminated by 75 Ω). **Step 1** • Play back the multi burst signal portion (8:00-11:00) of the alignment tape CR5-1B PS.	Waveform monitor or oscilloscope COMPONENT Y OUT  (1) 2T BAR reference 100% (or 0 dB) 4.0 MHz = 100% (104 through 95%) ($0^{+0.3}_{-0.4}$ dB) (2) Check the levels for following frequencies. 0.5 MHz = 100% (106 through 71%) ($0^{+0.5}_{-3.0}$ dB) 1.0 MHz = 100% (106 through 71%) ($0^{+0.5}_{-3.0}$ dB) 2.0 MHz = 100% (106 through 71%) ($0^{+0.5}_{-3.0}$ dB) 5.0 MHz = 100% (106 through 71%) ($0^{+0.5}_{-3.0}$ dB) 5.5 MHz = 84% (106 through 71%) ($-1.5^{+2.0}_{-1.5}$ dB) (3) Flicker should not be on the monitor picture.	A32:DM VR 1 EQ 1 METAL-Y-A ↓ Level Adjustment ↓ EQ 1 METAL-Y-B ↓ Level Adjustment TRIG:REF.VIDEO
Step 2 • Play back the multi burst signal portion (3:00-6:00) of the alignment tape CR5-2A PS.	Waveform monitor or oscilloscope COMPONENT Y OUT  (1) 2T BAR reference 100% (or 0 dB) 3.0 MHz = 89% (100 through 79%) (-1.0 ±1.0 dB) (2) Check the levels for following frequencies. 0.5 MHz = 100% (106 through 50%) ($0^{+0.5}_{-6.0}$ dB) 1.0 MHz = 100% (106 through 50%) ($0^{+0.5}_{-6.0}$ dB) 2.0 MHz = 98% (106 through 50%) ($0.2^{+0.3}_{-6.2}$ dB) 4.1 MHz = 71% (106 through 50%) ($-3.0^{+3.5}_{-3.0}$ dB) (3) Flicker should not be on the monitor picture.	EQ 1 OXIDE-Y-A ↓ Level Adjustment ↓ EQ 1 OXIDE-Y-B ↓ Level Adjustment TRIG:REF.VIDEO

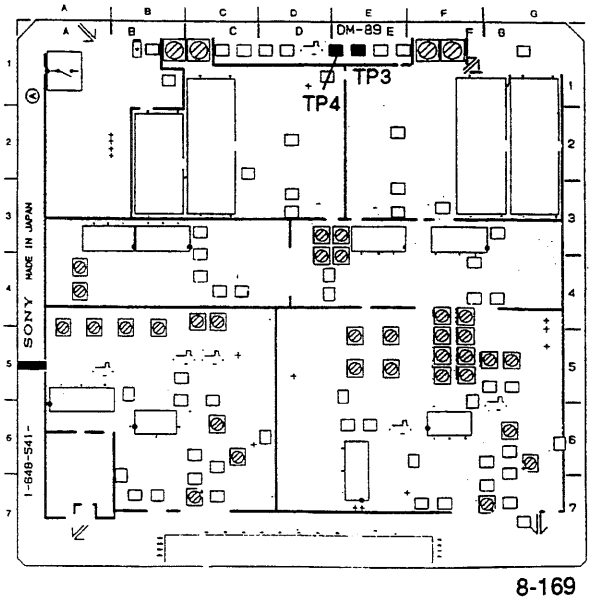
Continues to next page.

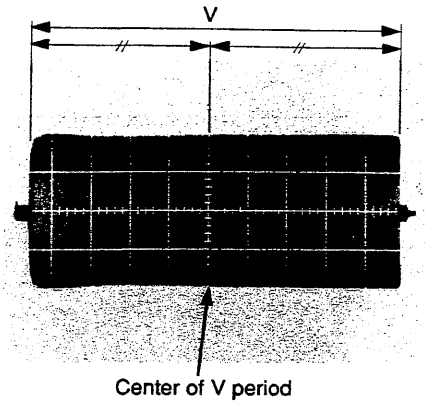
Preparations for adjustment	Specifications	Adjustments
Step 3 • Connect the waveform monitor or the oscilloscope to COMPONENT R-Y/B-Y OUTPUT connector (terminated by 75 Ω). • Play back the multi burst signal portion (8:00-11:00) of the alignment tape CR5-1B PS.	Waveform monitor or oscilloscope COMPONENT R-Y/B-Y OUT  (1) R-Y 8T BAR reference 100% (or 0 dB) 1.5 MHz = 93% (102 through 85%) (-0.6 ±0.8 dB) (2) Check the levels for following frequencies. 0.2 MHz = 100% (106 through 71%) (0 $^{+0.5}_{-3.0}$ dB) 0.5 MHz = 100% (106 through 71%) (0 $^{+0.5}_{-3.0}$ dB) 1.0 MHz = 100% (106 through 71%) (0 $^{+0.5}_{-3.0}$ dB) 2.0 MHz = 79% (106 through 71%) (-2.0 $^{+2.5}_{-1.0}$ dB) (3) Check the waveform of B-Y meets the specifications above. If it does not, perform fine adjustments so that both waveforms of R-Y and B-Y meet the specifications.	EQ 1 METAL-C-A ↓ Level Adjustment ↓ EQ 1 METAL-C-B ↓ Level Adjustment TRIG:REF.VIDEO
Step 4 • Play back the multi burst signal portion (3:00-6:00) of the alignment tape CR5-2A PS.	Waveform monitor or oscilloscope COMPONENT R-Y/B-Y OUT  (1) R-Y 8T BAR reference 100% (or 0 dB) 1.0 MHz = 94% (104 through 86%) (-0.5 ±0.8 dB) (2) Check the levels for following frequencies. 0.2 MHz = 100% (106 through 71%) (0 $^{+0.5}_{-3.0}$ dB) 0.5 MHz = 100% (106 through 71%) (0 $^{+0.5}_{-3.0}$ dB) 1.5 MHz = 84% (106 through 71%) (-1.5 $^{+2.0}_{-1.5}$ dB) (3) Check the waveform of B-Y meets the specifications above. If it does not, perform fine adjustments so that both waveforms of R-Y and B-Y meet the specifications.	EQ 1 OXIDE-C-A ↓ Level Adjustment ↓ EQ 1 OXIDE-C-B ↓ Level Adjustment ↓ [MENU] TRIG:REF.VIDEO
Step 5 • Enter "A3F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A3F:NV-RAM CONTROL SAVE ALL ADJUST DATA [SET] ↓ [MENU] Press several times. [MENU]

8-6-5. DM RF Output Level Adjustment (For Board No. suffix 11, 12)

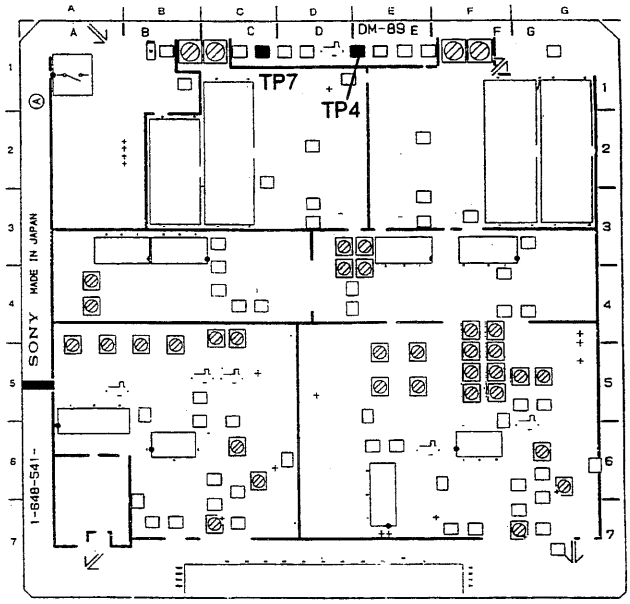
Note **The adjustment for board's No. suffix 13 is not necessary.**

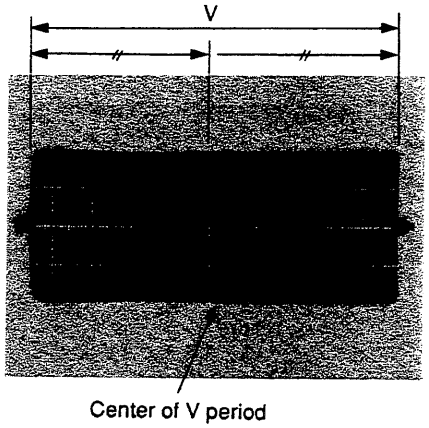
Preparations for adjustment	Specifications	Adjustments
• Enter "A31:DM VR 0" menu in the "A3:BETACAM PB ADJUST" in the maintenance mode. **Step 1** • Connect CH-1 and CH-2 of the oscilloscope to TP3 and TP4 on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Oscilloscope TP3/DM-89(E-1)  A = 400 ± 40 mV p-p	A31:DM VR 0 RF LEVEL METAL-Y-A ↓ Level Adjustment ↓ RF LEVEL METAL-Y-B ↓ Level Adjustment TRIG:TP4/DM-89(E-1)
Step 2 • Connect CH-1 and CH-2 of the oscilloscope to TP3 and TP4 on the DM-89 board. • Play back the 75% color bars signal portion (0:00-3:00) of the alignment tape CR5-2A PS.	Oscilloscope TP3/DM-89(B-7)  A = 400 ± 40 mV p-p	RF LEVEL OXIDE-Y-A ↓ Level Adjustment ↓ RF LEVEL OXIDE-Y-B ↓ Level Adjustment TRIG:TP4/DM-89(E-21)

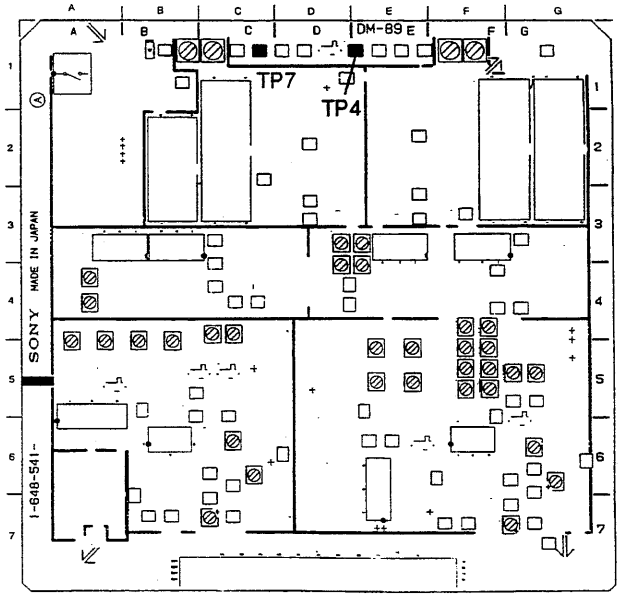


Preparations for adjustment	Specifications	Adjustments
Step 3 • Connect CH-1 and CH-2 of the oscilloscope to TP7 and TP4 on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Oscilloscope TP7/DM-89(D-1)  Center of V period A = 400 ± 40 mV p-p	RF LEVEL METAL-C-A ↓ Level Adjustment ↓ RF LEVEL METAL-C-B ↓ Level Adjustment TRIG:TP4/DM-89(E-1)

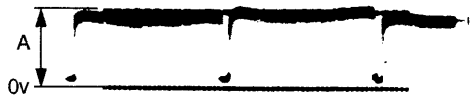
Continues to next page.



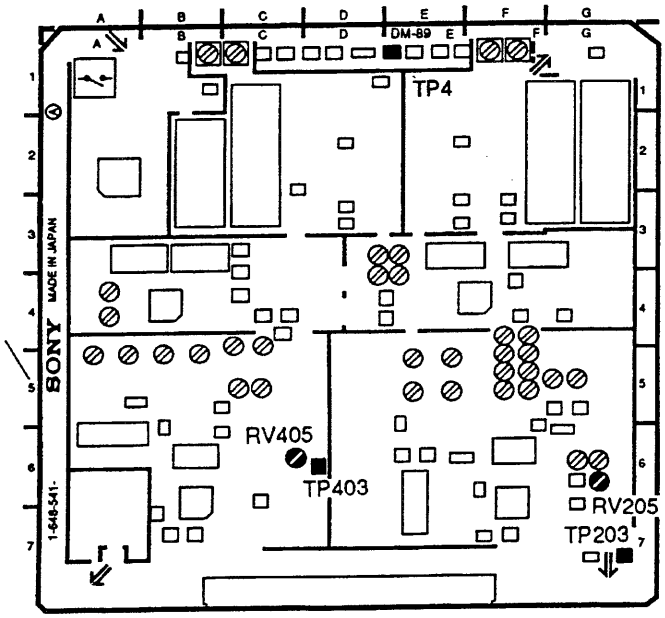
Preparations for adjustment	Specifications	Adjustments
Step 4 • Connect CH-1 and CH-2 of the oscilloscope to TP7 and TP4 on the DM-89 board. • Play back the 75% color bars signal portion (0:00-3:00) of the alignment tape CR5-2A PS.	Oscilloscope TP7/DM-89(D-1)  Center of V period A = 400 ± 40 mV p-p	RF LEVEL OXIDE-C-A ↓ Level Adjustment ↓ RF LEVEL OXIDE-C-B ↓ Level Adjustment ↓ MENU TRIG:TP4/DM-89(E-1)
Step 5 • Enter "A3F:NV-RAM CONTROL" menu. • Save adjustment data. • Exit the maintenance mode.		A3F:NV-RAM CONTROL SAVE ALL ADJUST DATA SET ↓ MENU ⋮ MENU Press several times.



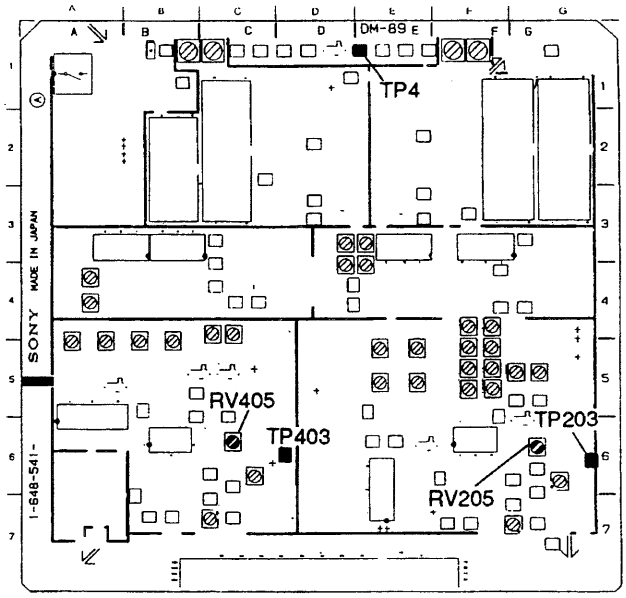
8-6-6. DM RF Envelope Check

Preparations for adjustment	Specifications	Adjustments
Step 1 • Connect CH-1 and CH-2 of the oscilloscope to TP203 and TP4 on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Oscilloscope TP203/DM-89(G-6)  A = 2.0 ± 0.2 V dc	When the specification is not met: ⊘RV205/DM-89(G-6) TRIG:TP4/DM-89(E-1)
Step 2 • Connect CH-1 and CH-2 of the oscilloscope to TP403 and TP4 on the DM-89 board. • Play back the flat field signal portion (24:00-26:00) of the alignment tape CR5-1B PS.	Oscilloscope TP403/DM-89(D-6) A = 2.0 ± 0.2 V dc	When the specification is not met: ⊘RV405/DM-89(C-6) TRIG:TP4/DM-89(E-1)

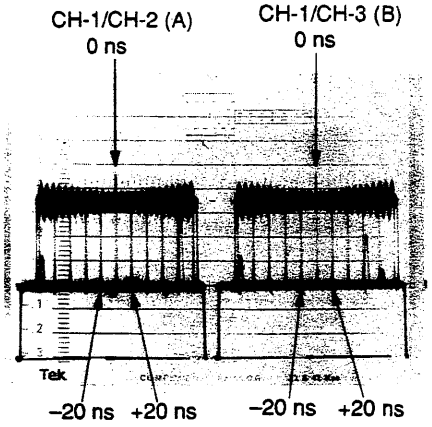
Board suffix No. 13 and later



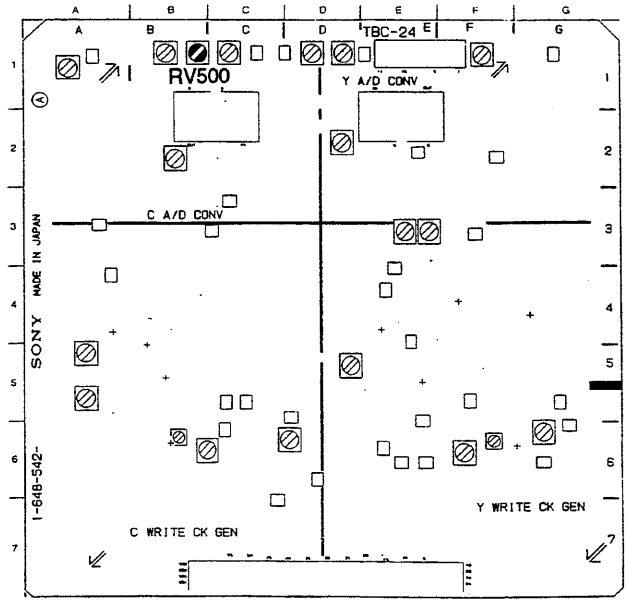
Board suffix No. 11, 12

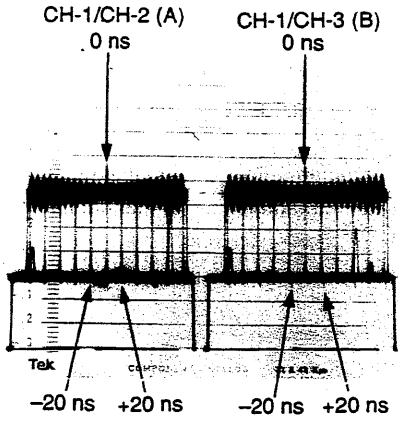


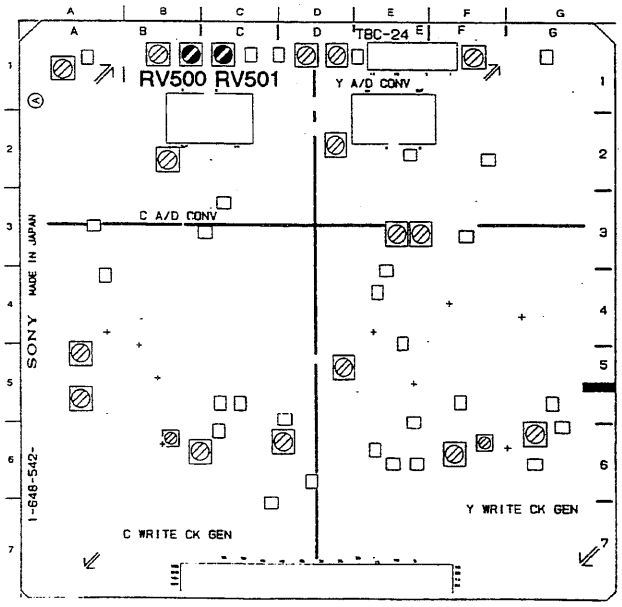
8-6-7. TBC Y/C Delay Check

Preparations for adjustment	Specifications	Adjustments
• CAPSTAN LOCK switch/sub control panel: 2FD • Connect the waveform monitor to COMPONENT OUTPUT connector. CH-1: Y OUTPUT CH-2: B-Y OUTPUT CH-3: R-Y OUTPUT **Step 1** • Play back the bowtie signal portion (17:00-19:00) of the alignment tape CR5-1B PS.	COMPONENT WAVEFORM MONITOR: BOWTIE mode COMPONENT OUTPUT  Set the BOWTIE DIP points of (A) and (B) on the center marker. 0 ±10 ns	(METAL Y/C DELAY) ◐RV500/TBC-24(B-1) TRIG:EXT/WFM

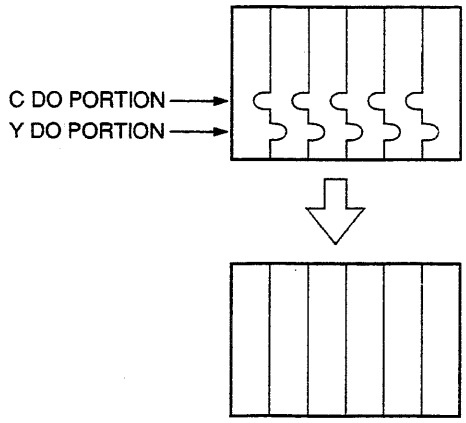
Continues to next page.

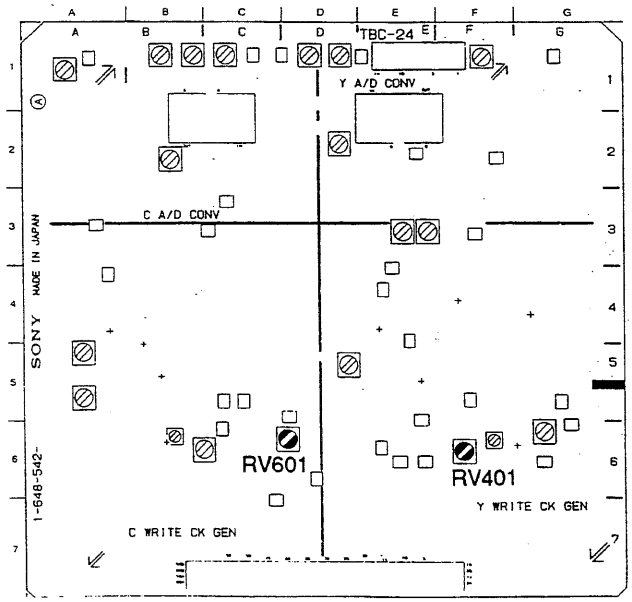


Preparations for adjustment	Specifications	Adjustments
Step 2 • Play back the bowtie signal portion (6:00-9:00) of the alignment tape CR5-2A PS	COMPONENT WAVEFORM MONITOR: BOWTIE mode COMPONENT OUTPUT  Set the BOWTIE DIP points of (A) and (B) on the center marker. 0 ± 10 ns	(OXIDE Y/C DELAY) ●RV501/TBC-24(C-1) TRIG:EXT/WFM

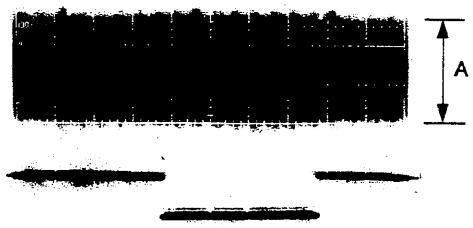


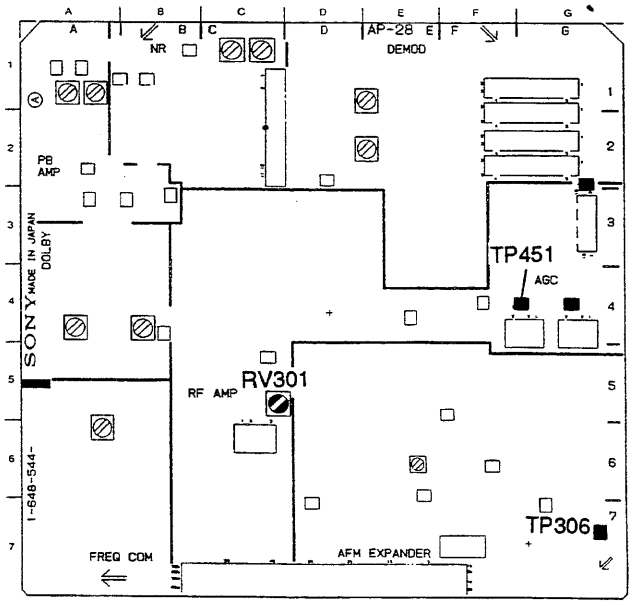
8-6-8. Y and C Error Offset Check

Preparations for adjustment	Specifications	Adjustments
• Play back the color bars with drop out signal portion (26:00-28:00) of the alignment tape CR5-1B PS. • CHARACTER switch/sub control panel:OFF • Connect a picture monitor to VIDEO OUTPUT COMPOSITE 3 connector.	PICTURE MONITOR VIDEO OUTPUT COMPOSITE 3  	(Y ERR CLIP) ●RV401/TBC-24(F-6) (C ERR CLIP) ●RV601/TBC-24(C-6)
• After adjustment is completed, set the CHARACTER switch to ON.	(A) The Y DO portions should disappear on the monitor display by RV401. (B) The C DO portions should disappear on the monitor display by RV601.	



8-6-9. AFM RF Level Adjustment

Preparations for adjustment	Specifications	Adjustments
• 20 MHz BW LIMIT switch/ oscilloscope: ON • Connect CH-1 and CH-2 of the oscilloscope to TP306 and TP401(TP451) on the AP-28 board. • Play back the color bars signal portion (14:00-16:30) of the alignment tape CR5-1B PS.	Oscilloscope TP401/AP-28(G-4) .....ADJ TP451/AP-28(F-4) .....Check  A = 450 ± 100 mV p-p	⊘RV301/AP-28(C-5) TRIG:TP306/AP-28(G-7)



8-7. ADJUSTMENT AFTER AUDIO/TC HEAD REPLACEMENT

[Item List]

No.	ITEMS	BOARDS	ADJUSTMENTS	NOTES
1	AUDIO PB FREQ RESPONSE OXIDE	CUE-1	RV106, RV108	CH1
		CUE-1	RV107, RV110	CH2
2	AUDIO PB FREQ RESPONSE METAL	CUE-1	RV109	CH1
		CUE-1	RV111	CH2
3	AP DOLBY LEVEL	AP-28	RV102	TP102
		AP-28	RV202	TP202
4	LAU PB LEVEL	AP-28	RV103	CH1
		AP-28	RV203	CH2
5	LAU PB PHASE	AP-28	RV201	CH1, CH2
6	CUE PB FREQ RESPONSE	CUE-1	RV901	CUE
7	CUE PB LEVEL	CUE-1	RV114, RV120	CUE
8	LTC PB LEVEL CHECK	CUE-1	CHECK	TP402

[Equipment]

- Oscilloscope (TEKTRONIX 2465B or equivalent)
- Audio Signal Generator (TEKTRONIX SG505-option 02 or equivalent)
- Audio analyzer (TEKTRONIX AA501A-option 02 or equivalent)
  Note: Audio analyzer should be filtered through 80 kHz L.P.F unless otherwise specified.
- Audio level meter

- Alignment tape ZR5-1P (part No. 8-960-073-51)

Contents

TIME min.:sec.	CTL	VIDEO	D-AUDIO	CUE	TIME min.:sec.
00 : 00					00 : 00
				1 kHz 0 VU	
			1 kHz -20 dB FS	Blank	01 : 25
		Color Bars (100%)			01 : 30
02 : 00				1 kHz -20 VU	
				Blank	02 : 25
					02 : 30
				3 kHz -20 VU	
					02 : 55
				Blank	03 : 00
			1 kHz 0 dB FS	7 kHz -20 VU	
					03 : 25
				Blank	03 : 30
				10 kHz -20 VU	
					03 : 55
				Blank	04 : 00
04 : 00				12 kHz -20 VU	
					04 : 25
				Blank	04 : 30
			-∞ dB FS	90 Hz -20 VU	
					04 : 55
				Blank	05 : 00
06 : 00					
			20 Hz -20 dB FS	Repeat	
08 : 00					
			20 kHz -20 dB FS		
10 : 00					10 : 00
		Ramp	Repeat	Repeat	
20 : 00					20 : 00

- Alignment tape CR8-1B PS (part No. 8-960-096-86)

Contents

TIME min.: sec.	AUDIO TRACK	VIDEO TRACK	CTL TRACK
0 : 00	1 kHz, 0 VU *1	Black Burst	CTL
3 : 00	15 kHz, 0 VU	Black Burst	CTL
5 : 00	1 kHz, -20 VU	Black Burst	CTL
6 : 00	40 Hz, -20 VU*2	Black Burst	CTL
6 : 30	7 kHz, -20 VU*2		
7 : 00	10 kHz, -20 VU*2		
7: 30	15 kHz, -20 VU*2		
8 : 00	1 kHz, 0 VU	—	1 kHz sine wave
10 : 00			

- Alignment tape CR8-1A PS (part No. 8-960-098-45)

Contents

TIME min.: sec.	AUDIO TRACK	VIDEO TRACK	CTL TRACK
0 : 00	1 kHz, 0 VU *1	—	CTL
2 : 55	Blank		
3 : 00	10 kHz, -10 VU	—	CTL
4 : 55	Blank		
5 : 00	1 kHz, -20 VU	—	CTL
5 : 55	Blank		
6 : 00	40 Hz, -20 VU*2	—	CTL
6 : 25	Blank		
6 : 30	7 kHz, -20 VU*2	—	CTL
6 : 55	Blank		
7 : 00	10 kHz, -20 VU*2	—	CTL
7 : 25	Blank		
7 : 30	15 kHz, -20 VU*2	—	CTL
7 : 55	Blank		
8 : 00	1 kHz, 0 VU	—	1 kHz, 0 VU
10 : 00			

- Alignment tape CR5-1B PS (part No. 8-960-096-91)

Contents

TIME min.:sec.	VIDEO TRACK	AFM	CTL
0 : 00	RF Sweep	No Signal	CTL
2 : 00	60% H Sweep (CTDM)		
5 : 00	Pulse & Bar (CTDM)		
8 : 00	60% Multi Burst		
11 : 00	Pulse & Bar		
14 : 00	100% Color Bars	400 Hz SINE WAVE 25 kHz DEVIATION	
16 : 30		75 kHz DEVIATION	
17 : 00	50% Bowtie & 10T	No Signal	
19 : 00	Line 17 Signal		
22 : 00	Quad Phase		
24 : 00	Flat Field		
26 : 00	100% Color Bars with Dropout		
28 : 00	Composite H Sweep with VISC		
30 : 00			

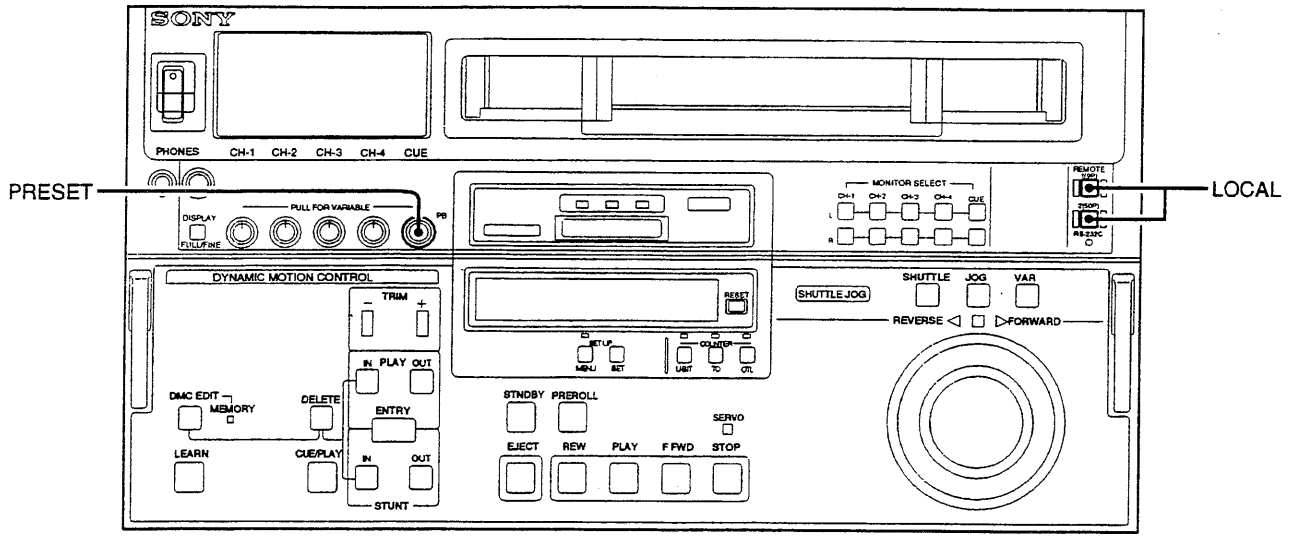
*1. When this tape is reproduced in the audio reference level check or adjustment, the output level (0 dB) should be corrected according to the correction value as follows.

Example: Correction value = –0.5 dB
Output level = 0 dB –0.5 dB = –0.5 dB

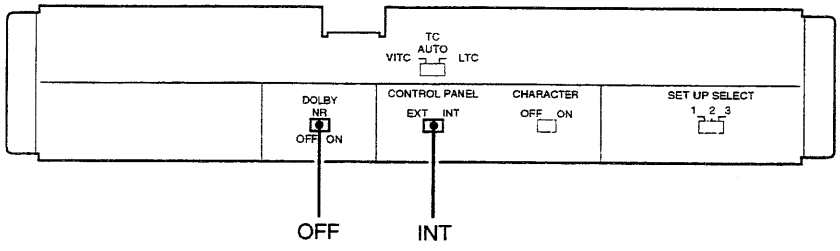
*2. When this tape is reproduced in the audio frequency response check or adjustment, the output level should be corrected according to the correction value.

[Switch Setting]

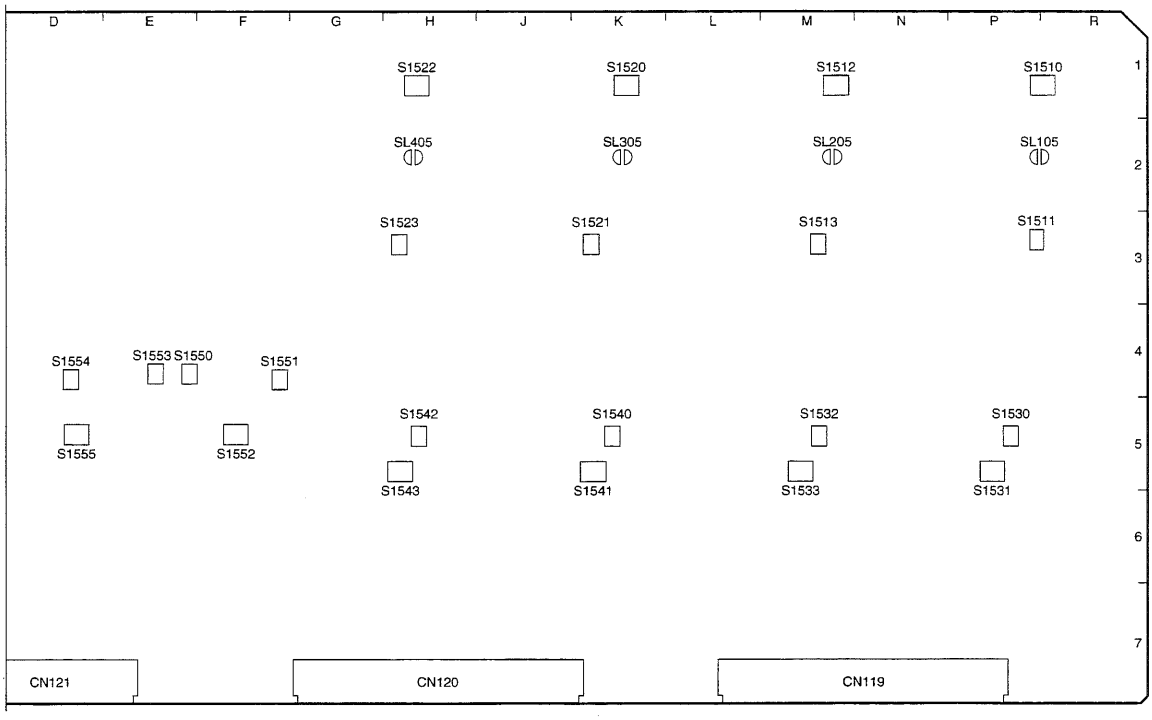
Upper/Lower Control Panel



System Set-up Panel



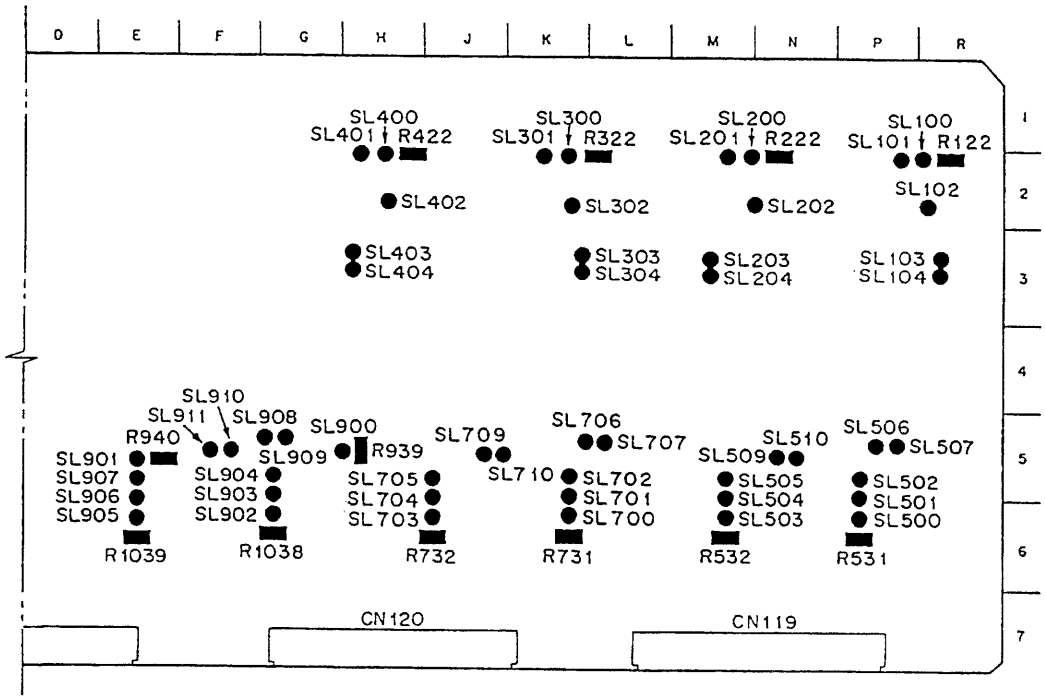
APR-1 board (Board Suffix No. 16 and higher)



Selecting output level

Audio Channel	Ref. No.	Output Level (dBm/600 Ω)				Fine Adjustment (Address No.)
		+4	0	–3	–20	
CH1	S1531-1 S1531-2 S1531-3 S1531-4	ON OFF OFF OFF	OFF ON OFF OFF	OFF OFF ON OFF	OFF OFF OFF ON	RV500 (P-5)
CH2	S1533-1 S1533-2 S1533-3 S1533-4	ON OFF OFF OFF	OFF ON OFF OFF	OFF OFF ON OFF	OFF OFF OFF ON	RV501 (M-5)
CH3	S1541-1 S1541-2 S1541-3 S1541-4	ON OFF OFF OFF	OFF ON OFF OFF	OFF OFF ON OFF	OFF OFF OFF ON	RV700 (K-5)
CH4	S1543-1 S1543-2 S1543-3 S1543-4	ON OFF OFF OFF	OFF ON OFF OFF	OFF OFF ON OFF	OFF OFF OFF ON	RV701 (H-5)
MONITOR L-CH	S1552-1 S1552-2 S1552-3 S1552-4	ON OFF OFF OFF	OFF ON OFF OFF	OFF OFF ON OFF	OFF OFF OFF ON	RV901 (F-5)
MONITOR R-CH	S1555-1 S1555-2 S1555-3 S1555-4	ON OFF OFF OFF	OFF ON OFF OFF	OFF OFF ON OFF	OFF OFF OFF ON	RV902 (D-5)
FACTORY SETTING		○				

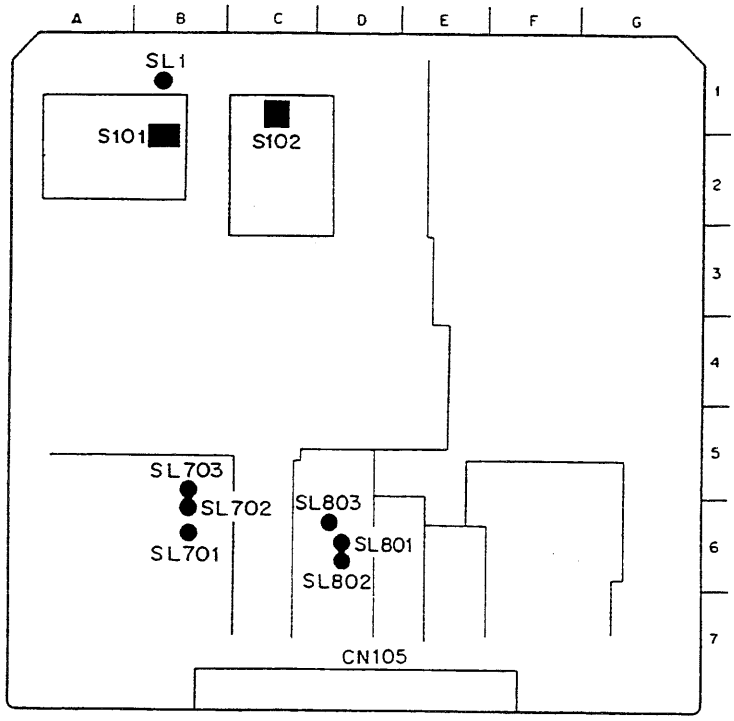
APR-1 board (Board suffix No. 11, 12, 13, 14, 21, 22, 23, 31, 32, 33)



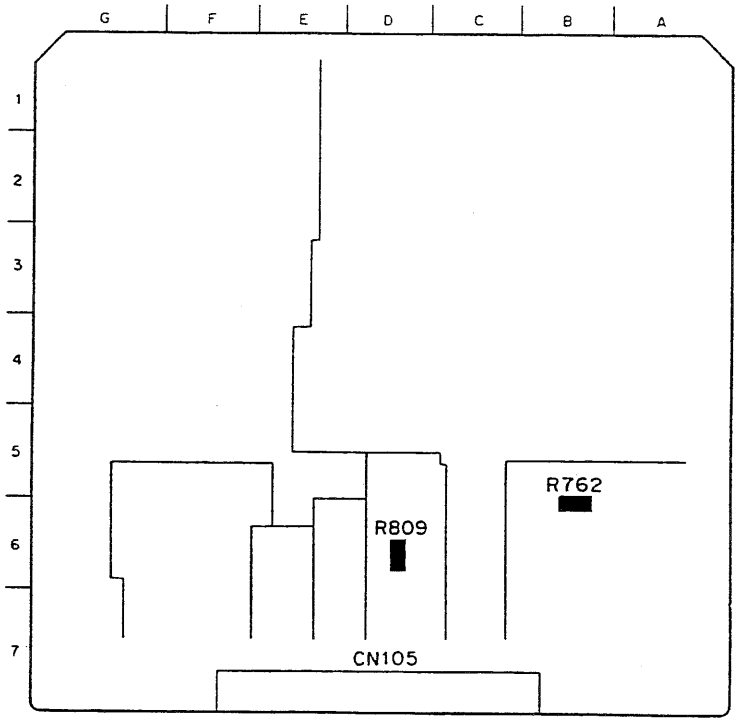
Selecting output level

Audio Channel	Ref. No.	Output Level (dBm/600 Ω)				Fine Adjustment (Address No.)
		+4	0	–3	–20	
CH1	SL500 SL501 SL502 R531	OPEN OPEN OPEN MOUNT	SHORT OPEN OPEN NO MOUNT	OPEN SHORT OPEN NO MOUNT	OPEN OPEN SHORT NO MOUNT	RV500 (P-5)
CH2	SL503 SL504 SL505 R532	OPEN OPEN OPEN MOUNT	SHORT OPEN OPEN NO MOUNT	OPEN SHORT OPEN NO MOUNT	OPEN OPEN SHORT NO MOUNT	RV501 (M-5)
CH3	SL700 SL701 SL702 R731	OPEN OPEN OPEN MOUNT	SHORT OPEN OPEN NO MOUNT	OPEN SHORT OPEN NO MOUNT	OPEN OPEN SHORT NO MOUNT	RV700 (K-5)
CH4	SL703 SL704 SL705 R732	OPEN OPEN OPEN MOUNT	SHORT OPEN OPEN NO MOUNT	OPEN SHORT OPEN NO MOUNT	OPEN OPEN SHORT NO MOUNT	RV701 (H-5)
MONITOR L-CH	SL902 SL903 SL904 R1038	OPEN OPEN OPEN MOUNT	SHORT OPEN OPEN NO MOUNT	OPEN SHORT OPEN NO MOUNT	OPEN OPEN SHORT NO MOUNT	RV901 (F-5)
MONITOR R-CH	SL905 SL906 SL907 R1039	OPEN OPEN OPEN MOUNT	SHORT OPEN OPEN NO MOUNT	OPEN SHORT OPEN NO MOUNT	OPEN OPEN SHORT NO MOUNT	RV902 (E-5)
FACTORY SETTING		○				

CUE-1 board



CUE-1 Board (A Side)



CUE-1 Board (B Side)

CUE-1 board, the on-board switch

Switch S101 is not equipped in DVW-510P

Switch No.		Name	Description	FACTORY SETTING
S101	1	CH-1 AUDIO HEAD TUNE ADJ. SWITCH	By coupling with RV106 on the CUE-1 board, adjust the CH-1 head amp high frequency response (head vibration). This switch is used in audio head dumping adjustment. If the switch setting is changed when this adjustment is not performed, audio frequency response may be failed.	When the unit is shipped, this switch is set to the position based on the adjustment condition.
	2			
S102	1	CH-2 AUDIO HEAD TUNE ADJ. SWITCH	By coupling with RV107 on the CUE-1 board, adjust the CH-2 head amp high frequency response (head vibration). This switch is used in audio head dumping adjustment. If the switch setting is changed when this adjustment is not performed, audio frequency response may be failed.	When the unit is shipped, this switch is set to the position based on the adjustment condition.
	2			

CUE-1 board, the on-board shorting lands and resistor selection
(* : Component attached on B side)

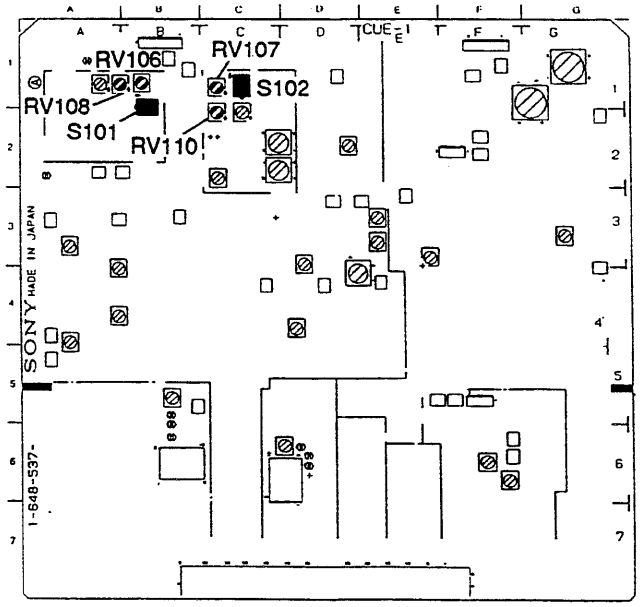
Selecting output level

Ref. No.	Output Level (dBm/600 Ω)			
	+4	0	−3	−20
SL701	OPEN	SHORT	OPEN	OPEN
SL702	OPEN	OPEN	SHORT	OPEN
SL703	OPEN	OPEN	OPEN	SHORT
R762*	0 Ω MOUNT	NO MOUNT	NO MOUNT	NO MOUNT
FACTORY SETTING	○			

8-7-1. Audio PB Frequency Response Adjustment (Oxide) (For DVW-A510P/CA510P)

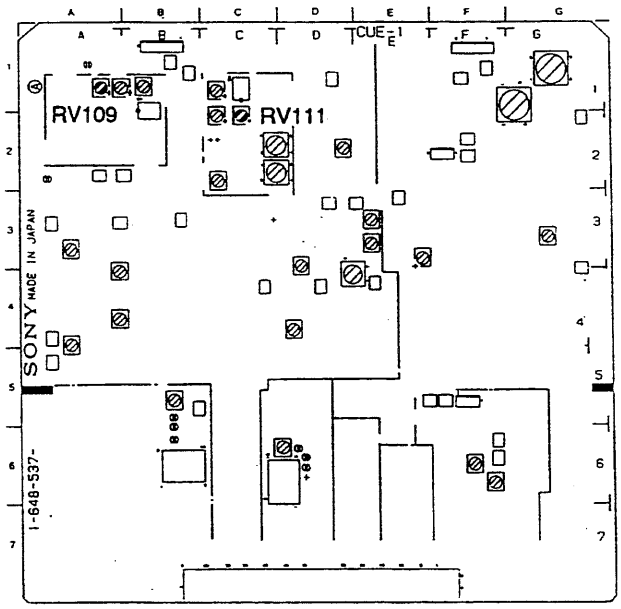
[Preparation]
Set the item "F01: AUDIO NR IN SP MODE" in the set up menu to "1: switch select" during the adjustment.
After adjustment is completed, return to initial setting surely.

Preparations for adjustment	Specifications	Adjustments
Play back the 1 kHz, 40 Hz, 7 kHz, 10 kHz and 15 kHz (–20 VU) signal portions (5:00-8:00) of the alignment tape CR8-1A PS.	ANALOG AUDIO OUTPUT CH1 and CH2 FREQUENCY [Hz] / OUTPUT LEVEL [dB] 1 k / 0 (REF) 40 / $0^{+0.7}_{-1.7}$ 7 k / 0 ±0.4 10 k / 0 ±0.4 15 k / $-1.0^{+0.5}_{-0.2}$ **Note:** Correct the output levels by using correction value of the alignment tape.	CH1 15 kHz: ⊘RV106/CUE-1(B-1) 7 kHz: ⊘RV108/CUE-1(A-1) If the specifications are not met, switch S101 and adjust again. CH2 15 kHz: ⊘RV107/CUE-1(C-1) 7 kHz: ⊘RV110/CUE-1(C-2) If the specifications are not met, switch S102 and adjust again.



8-7-2. Audio PB Frequency Response Adjustment (Metal) (For DVW-A510P/CA510P)

<table>
<tr><th>Preparations for adjustment</th><th>Specifications</th><th>Adjustments</th></tr>
<tr>
<td>Play back the 1 kHz, 40 Hz, 7 kHz, 10 kHz and 15 kHz (–20 VU) signal portions (5:00-8:00) of the alignment tape CR8-1B PS.</td>
<td>ANALOG AUDIO OUTPUT CH1 and CH2
<table>
<tr><th>FREQUENCY [Hz]</th><th>OUTPUT LEVEL [dB]</th></tr>
<tr><td>1 k</td><td>0(REF)</td></tr>
<tr><td>40</td><td>$0^{+0.7}_{-1.7}$</td></tr>
<tr><td>7 k</td><td>0 ±0.3</td></tr>
<tr><td>10 k</td><td>0 ±0.4</td></tr>
<tr><td>15 k</td><td>0 ±0.5</td></tr>
</table>
Note: Correct the output levels by using correction value of the alignment tape.</td>
<td>15 kHz
CH1: ◐RV109/CUE-1(A-1)
CH2: ◐RV111/CUE-1(C-2)</td>
</tr>
</table>

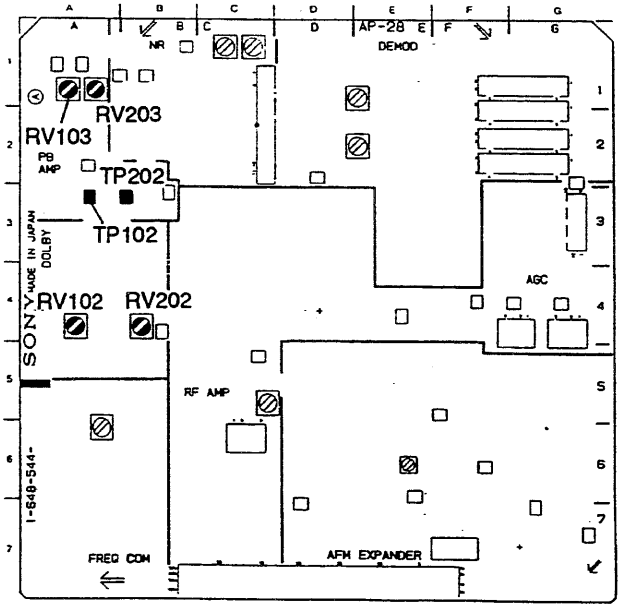


8-7-3. AP Board Dolby Level Adjustment (For DVW-A510P/CA510P)

Preparations for adjustment	Specifications	Adjustments
• Extend the AP-28 board by extension board EX-377. • Connect the audio level meter to TP102 or TP202 on the AP-28 board. • Turn on the power, and insert the alignment tape CR8-1B PS. • Play back the 1 kHz, 0 VU signal portion (0:00-2:55).	TP102/AP-28(A-3) −10.0 ±0.1 dBu TP202/AP-28(B-3) −10.0 ±0.1 dBu	TP102:⊘RV102/AP-28(A-4) TP202:⊘RV202/AP-28(B-4)

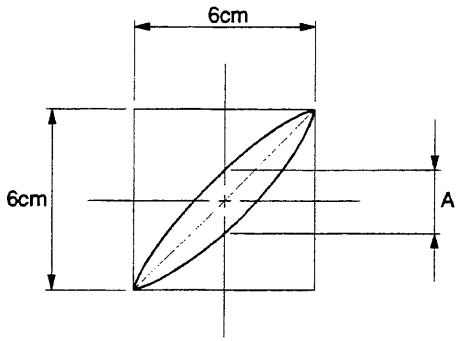
8-7-4. LAU PB Level Adjustment (For DVW-A510P/CA510P)

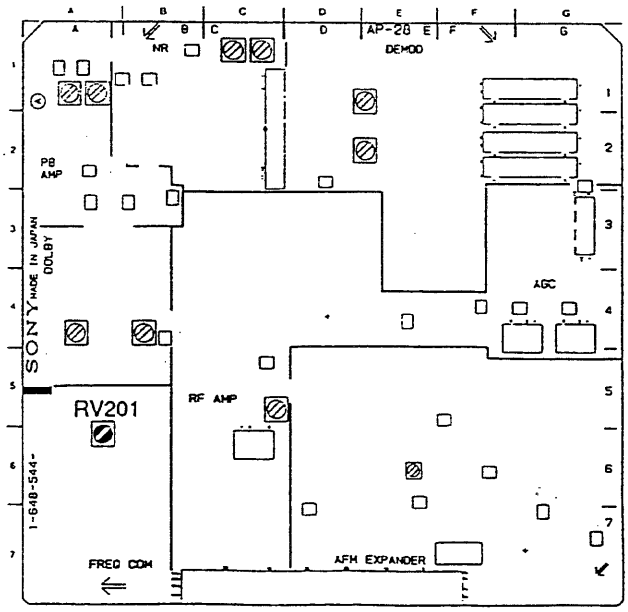
Preparations for adjustment	Specifications	Adjustments
Step 1 Play back the 1 kHz, 0 VU signal portion (0:00-2:55) of the alignment tape CR8-1B PS.	ANALOG AUDIO OUTPUT CH1 and CH2 +4.0 ±0.1 dBu (terminated by 600 Ω)	CH1:⊘RV103/AP-28(A-1) CH2:⊘RV203/AP-28(A-1)
Step 2 Play back the 1 kHz, 0 VU signal portion (0:00-2:55) of the alignment tape CR8-1A PS.	ANALOG AUDIO OUTPUT CH1 and CH2 +4.0 ±0.5 dBu (terminated by 600 Ω)	Check



8-7-5. LAU PB Phase Adjustment (For DVW-A510P/CA510P)

NOTE: Before performing this adjustment, section 8-4-7. Audio/TC Head Azimuth Adjustment should be completed.

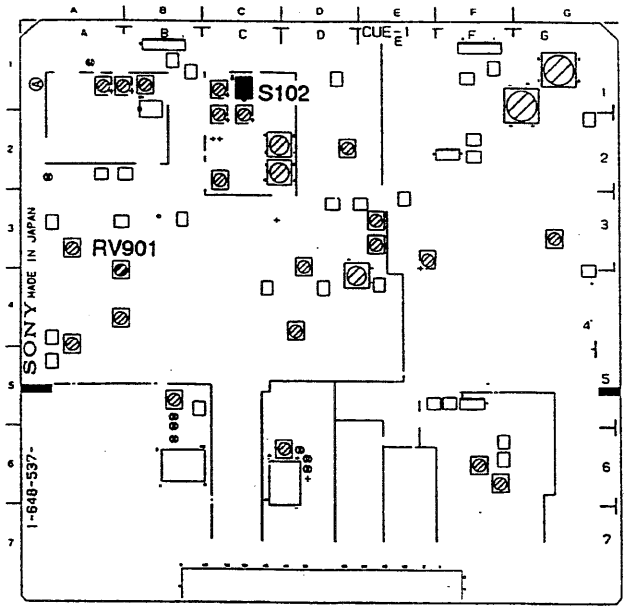
Preparations for adjustment	Specifications	Adjustments
• Play back the 15 kHz, 0 VU signal portion (3:00-5:00) of the alignment tape CR8-1B PS. • Observe the lissajous with the oscilloscope.	ANALOG AUDIO OUTPUT CH1 and CH2 (terminated by 600 Ω)  A ≦ 0.52 cm (5° or less)	⊘RV201/AP-28(A-6)



8-7-6. Cue PB Frequency Response Adjustment

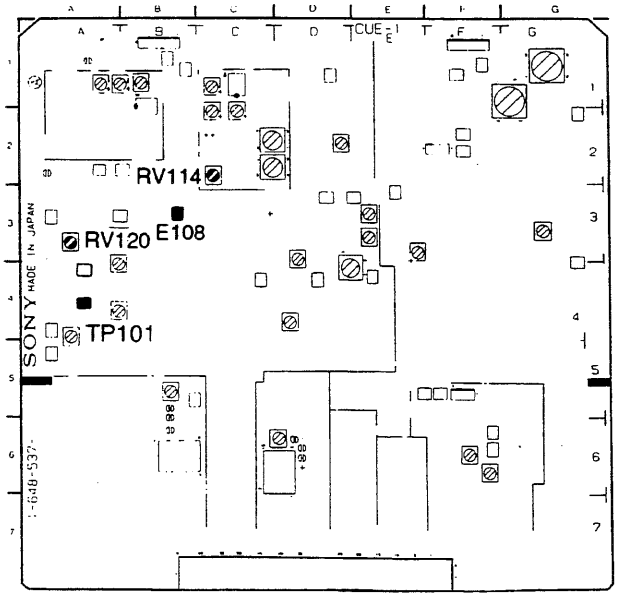
<table>
<tr><th>Preparations for adjustment</th><th>Specifications</th><th>Adjustments</th></tr>
<tr>
<td>• Play back the 1 kHz, 3 kHz, 7 kHz, 10 kHz, 12 kHz and 90 Hz (–20 VU) signal portions (1:30-4:55) of the alignment tape ZR5-1P.</td>
<td>ANALOG AUDIO OUTPUT CUE
<table>
<tr><th>FREQUENCY [Hz]</th><th>OUTPUT LEVEL [dB]</th></tr>
<tr><td>1 k</td><td>0 (REF)</td></tr>
<tr><td>3 k</td><td>0 ±0.5</td></tr>
<tr><td>7 k</td><td>0 ±0.5</td></tr>
<tr><td>10 k</td><td>0 ±0.5</td></tr>
<tr><td>12 k</td><td>0 ±0.5</td></tr>
<tr><td>90</td><td>$0\ ^{+0.7}_{-1.7}$</td></tr>
</table>
Note: Correct output levels by correction value of the alignment tape</td>
<td>⊘RV901/CUE-1(A-4)

As for DVW-510P, when the specifications are not met, switch S102 and then perform this adjustment again.</td>
</tr>
</table>

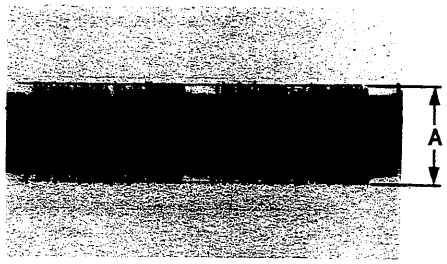


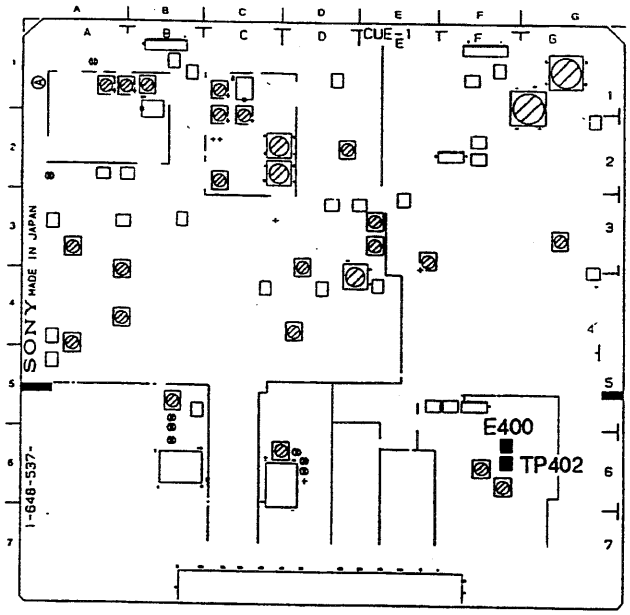
8-7-7. Cue PB Level Adjustment

Preparations for adjustment	Specifications	Adjustments
Step 1 • Shorten TP101 and E108 on the CUE-1 board with a shorting clip. • Play back the 1 kHz, 0 VU signal portion(0:00-1:25) of the alignment tape ZR5-1P.	ANALOG AUDIO OUTPUT CUE 4.0 ± 1 dBu (terminated by 600 Ω)	PB LEVEL ADJ ⊘RV114/CUE-1(C-2)
Step 2 Disconnect the shorting clip. • Play back the 1 kHz, 0 VU signal portion(0:00-1:25) of the alignment tape ZR5-1P.	ANALOG AUDIO OUTPUT CUE 4.0 ± 0.1 dBu (terminated by 600 Ω)	PB REF ADJ ⊘RV120/CUE-1(A-3)



8-7-8. LTC PB Level Check

Preparations for adjustment	Specifications	Adjustments
Step 1 • Connect the oscilloscope to TP402(X) and E400(G) on the CUE-1 board. • Play back the alignment tape ZR5-1P (any portion is acceptable).	TP402/CUE-1 (F-6)  A ≧ 80 mV p-p	check
Step 2 a) REW b) REV shuttle × 5 c) REV shuttle × 1/5 Play back at upper speed.	TP402/CUE-1 (F-6) A ≧ 80 mV p-p	check If the specification is not met, clean the head. Nevertheless the specification is not met, perform section 8-4-10. Audio Level Adjustment again. Then, check from section 8-7-1. Audio PB Frequency Response Adjustment again.



SECTION 9
SPARE PARTS

9-1. NOTES ON SPARE PARTS

1. Safety Related Components Warning

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts list has the present standardized repair parts.

3. Stock of Parts

Parts marked with "o" at SP(Supply Code) column of the spare parts list may be not stocked. Therefore, the delivery date will be delayed.

4. Tension Spring

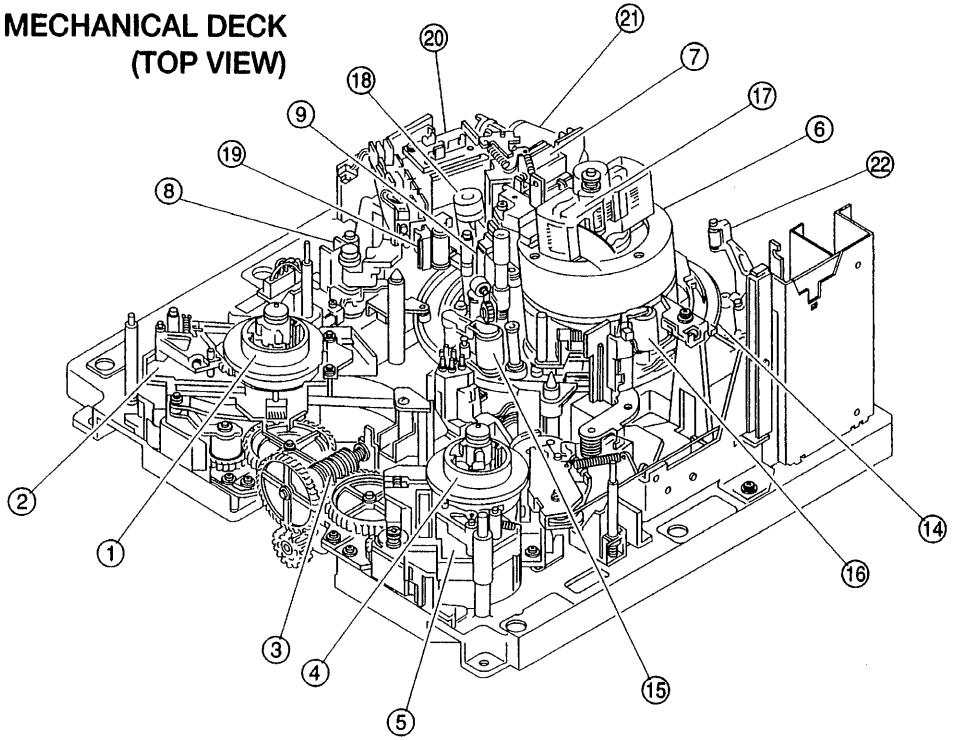
(xxT) after a tension spring is shown on the parts list in order to indicate the number of spring turns required for the use.
(Example) TENSION, SPRING (20T):
This spring must be cut at its 20th turn for actual use.

9-2. SPARE PARTS LIST – VTR –
9-2. 補修部品リスト – 本体 –

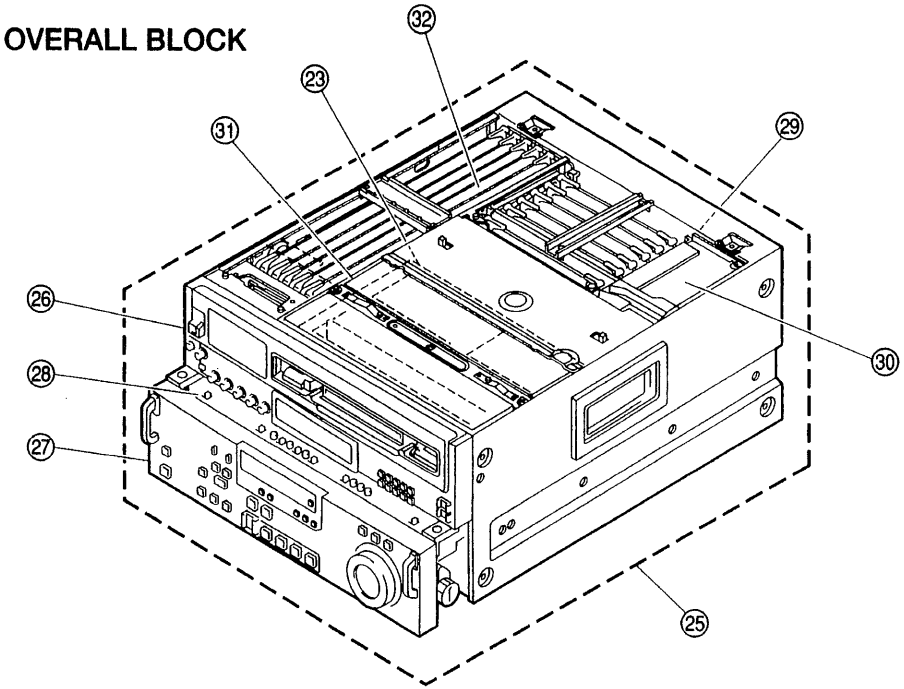
9-2-1. Index
9-2-1. インデックス

Mark	Item	Title	Page
①	S Reel Table	REEL CHASSIS (S SIDE) BLOCK	9-4
②	RS Table (S)		
③	Reel Shift		
④	T Reel Table	REEL CHASSIS (T SIDE) BLOCK	9-6
⑤	RS Table (T)		
⑥	Head Drum	DRUM AND ROTARY HEAD CLEANER BLOCK	9-8
⑦	Rotary Head Cleaner		
⑧	Tension Regulator	S TENSION REGULATOR BLOCK	9-10
⑨	CTL Head	CTL AND FE HEAD BLOCK	9-12
⑭	Threading Ring	THREADING RING AND PINCH ROLLER BLOCK	9-14
⑮	Pinch Roller		
⑯	AT Head Cleaner		
⑰	AT Head	AT HEAD AND CAPSTAN MOTOR BLOCK	9-16
⑱	Capstan Motor		
⑲	Tape Cleaner		
⑳	Pinch Press	PINCH PRESS AND GEAR BOX BLOCK	9-18
㉑	Gear Box Motor		
㉒	T Tension Regulator	T TENSION REGULATOR BLOCK	9-20
㉓	Cassette Compartment	CASSETTE COMPARTMENT BLOCK	9-22
㉔	Printed Circuit Board	PRINTED CIRCUIT BOARD (BOTTOM SIDE) BLOCK	9-24
㉕	Upper Lid	ORNAMENTAL PANEL BLOCK	9-26
	Bottom Panel		
	Cabinet (right)		
	Cabinet (left)		
㉖	Upper Control Panel	UPPER CONTROL PANEL BLOCK	9-28
㉗	Lower Control Panel	LOWER CONTROL PANEL BLOCK	9-30
㉘	Sub Control Panel	SUB CONTROL PANEL BLOCK	9-32
㉙	Connector Panel	CONNECTOR PANEL BLOCK	9-34
㉚	Power Block		
㉛	Cassette Compartment Stay	CHASSIS BLOCK	9-36
㉜	Mounted Circuit Board	MOUNTED CIRCUIT BOARD BLOCK	9-38

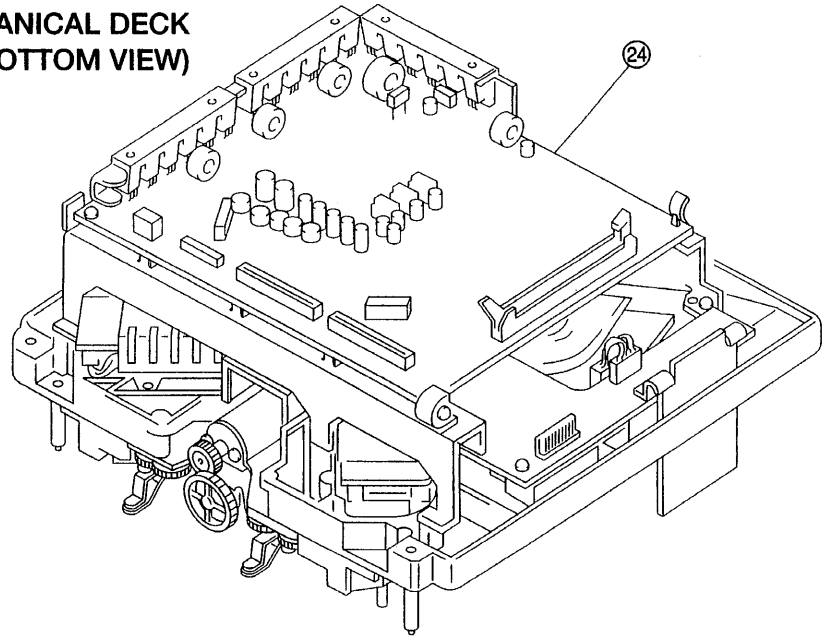
MECHANICAL DECK (TOP VIEW)

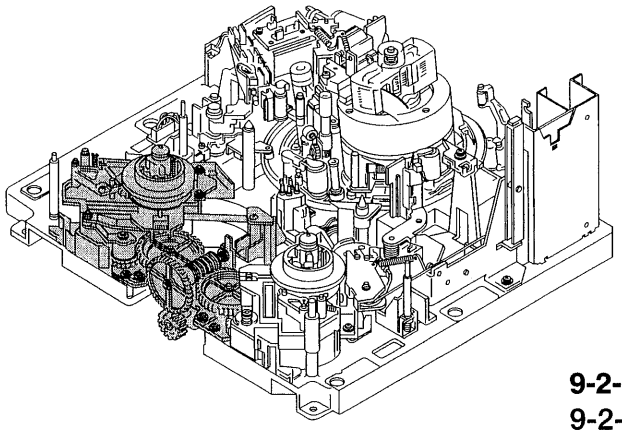


OVERALL BLOCK



MECHANICAL DECK (BOTTOM VIEW)



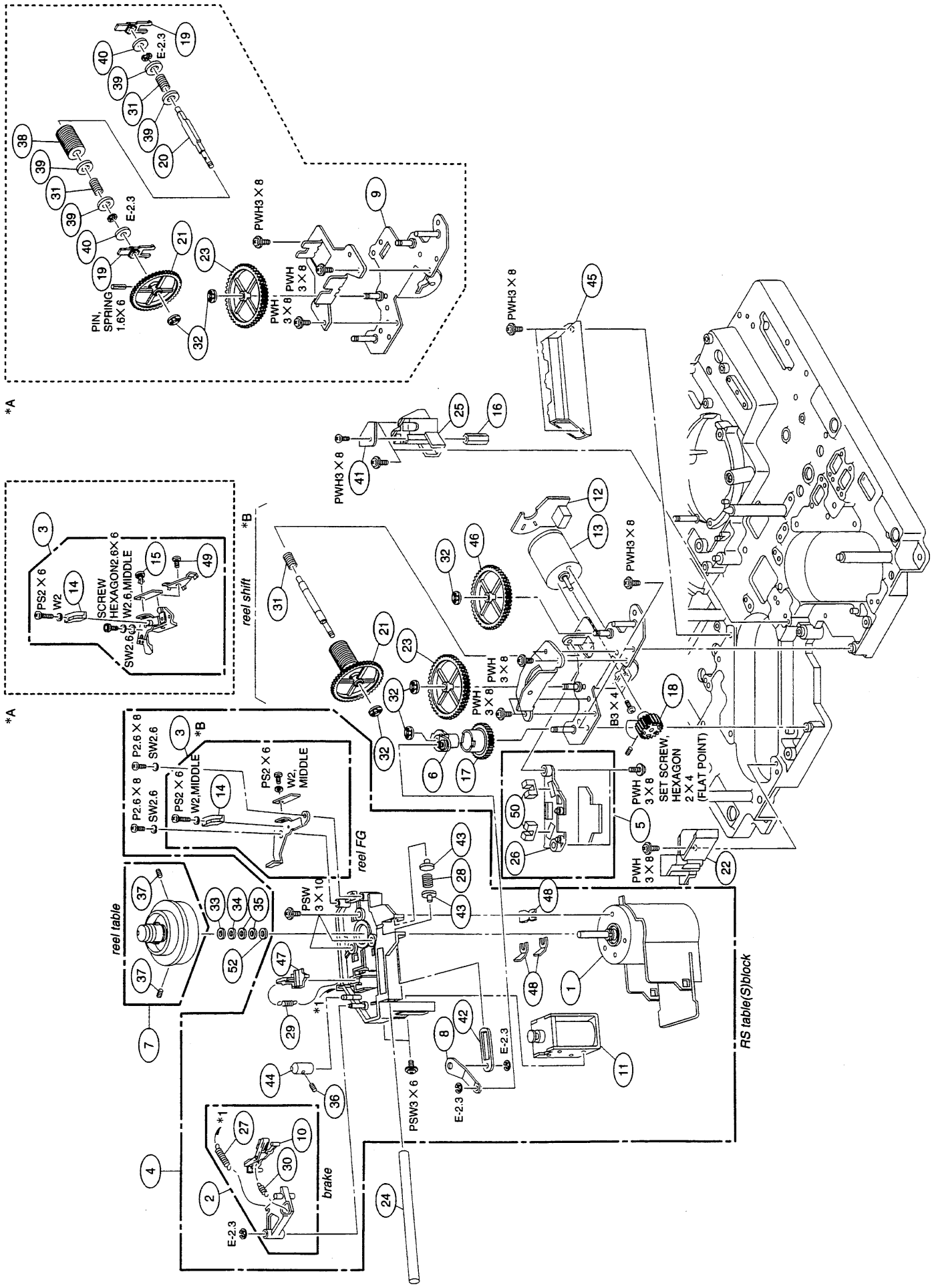


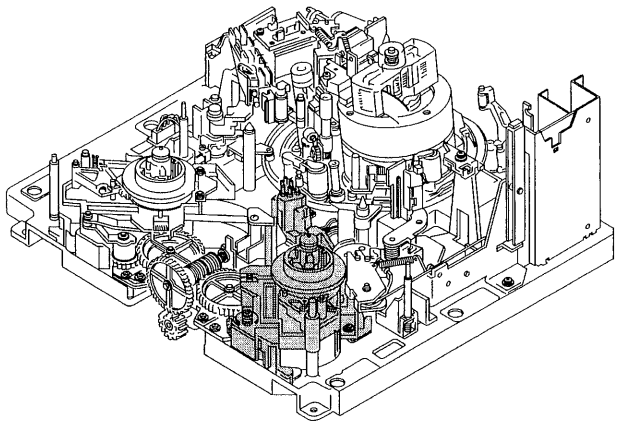
9-2-2. Exploded Views and Mechanical Parts List
9-2-2. 分解図および機構部品リスト

No.	Part No.	SP	Description
1	A-8267-774-E	s	RM ASSY
2	A-6741-066-B	o	BRAKE ASSY
*A 3	A-8267-701-C	s	FG ASSY, REEL
*B	A-8278-310-A	s	FG ASSY, REEL
4	A-8267-703-J	s	TABLE (S) BLOCK ASSY, RS
5	A-8276-619-A	o	MOUNTED CIRCUIT BOARD, PTC-71
6	X-3166-024-1	o	ARM (A) ASSY, CRANK
7	X-3166-025-3	s	TABLE ASSY, REEL
8	X-3166-060-1	o	ARM (B) ASSY, CRANK
*A 9	X-3167-047-1	o	BASE ASSY, REEL SHIFT
10	X-3717-205-1	s	LINING ASSY
11	1-454-417-31	s	SOLENOID, PLUNGER
12	1-648-570-11	o	PRINTED CIRCUIT BOARD, CCM-15
13	1-698-152-11	s	MOTOR (SVD-1449), DC
14	1-807-683-11	s	RESISTOR ELEMENT
*A15	2-279-715-01	s	RIVET, NYLON
16	2-280-622-51	o	SUPPORT (M3), HEXAGON
17	3-171-430-01	o	GEAR, CRANK
18	3-171-316-01	s	GEAR, M
*A19	3-171-318-01	o	BEARING, WORM
*A20	3-171-319-01	o	SHAFT, WORM
*A21	3-171-320-01	o	GEAR, DRIVE
*B	3-603-393-01	o	GEAR, SHIFT
22	3-171-397-02	o	HOLDER (S), SHAFT
23	3-171-429-01	o	GEAR, LS
24	3-171-431-01	s	SHAFT, SLIDE
25	3-180-687-01	o	HOLDER (A), SHAFT
26	3-180-866-01	o	BASE, LS SENSOR
27	3-307-381-00	s	SPRING, TENSION
28	3-491-247-00	s	SPRING, COMPRESSION
29	3-535-532-01	s	SPRING, TENSION
30	3-648-217-00	o	SPRING, TENSION
31	3-659-324-00	s	SPRING, COMPRESSION
32	3-669-596-01	s	WASHER (2.3), STOPPER
33	3-701-441-01	s	WASHER, POLY 4mm DIA., 0.13T
34	3-701-441-11	s	WASHER, POLY 4mm DIA., 0.25T
35	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
36	3-701-506-01	s	SET SCREW, DOUBLE POINT 3x4
37	3-701-507-00	s	SET SCREW, DOUBLE POINT M3x5
*A 38	3-717-210-01	s	WORM
*A 39	3-717-212-01	o	WASHER (B), WORM
*A 40	3-717-213-01	o	WASHER (A), WORM
41	3-717-224-01	s	WASHER (B), WORM
42	3-717-230-01	o	BRACKET, LIMITER
43	3-717-231-01	o	HOLDER, LIMITER
44	3-717-266-01	o	CAP (S), CG SHAFT
45	3-717-398-01	o	TABLE, SLIDE
46	3-717-399-01	s	WHEEL, W
47	3-717-450-02	o	ARM, BRAKE RELEASE
48	3-717-625-01	s	SPACER
*A 49	3-729-013-01	s	SCREW (P1.4x1.6), WASHER-HEAD
50	8-719-939-05	s	PHOTO INTERRUPTER GP1S54
52	3-188-108-01	s	WASHER, POLY 4mm DIA., 0.05T

*A for S/N 10001 thru. 12089: DVW-A510P(EK)
for S/N 10001 thru. 10555: DVW-510P(EK)

*B for S/N 12090 and higher: DVW-A510P(EK)
for S/N 10556 and higher: DVW-510P(EK)


*A
*B
reel shift
reel FG
reel table
brake
RS table(S)block
PWH3 X 8
PWH 3 X 8
PSW 3 X 10
PSW3 X 6
PS2 X 6
W2
SCREW HEXAGON2.6X6 W2.6,MIDDLE
SW2.6
P2.6 X 8
W2,MIDDLE
W2 MIDDLE
B3 X 4
SET SCREW, HEXAGON 2 X 4 (FLAT POINT)
PIN, SPRING 1.6X 6
E-2.3



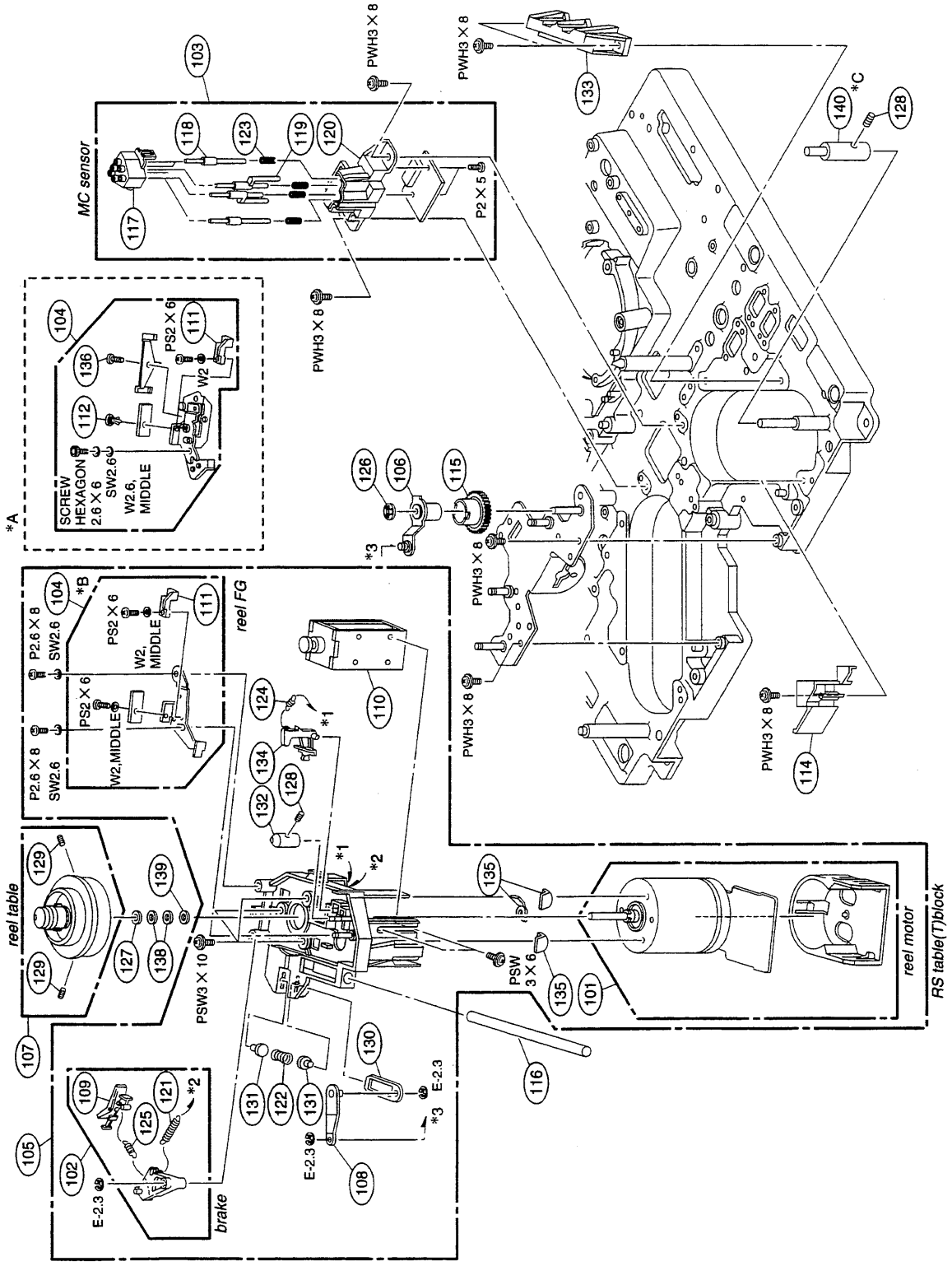
No.	Part No.	SP	Description
101	A-8627-774-E	s	RM ASSY
102	A-6741-066-B	o	BRAKE ASSY
103	A-8267-549-B	o	SENSOR ASSY, MC
*A 104	A-8267-701-C	s	FG ASSY, REEL
*B	A-8278-310-A	s	FG ASSY, REEL
105	A-8267-702-H	s	TABLE (T) BLOCK ASSY, RS
106	X-3166-024-1	o	ARM (A) ASSY, CRANK
107	X-3166-025-3	s	TABLE ASSY, REEL
108	X-3166-060-1	o	ARM (B) ASSY, CRANK
109	X-3717-205-1	s	LINING ASSY
110	1-454-417-31	s	SOLENOID, PLUNGER
*A 111	1-807-683-11	s	RESISTOR ELEMENT
*B	1-801-300-11	s	RESISTOR ELEMENT, MAGNETIC
*A 112	2-279-715-01	s	RIVET, NYLON
114	3-171-428-02	o	HOLDER (T), SHAFT
115	3-171-430-01	o	GEAR, CRANK
116	3-171-431-01	s	SHAFT, SLIDE
117	3-180-756-01	o	CAP, MC
118	3-180-757-01	o	PIN (1), MC
119	3-180-758-01	o	PIN (2), MC
120	3-180-759-01	o	HOLDER, MC
121	3-307-381-00	s	SPRING, TENSION
122	3-491-247-00	s	SPRING, COMPRESSION
123	3-554-202-00	o	SPRING, COMPRESSION
124	3-535-532-01	s	SPRING, TENSION

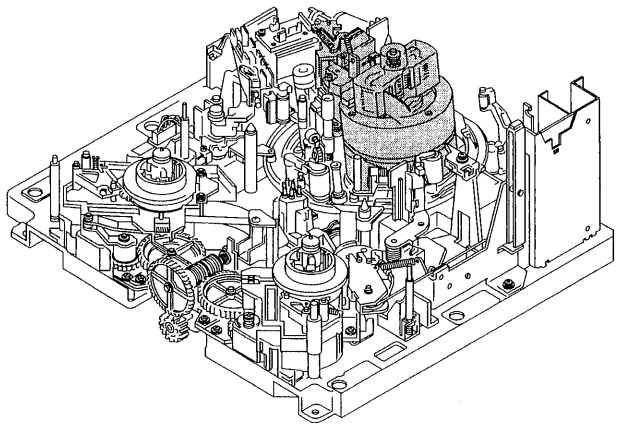
No.	Part No.	SP	Description
125	3-648-217-00	o	SPRING, TENSION
126	3-669-596-01	s	WASHER (2.3), STOPPER
127	3-701-441-01	s	WASHER, POLY 4mm DIA., 0.13T
128	3-701-506-01	s	SET SCREW, DOUBLE POINT 3x4
129	3-701-507-00	s	SET SCREW, DOUBLE POINT M3x5
130	3-717-230-01	o	BRACKET, LIMITER
131	3-717-231-01	o	HOLDER, LIMITER
132	3-717-266-01	o	CAP (S), CG SHAFT
133	3-717-398-01	o	TABLE, SLIDE
134	3-717-450-02	o	ARM, BRAKE RELEASE
135	3-717-625-01	s	SPACER
*A 136	3-729-013-01	s	SCREW (P1.4x1.6), WASHER-HEAD
138	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
139	3-188-108-01	s	WASHER, POLY 4mm DIA., 0.05T
*C 140	3-717-222-01	s	CAP(L), CS SHAFT

*A for S/N 10001 thru. 12089: DVW-A510P(EK)
for S/N 10001 thru. 10555: DVW-510P(EK)

*B for S/N 12090 and higher: DVW-A510P(EK)
for S/N 10556 and higher: DVW-510P(EK)

*C for S/N 13276 and higher: DVW-A510P(CE)
for S/N 11065 and higher: DVW-510P(CE)
for S/N 10076 and higher: DVW-CA510P(EK)

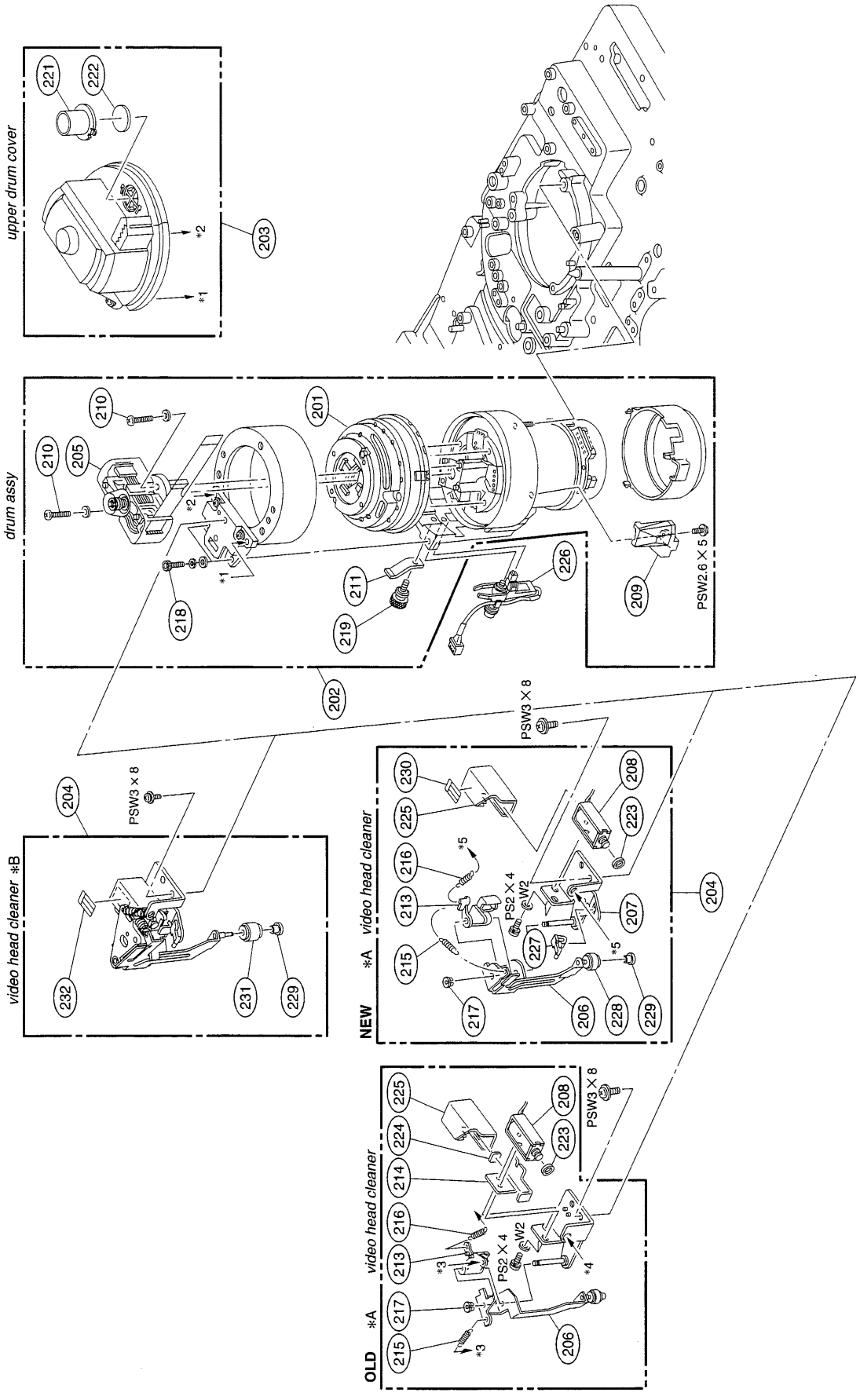

MC sensor
reel table
reel FG
brake
reel motor
RS table(T)block
PWH3 X 8
P2 X 5
PS2 X 6
P2.6 X 8
SW2.6
W2, MIDDLE
W2.6, MIDDLE
SCREW HEXAGON 2.6 X 6
PSW3 X 10
PSW 3 X 6
E-2.3
*A
*B
*C
*1
*2
*3

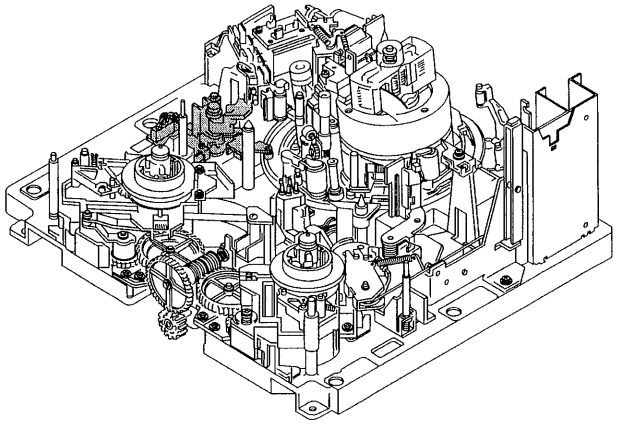


No.	Part No.	SP	Description
201	A-8260-747-D	s	INNER DRUM ASSY, DJR-06A-R (for DVW-A510P/CA510P)
	A-8260-749-D	s	INNER DRUM ASSY, DJR-08A-R (for DVW-510P)
202	A-8260-743-D	s	DRUM ASSY, DJH-06A-R (for DVW-A510P/CA510P)
	A-8260-745-D	s	DRUM ASSY, DJH-08A-R (for DVW-510P)
203	A-8267-391-D	s	COVER ASSY, DRUM, UPPER
*A 204	A-8267-398-H	s	CLEANER ASSY, VIDEO HEAD
*B	A-8320-545-A	s	CLEANER (B) ASSY, VIDEO HEAD
205	A-8267-571-A	s	SR13 ASSY (RP), BRUSH (for DVW-A510P/CA510P)
	A-8267-572-A	s	SR9 ASSY (RP), BRUSH (for DVW-510P)
206	X-3167-280-3	s	CLEANER SUB ASSY, VIDEO (for S/N 10521 and higher: DVW-A510P) (for S/N 10201 and higher: DVW-510P) (for S/N 10021 and higher: DVW-CA510P)
	X-3167-280-2	s	CLEANER SUB ASSY, VIDEO (for S/N 10001 thru. 10520: DVW-A510P) (for S/N 10001 thru. 10200: DVW-510P) (for S/N 10001 thru. 10020: DVW-CA510P)
207	X-3167-045-3	o	BASE ASSY, V CLEANER
208	1-454-607-11	s	SOLENOID, PLUNGER
209	3-180-112-02	s	BRACKET, TAPE
210	3-180-163-01	s	SCREW (2x16)
211	3-180-164-01	s	SPRING, FITTING, UD
213	3-180-729-02	o	LEVER, V CLEANER (for S/N 10521 and higher: DVW-A510P) (for S/N 10201 and higher: DVW-510P) (for S/N 10021 and higher: DVW-CA510P)
	3-180-729-01	o	LEVER, V CLEANER (for S/N 10001 thru. 10520: DVW-A510P) (for S/N 10001 thru. 10200: DVW-510P) (for S/N 10001 thru. 10020: DVW-CA510P)
214	3-180-730-01	o	PLATE, STOPPER (for S/N 10001 thru. 10520: DVW-A510P) (for S/N 10001 thru. 10200: DVW-510P) (for S/N 10001 thru. 10020: DVW-CA510P)
215	3-307-378-00	s	SPRING, TENSION
216	3-642-490-00	s	SPRING, TENSION
217	3-703-074-01	s	CAP 3, SHAFT
218	3-899-249-11	s	BOLT, HEXAGON SOCKET
219	3-182-488-02	s	SCREW, FITTING, UD
221	3-182-648-02	s	CAP
222	3-182-649-01	s	FILTER
223	3-183-901-01	s	WASHER, CL
224	3-183-902-01	o	STOPPER, CL (for S/N 10001 thru. 10520: DVW-A510P) (for S/N 10001 thru. 10200: DVW-510P) (for S/N 10001 thru. 10020: DVW-CA510P)
225	3-183-903-01	o	CASE, VH SHIELD
226	A-8314-518-A	s	HEAD ASSY, DEMAGNETIZATION
227	3-671-150-01	o	CLAMP
228	X-3167-281-3	s	ROLLER ASSY, V CLEANING
229	3-182-765-02	s	SPACER, CR
230	3-190-056-01	s	LABEL, HOURS
*B 231	A-8320-546-A	s	ROLLER (B) ASSY (RP), V CLEANING
*B 232	3-615-958-01	s	LABEL 5, SELF

*A for S/N 10001 thru. 13450: DVW-A510P
for S/N 10001 thru. 11074: DVW-510P
for S/N 10001 thru. 10033: DVW-CA510P

*B for S/N 13451 and higher: DVW-A510P
for S/N 11075 and higher: DVW-510P
for S/N 10034 and higher: DVW-CA510P


upper drum cover
221
222
203
*2
*1
drum assy
210
205
201
*2
*1
218
211
219
226
209
PSW2.6 × 5
202
PSW3 × 8
video head cleaner *B
204
PSW3 × 8
232
231
229
NEW
*A
video head cleaner
230
225
216
213
215
208
223
207
204
*5
PS2 × 4
W2
227
217
206
228
229
OLD
*A
video head cleaner
225
224
214
216
213
217
215
208
223
PSW3 × 8
*3
PS2 × 4
W2
*4
206

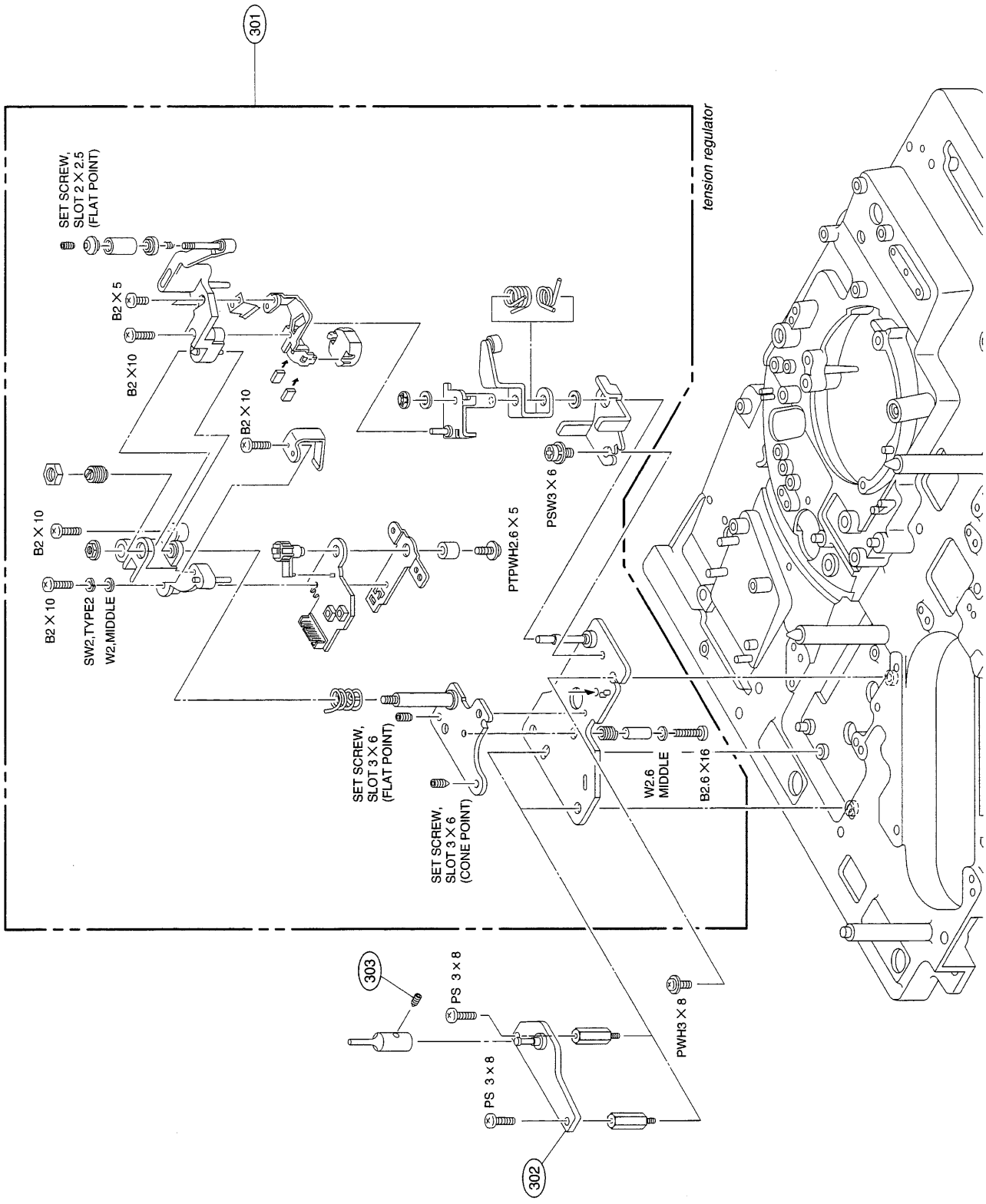


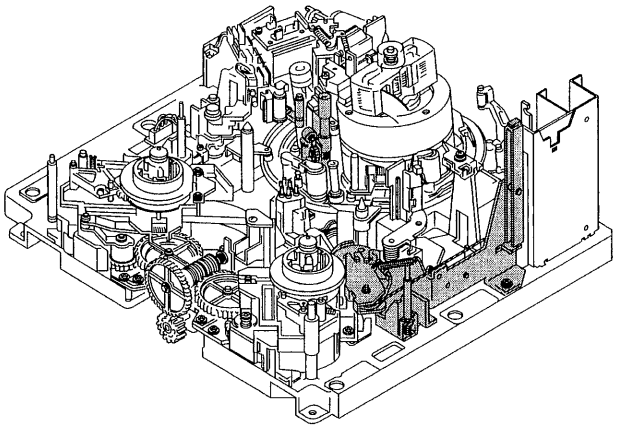
No.	Part No.	SP	Description
301	A-8267-795-E	s	TENSION REGULATOR ASSY (RP)

Sテンションレギュレータ ASSYの構成部品の交換は、厳密な調整を必要とするため、組立品で交換してください。

If the component parts of the S tension regulator assembly are needed to replace, replace as a whole assembled parts instead of as a component part because of the strict adjustment is required.

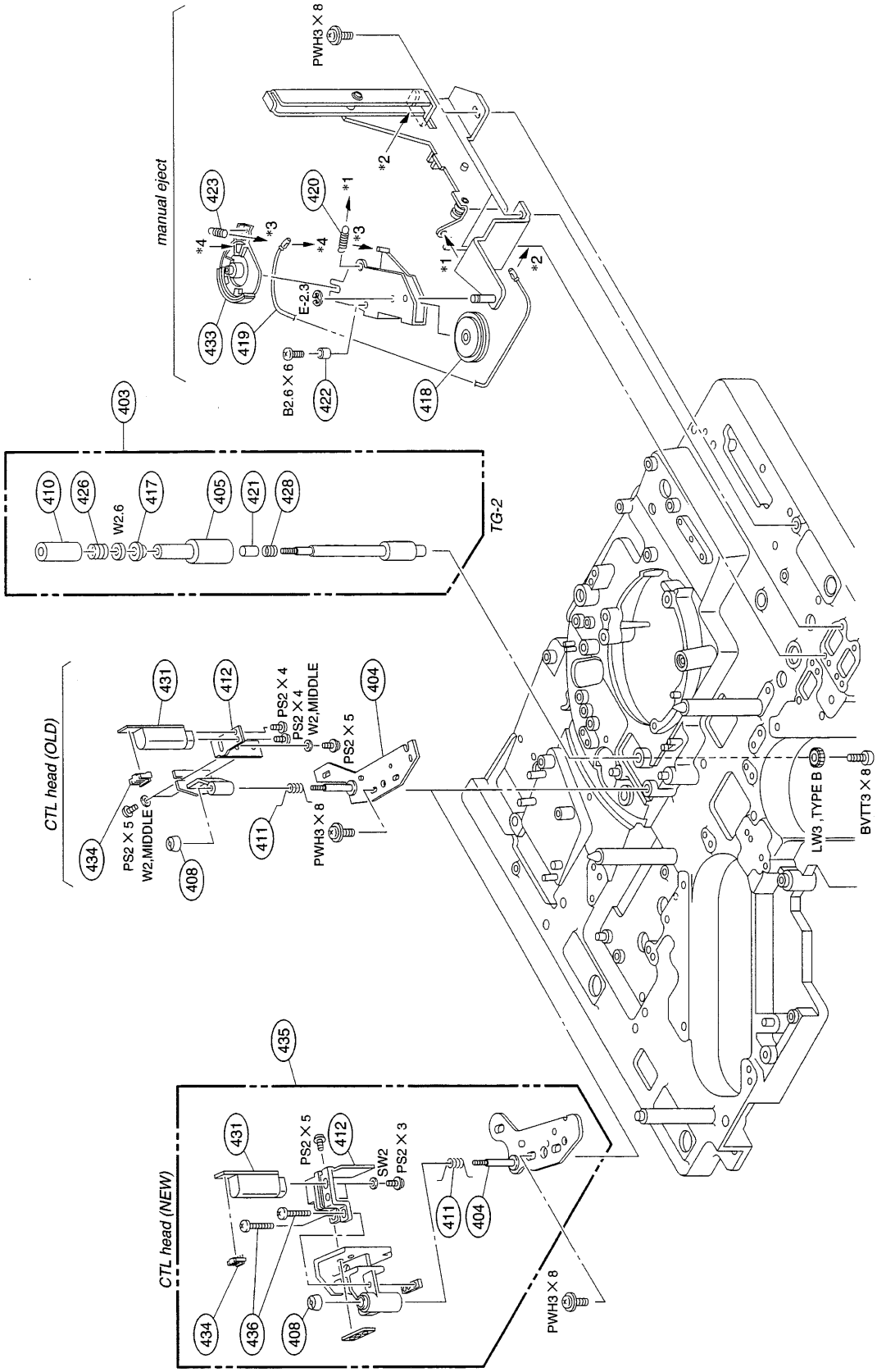
302	X-3168-229-1	s	PLATE (S) ASSY
303	3-701-506-01	s	SET SCREW, DOUBLE POINT 3x4

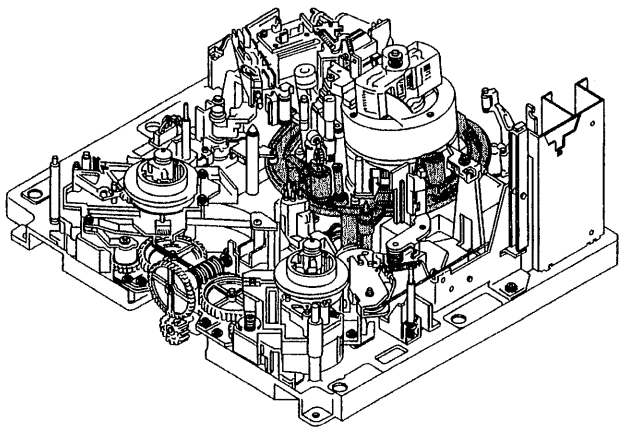

301
tension regulator
SET SCREW, SLOT 2 X 2.5 (FLAT POINT)
B2 X 5
B2 X10
B2 X 10
B2 X 10
B2 X 10
SW2,TYPE2
W2,MIDDLE
PSW3 X 6
PTPWH2.6 X 5
SET SCREW, SLOT 3 X 6 (FLAT POINT)
SET SCREW, SLOT 3 X 6 (CONE POINT)
W2.6 MIDDLE
B2.6 X16
303
PS 3 x 8
PS 3 x 8
PWH3 X 8
302



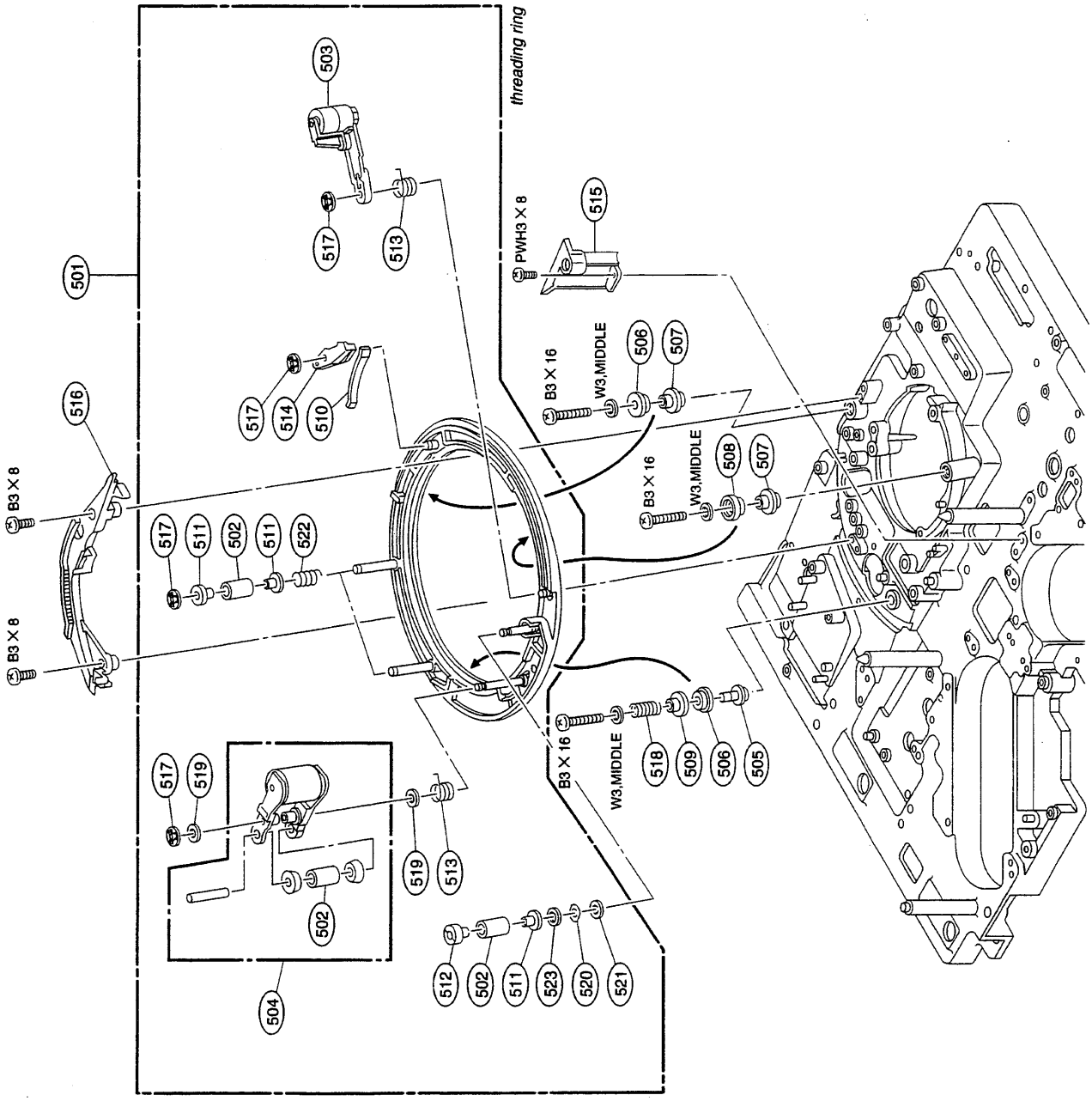
No.	Part No.	SP	Description
403	A-8267-554-B	s	TG-2 ASSY
404	X-3167-044-2	o	BASE ASSY, CTL/FE
			(for S/N 10721 and higher: DVW-A510P(EK))
			(for S/N 10257 and higher: DVW-A510(UC))
			(for S/N 10101 and higher: DVW-A510(J))
			(for S/N 10251 and higher: DVW-510P(EK))
			(for S/N 10098 and higher: DVW-510(UC))
			(for S/N 10021 and higher: DVW-510(J))
			(for S/N 10051 and higher: DVW-CA510P(EK))
			(for S/N 10010 and higher: DVW-CA510(UC))
			(for S/N 10001 and higher: DVW-CA510(J))
	X-3167-044-1	o	BASE ASSY, CTL/FE
			(for S/N 10001 thru. 10720: DVW-A510P(EK))
			(for S/N 10001 thru. 10256: DVW-A510(UC))
			(for S/N 10001 thru. 10100: DVW-A510(J))
			(for S/N 10001 thru. 10250: DVW-510P(EK))
			(for S/N 10001 thru. 10097: DVW-510(UC))
			(for S/N 10001 thru. 10020: DVW-510(J))
			(for S/N 10001 thru. 10050: DVW-CA510P(EK))
			(for S/N 10001 thru. 10009: DVW-CA510(UC))
405	X-3167-056-1	s	ROLLER ASSY, GUIDE
408	2-203-519-21	s	NUT (A), LOCK, PIVOT
410	3-180-665-02	o	FLANGE (L), UPPER
411	3-180-725-01	s	SPRING, CTL/FE

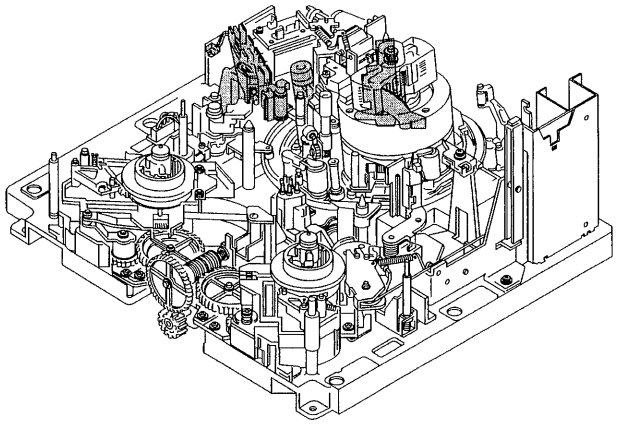
No.	Part No.	SP	Description
412	3-180-726-02	o	BRACKET, CTL/FE
			(for S/N 10721 and higher: DVW-A510P(EK))
			(for S/N 10257 and higher: DVW-A510(UC))
			(for S/N 10101 and higher: DVW-A510(J))
			(for S/N 10251 and higher: DVW-510P(EK))
			(for S/N 10098 and higher: DVW-510(UC))
			(for S/N 10021 and higher: DVW-510(J))
			(for S/N 10051 and higher: DVW-CA510P(EK))
			(for S/N 10010 and higher: DVW-CA510(UC))
			(for S/N 10001 and higher: DVW-CA510(J))
	3-180-726-01	o	BRACKET, CTL/FE
			(for S/N 10001 thru. 10720: DVW-A510P(EK))
			(for S/N 10001 thru. 10256: DVW-A510(UC))
			(for S/N 10001 thru. 10100: DVW-A510(J))
			(for S/N 10001 thru. 10250: DVW-510P(EK))
			(for S/N 10001 thru. 10097: DVW-510(UC))
			(for S/N 10001 thru. 10020: DVW-510(J))
			(for S/N 10001 thru. 10050: DVW-CA510P(EK))
			(for S/N 10001 thru. 10009: DVW-CA510(UC))
417	3-181-489-01	s	FLANGE, DIA. 8
418	3-181-834-01	o	PULLEY, ME
419	3-181-839-01	o	WIRE, STAINLESS
420	3-563-104-00	s	SPRING, TENSION
421	3-657-842-11	o	SPACER (3x7)
422	3-661-588-01	s	SPACER (3x5)
423	3-701-788-XX	s	SPRING, TENSION (27T)
426	3-738-730-01	s	SPRING, COMPRESSION
428	4-869-230-00	s	SPRING, COMPRESSION
431	8-825-554-84	s	HEAD, CTL PS244-21B
433	X-3167-257-1	o	IDLER ASSY, ME
434	1-506-481-11	o	PIN, CONNECTOR 2P
435	A-8267-860-B	o	HEAD ASSY, CTL
436	3-740-546-31	s	SCREW (M2x12)


manual eject
PWH3 X 8
*2
423
420
*1
*3
*4
E-2.3
433
419
B2.6 X 6
422
418
403
410
426
W2.6
417
405
421
428
TG-2
CTL head (OLD)
431
412
PS2 X 4
PS2 X 4
W2,MIDDLE
PS2 X 5
404
434
PS2 X 5
W2,MIDDLE
408
411
PWH3 X 8
LW3 ,TYPE B
BVTT3 X 8
435
CTL head (NEW)
431
PS2 X 5
412
SW2
PS2 X 3
411
404
434
436
408
PWH3 X 8

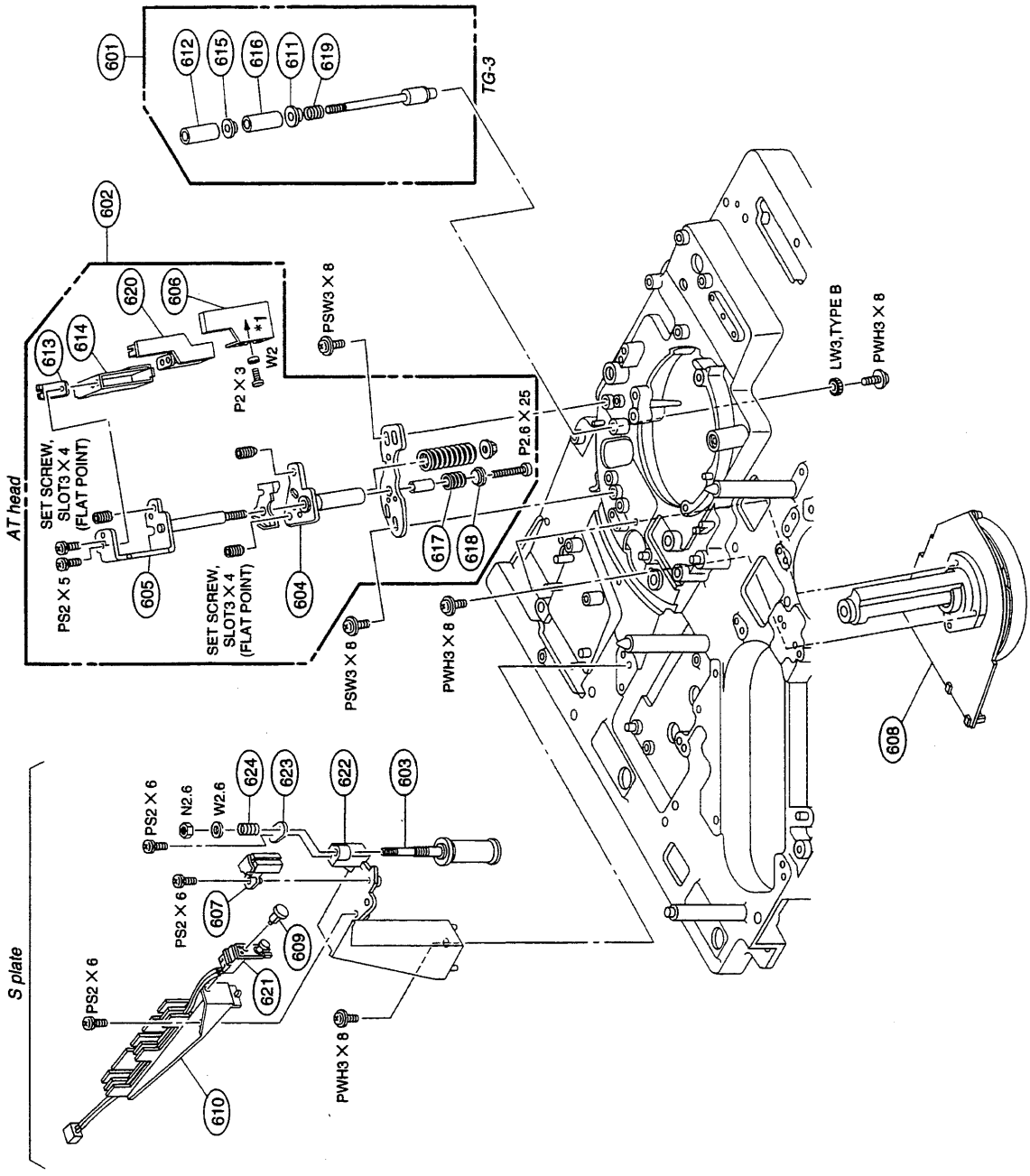


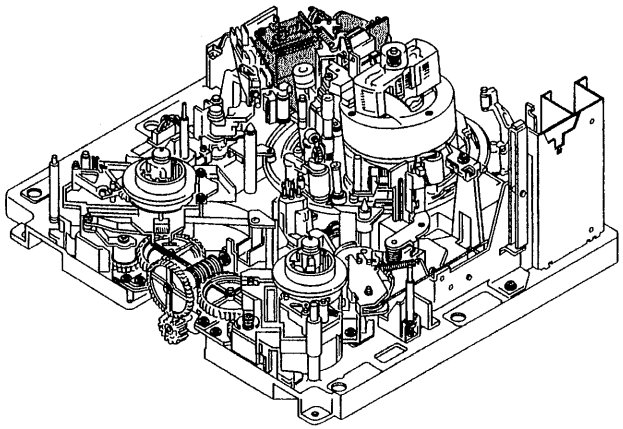
No.	Part No.	SP	Description
501	A-8267-395-F	s	RING ASSY, THREADING
502	X-3167-052-2	s	ROLLER ASSY, ONEBARE
503	X-3167-053-2	s	ARM ASSY, CL
504	X-3167-054-4	s	ARM ASSY, PINCH
505	3-180-676-01	s	SHAFT, (B) RING ROLLER
506	3-180-677-01	s	ROLLER, RING
507	3-180-678-01	s	SHAFT, RING ROLLER
508	3-180-679-01	s	ROLLER, (B) RING
509	3-180-681-01	s	ROLLER (C) RING
510	3-180-772-01	s	SPRING (RG), PLATE
511	3-180-773-02	s	FLANGE, ONEBARE USE
512	3-180-774-03	s	FLANGE, TG5 (UPPER)
513	3-180-849-01	s	SPRING (C), TORSION
514	3-180-850-01	s	ARM, LOCK
515	3-180-853-01	s	GUARD, PINCH ARM
516	3-180-874-02	s	RAIL, CL GUIDE
517	3-669-596-01	s	WASHER (2.3), STOPPER
518	3-676-327-01	s	SPRING, COMPRESSION
519	3-701-439-11	s	WASHER, POLY 3mm DIA., 0.25T
	3-701-439-01	s	WASHER, POLY 3mm DIA., 0.13T
520	3-714-587-01	o	SPRING, LEAF
521	3-739-736-02	o	BASE, SPRING
522	4-879-563-00	s	SPRING, COMPRESSION
523	3-701-439-21	s	WASHER, POLY 3mm DIA., 0.50T


threading ring
503
517
513
501
515
PWH3 X 8
517
514
510
516
B3 X 16
W3,MIDDLE
506
507
B3 X 16
W3,MIDDLE
508
507
B3 X 8
517
511
502
511
522
B3 X 8
B3 X 16
W3,MIDDLE
518
509
506
505
517
519
519
513
502
504
512
502
511
523
520
521

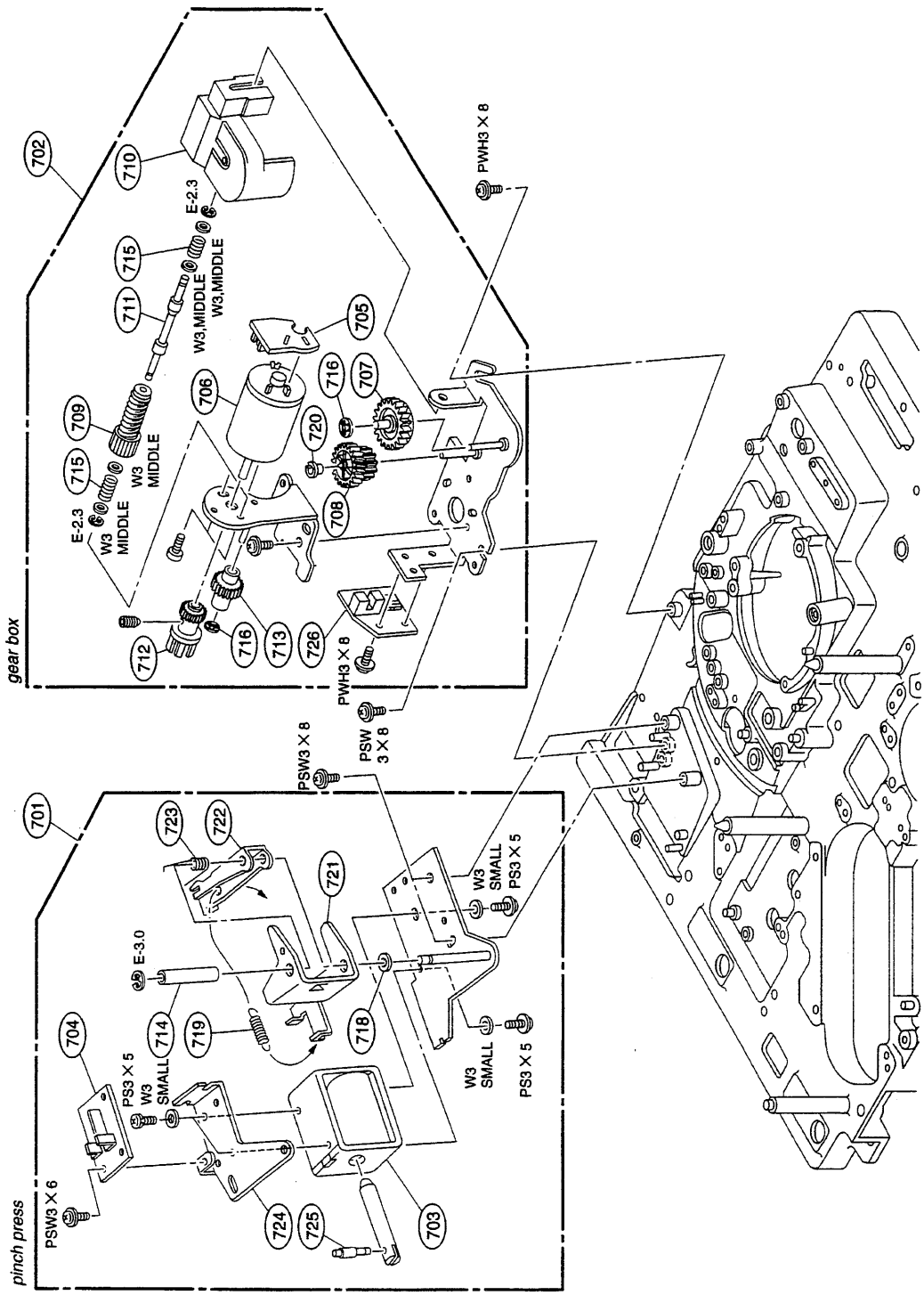


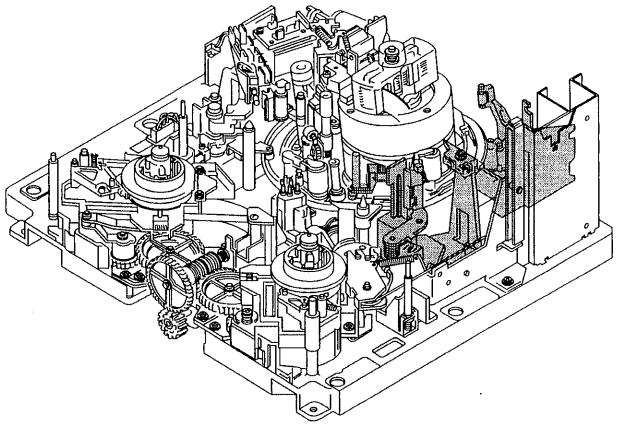
No.	Part No.	SP	Description
601	A-8267-394-C	s	TG-3 ASSY
602	A-8267-422-B	o	HEAD ASSY, AT
603	X-3167-049-3	s	GUIDE ASSY, TG-0
604	X-3167-057-1	o	PLATE, ADJUSTMENT ASSY, AT
605	X-3167-061-2	o	BRACKET ASSY, AT
606	X-3167-142-2	o	PLATE, SHIELD ASSY, AT
607	X-3167-203-4	o	CLEANER ASSY, TWIN TAPE
608	1-698-179-12	s	MOTOR, DC (CAPSTAN)
609	2-279-715-01	s	RIVET, NYLON
610	3-180-403-01	o	HOLDER, SENSOR
611	3-180-669-02	s	FLANGE, FIXED GUIDE USE
612	3-180-670-01	o	NUT, FIXED GUIDE ADJUSTMENT
613	3-180-826-01	o	GOOSENECK PLATE
614	3-180-829-04	o	CASE, SHIELD AT
615	3-181-489-01	s	FLANGE, DIA. 8
616	3-181-491-01	o	SLEEVE, DIA. 6
617	3-181-979-01	o	SPRING, COMPRESSION
618	3-181-980-01	o	SPACER, AT
619	3-738-730-01	s	SPRING, COMPRESSION
620	8-825-778-23	s	HEAD, AUDIO EPS244-2103G
621	1-543-316-31	s	HEAD, SENSING (SMALL TYPE)
622	3-180-869-04	s	PLATE, (S)
623	3-183-823-01	o	BRACKET, GUIDE RETAINER
624	3-669-316-01	s	SPRING, COMPRESSION


601
612
615
616
611
619
TG-3
602
620
606
613
614
*1
W2
P2 X 3
PSW3 X 8
AT head
SET SCREW, SLOT3 X 4 (FLAT POINT)
PS2 X 5
605
SET SCREW, SLOT3 X 4 (FLAT POINT)
604
P2.6 X 25
617
618
PSW3 X 8
PWH3 X 8
LW3,TYPE B
PWH3 X 8
608
S plate
PS2 X 6
N2.6
W2.6
624
623
622
603
PS2 X 6
607
609
PS2 X 6
621
610
PWH3 X 8



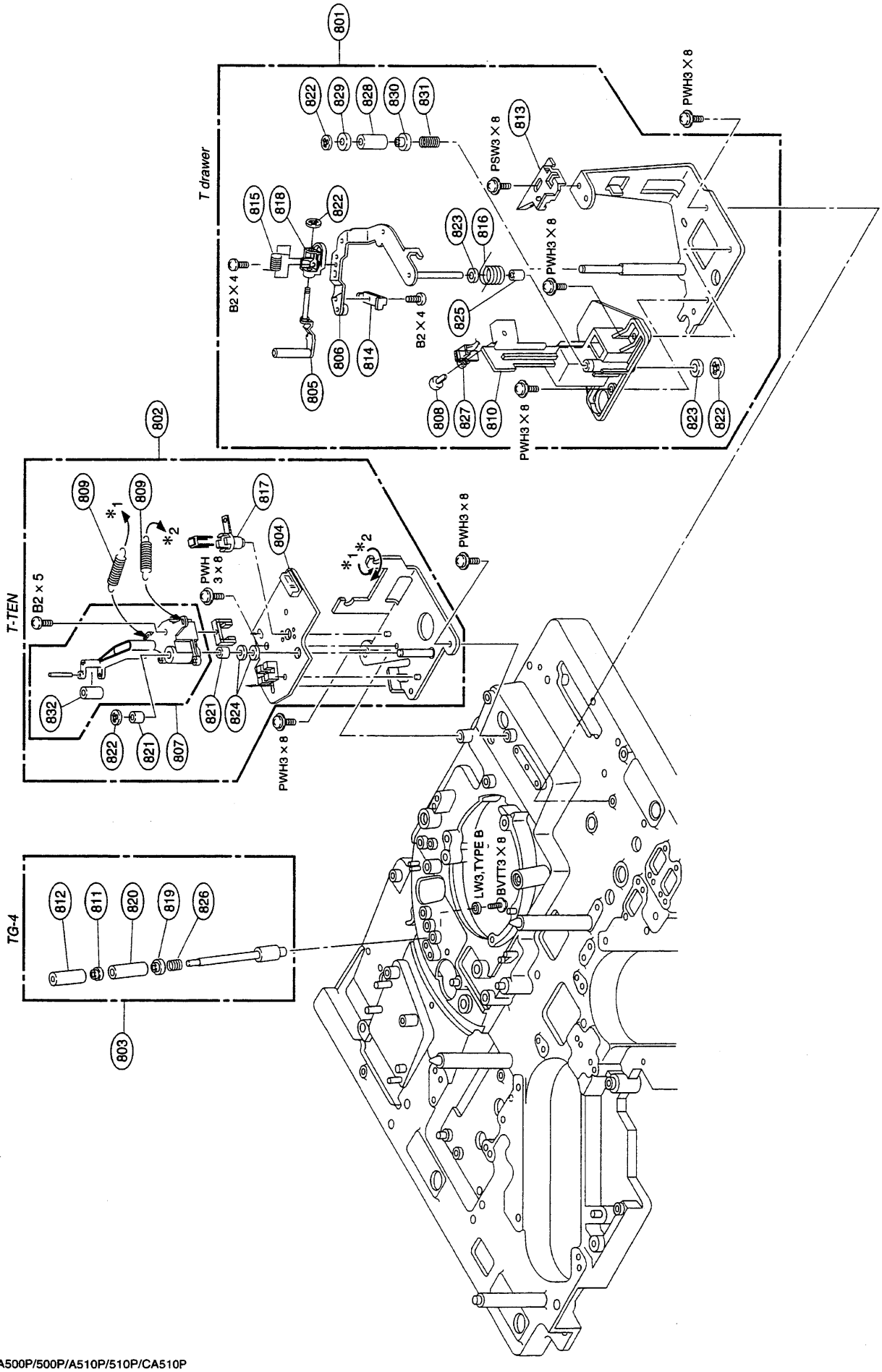
No.	Part No.	SP	Description
701	A-6749-117-C	o	PRESS ASSY, PINCH
702	A-8267-424-A	s	BOX ASSY, GEAR
703	1-454-338-11	s	SOLENOID, PLUNGER
704	1-622-596-11	o	PRINTED CIRCUIT BOARD, PD-35
705	1-648-570-11	o	PRINTED CIRCUIT BOARD, CCM-15
706	1-698-152-11	s	MOTOR (SVD-1449), DC
707	3-180-717-01	s	GEAR, RING
708	3-180-718-01	s	GEAR, DRIVE
709	3-180-719-01	s	GEAR, WORM
710	3-180-720-01	o	GUARD, WORM
711	3-180-843-02	o	SHAFT, WORM
712	3-180-844-01	s	GEAR, (M)
713	3-180-845-01	s	GEAR, (B)
714	3-653-382-01	o	SPACER (4x25)
715	3-659-324-00	s	SPRING, COMPRESSION
716	3-669-596-01	s	WASHER (2.3), STOPPER
718	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
719	3-701-788-XX	s	SPRING, TENSION (12T)
720	3-703-074-01	s	CAP 3, SHAFT
721	3-717-246-01	o	LEVER, PRESS, P
722	3-717-247-01	o	LIMITER, P
723	3-717-248-01	o	SPRING
724	3-717-249-01	o	STOPPER, P
725	3-717-250-02	o	SHAFT, JOINT, P
726	1-640-163-12	o	PRINTED CIRCUIT BOARD, PTC-54

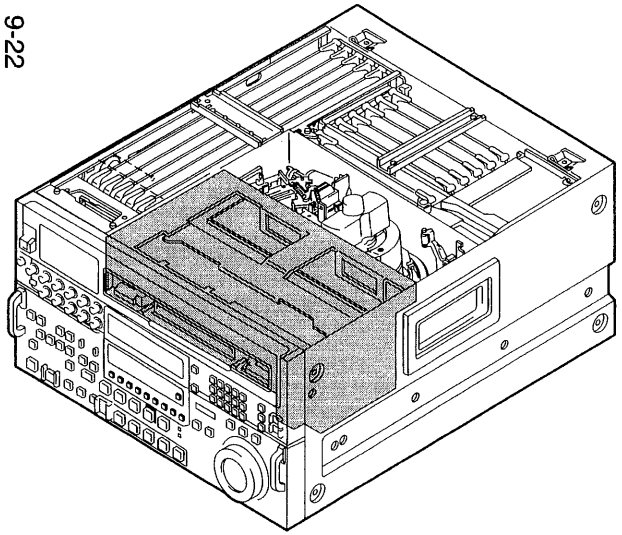

gear box
pinch press
PWH3 X 8
PWH3 X 8
PSW3 X 8
PSW 3 X 8
PSW3 X 6
E-2.3
E-3.0
W3,MIDDLE
W3 MIDDLE
W3 SMALL
PS3 X 5
702
710
715
711
705
706
716
707
709
720
708
712
713
726
701
723
722
721
704
714
719
718
724
725
703



No.	Part No.	SP	Description
801	A-8274-876-C	s	DRAWER ASSY, T
802	A-8267-423-C	s	T-TEN ASSY
803	A-8267-555-D	s	TG-4 ASSY
804	A-8276-628-A	o	MOUNTED CIRCUIT BOARD, TR-79
805	X-3678-288-2	s	GUIDE ASSY, SLANT
806	X-3167-063-4	s	ARM ASSY, DRAWING, T
807	X-3167-064-5	s	ARM ASSY, T TEN
808	2-279-715-01	s	RIVET, NYLON
809	3-180-262-01	s	SPRING, TENSION
810	3-180-404-02	o	BASE, DRAWING, T
811	3-180-669-02	s	FLANGE, FIXED GUIDE USE
812	3-180-670-01	o	NUT, FIXED GUIDE ADJUSTMENT
813	3-180-708-01	s	PLATE, SLANT GUIDE ADJUSTMENT
814	3-180-710-03	s	GUARD, DRAWER
815	3-180-715-01	s	SPRING, (A) TORSION COIL
816	3-180-716-02	s	SPRING, (B) TORSION COIL
817	3-180-861-01	o	HOLDER, DME
818	3-180-863-03	s	BASE, SLANT GUIDE
819	3-190-819-01	s	FLANGE, DIA. 8
820	3-181-490-01	o	SLEEVE, DIA. 7

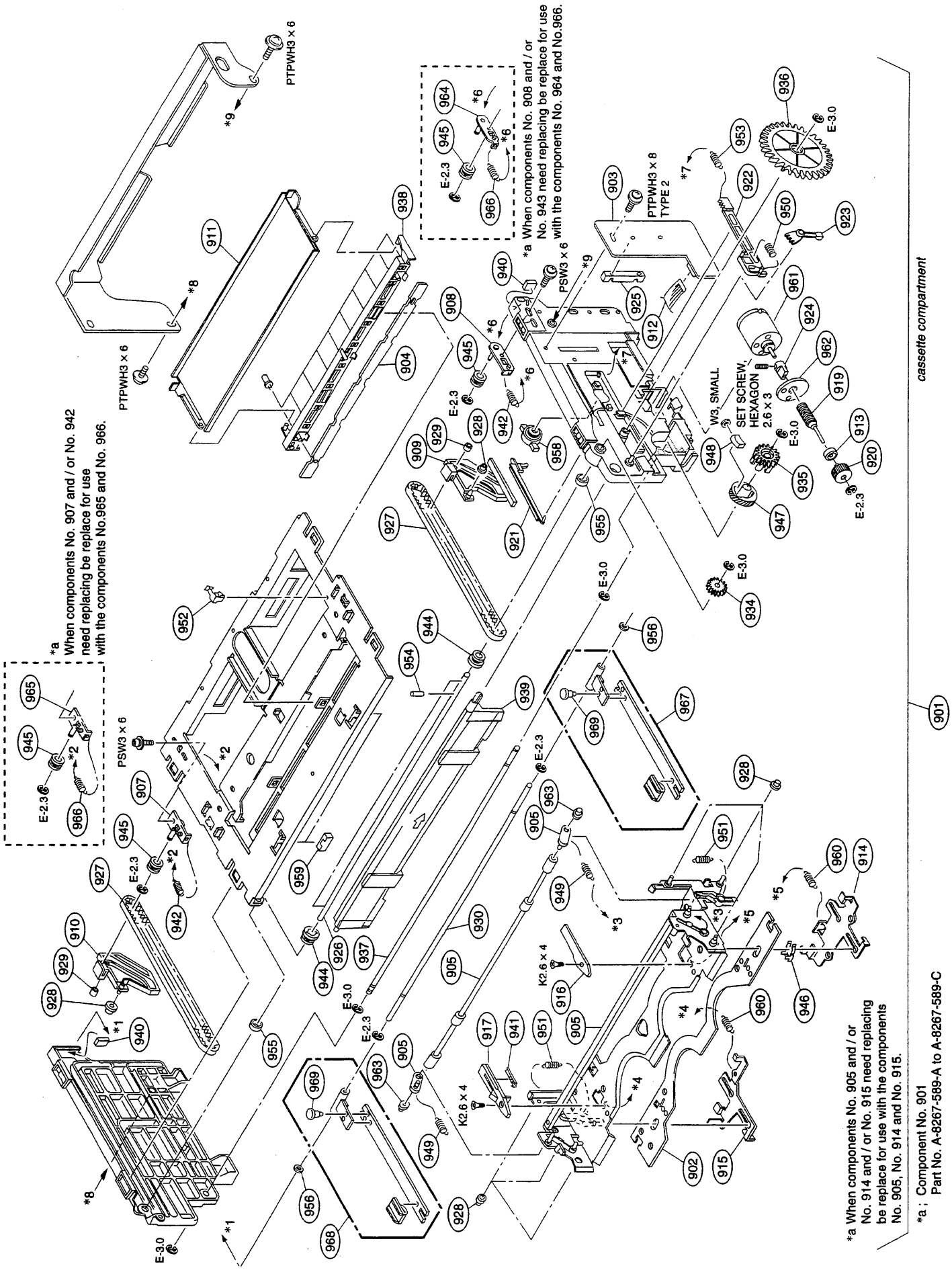
No.	Part No.	SP	Description
821	3-645-028-00	s	BEARING, BALL
822	3-669-596-01	s	WASHER (2.3), STOPPER
823	3-701-439-01	s	WASHER, POLY 3mm DIA., 0.13T
	3-701-439-11	s	WASHER, POLY 3mm DIA., 0.25T
	3-701-439-21	s	WASHER, POLY 3mm DIA., 0.50T
824	3-701-439-21	s	WASHER, POLY 3mm DIA., 0.50T
825	3-717-253-01	s	ROLLER
826	3-738-730-01	s	SPRING, COMPRESSION
827	1-543-316-31	s	HEAD, SENSING (SMALL TYPE)
828	X-3167-347-2	s	ROLLER ASSY, GUIDE
829	3-183-460-02	s	FLANGE (B), UPPER
830	3-183-462-02	s	FLANGE, LOWER
831	4-879-563-00	s	SPRING, COMPRESSION
832	X-3167-052-2	s	ROLLER ASSY, ONEBARE

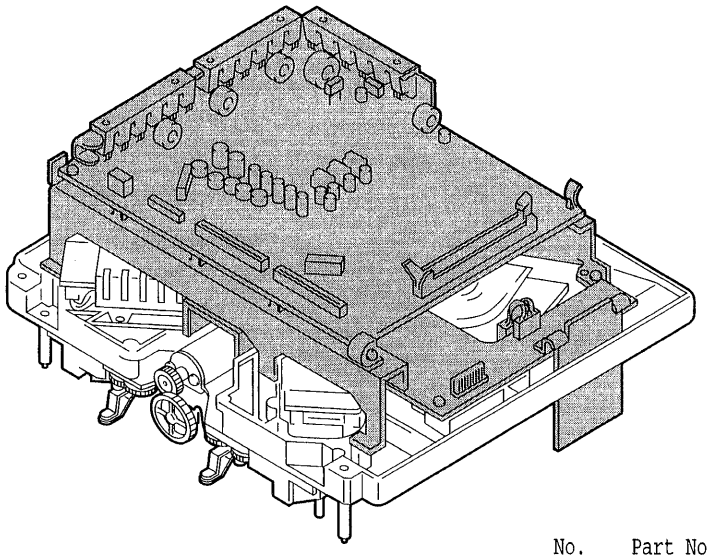

T drawer
T-TEN
TG-4
PWH3 X 8
PSW3 X 8
B2 X 4
PWH 3 X 8
B2 X 5
PWH3 x 8
LW3,TYPE B
BVTT3 X 8



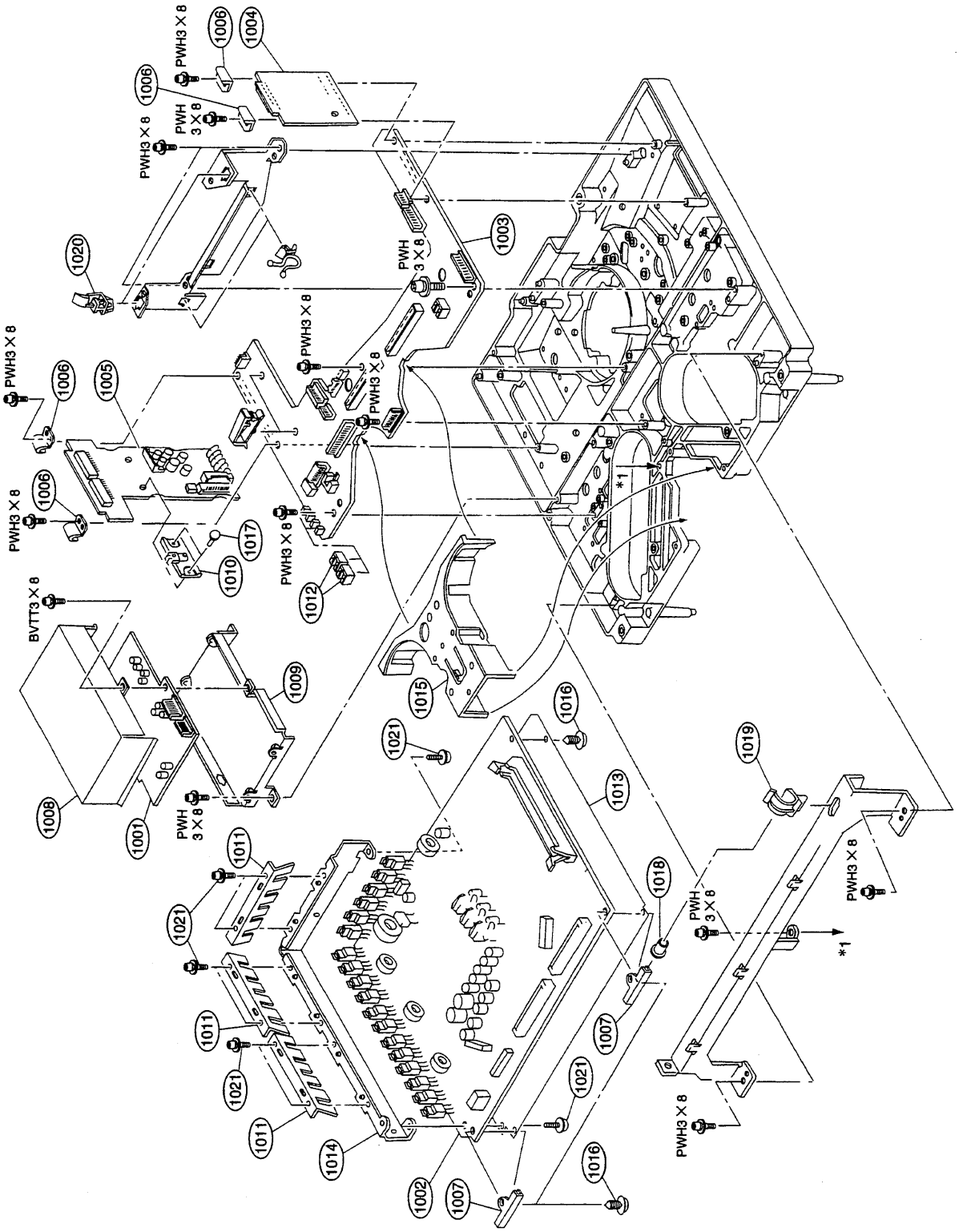
No.	Part No.	SP	Description
901	A-8267-589-F	s	CASSETE COMPRATMENT ASSY
902	A-8276-625-A	o	MOUNTED CIRCUIT BOARD, PC-70
903	A-8276-626-B	o	MOUNTED CIRCUIT BOARD, CL-29
904	A-8276-627-A	o	MOUNTED CIRCUIT BOARD, LP-81
905	A-8276-957-B	s	STAGE ASSY
907	X-3167-849-1	o	DECK (L) ASSY, PULLEY
908	X-3167-848-1	o	DECK (R) ASSY, PULLEY
909	X-3167-447-3	o	SLIDER (R) ASSY
910	X-3167-446-3	o	SLIDER (L) ASSY
911	X-3166-217-1	s	MIRROR ASSY
912	1-665-836-11	s	PC BOARD, CL-41 FLEXIBLE
913	3-188-745-01	s	BEARING, BALL, (NO FRANGE)
914	3-171-367-06	o	SWITCH (R), IN
915	3-171-398-05	o	SWITCH (L), IN
916	3-171-399-02	o	GUIDE (R), CASSETTE
917	3-171-400-04	s	GUIDE (L), CASSETTE
919	3-171-418-03	s	WORM
920	3-171-419-11	s	WHEEL
921	3-171-420-04	o	SHUTTER
922	3-171-421-01	o	SLIDER, DOOR SWITCHING
923	3-171-422-01	o	LEVER, DOOR SWITCHING
924	3-171-423-02	o	JOINT, MOTOR
925	3-171-424-02	o	HOLDER, SENSOR
926	3-171-457-03	o	SHAFT, JOINT
927	3-171-458-01	s	BELT, TIMING
928	3-171-459-01	s	ROLLER, GUIDE
929	3-171-460-01	s	ROLLER, SLIDER
930	3-171-461-04	o	SHAFT, RETAINER, L CASSETTE
934	3-171-465-01	o	GEAR, DRIVING
935	3-171-466-02	o	GEAR, LIMITER
936	3-171-479-01	o	GEAR, MIDWAY
937	3-171-480-01	o	SHAFT, WORM WHEEL
938	3-171-508-04	o	HOLDER, LAMP
939	3-171-510-02	s	DOOR, CASSETTE
940	3-174-908-01	s	STOPPER
941	3-176-139-01	s	SPRING, C GUIDE
942	3-194-680-01	s	SPRING, TENSION
944	3-176-583-01	o	PULLEY (A)
945	3-176-584-01	o	PULLEY (B)
946	3-176-598-02	o	SPRING, GROUND
947	3-181-430-01	o	WHEEL, WORM
948	3-181-431-01	o	RUBBER, LIMITER
949	3-548-757-00	s	SPRING, TENSION
950	3-579-759-00	s	SPRING, COMPRESSION
951	3-646-214-00	s	SPRING
952	3-671-150-01	o	CLAMP
953	3-672-461-00	s	SPRING, TENSION
954	3-677-193-00	o	PIN, STOPPER
955	3-698-217-11	s	BEARING (NO FLANGE), BALL
956	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T

No.	Part No.	SP	Description
957	3-701-443-21	s	WASHER, POLY 5mm DIA., 0.50T (for S/N 10001 thru. 12891: DVW-A500P(EK)) (for S/N 10001 thru. 10054: DVW-A500P(UC)) (for S/N 10001 thru. 11700: DVW-500P(EK)) (for S/N 10001 thru. 10030: DVW-500P(UC)) (for S/N 10001 thru. 11950: DVW-A500(UC)) (for S/N 10001 thru. 11019: DVW-500(UC)) (for S/N 10001 thru. 10620: DVW-A500(J)) (for S/N 10001 thru. 10100: DVW-500(J)) (for S/N 10001 thru. 11109: DVW-A510P(EK)) (for S/N 10001 thru. 10340: DVW-510P(EK)) (for S/N 10001 thru. 10474: DVW-A510(UC)) (for S/N 10001 thru. 10139: DVW-510(UC)) (for S/N 10001 thru. 10185: DVW-A510(J)) (for S/N 10001 thru. 10030: DVW-510(J))
958	3-712-786-01	s	DAMPER, OIL
959	3-717-369-04	o	STOPPER, DOOR
960	4-858-799-00	s	SPRING, TENSION
961	1-698-152-11	s	MOTOR, DC (SVD-1449)
962	3-182-706-01	s	SPACER
963	3-171-459-01	s	ROLLER, GUIDE (for S/N 10001 thru. 12891: DVW-A500P(EK)) (for S/N 10001 thru. 10054: DVW-A500P(UC)) (for S/N 10001 thru. 11700: DVW-500P(EK)) (for S/N 10001 thru. 10030: DVW-500P(UC)) (for S/N 10001 thru. 11950: DVW-A500(UC)) (for S/N 10001 thru. 11019: DVW-500(UC)) (for S/N 10001 thru. 10620: DVW-A500(J)) (for S/N 10001 thru. 10100: DVW-500(J)) (for S/N 10001 thru. 11109: DVW-A510P(EK)) (for S/N 10001 thru. 10340: DVW-510P(EK)) (for S/N 10001 thru. 10474: DVW-A510(UC)) (for S/N 10001 thru. 10139: DVW-510(UC)) (for S/N 10001 thru. 10185: DVW-A510(J)) (for S/N 10001 thru. 10030: DVW-510(J))
	3-188-273-01	s	ROLLER (B), GUIDE (for S/N 12892 and higher: DVW-A500P(EK)) (for S/N 10055 and higher: DVW-A500P(UC) (for S/N 11701 and higher: DVW-500P(EK)) (for S/N 10031 and higher: DVW-500P(UC)) (for S/N 11951 and higher: DVW-A500(UC)) (for S/N 11020 and higher: DVW-500(UC)) (for S/N 10621 and higher: DVW-A500(J)) (for S/N 10101 and higher: DVW-500(J)) (for S/N 11110 and higher: DVW-A510P(EK)) (for S/N 10341 and higher: DVW-510P(EK)) (for S/N 10475 and higher: DVW-A510(UC)) (for S/N 10140 and higher: DVW-510(UC)) (for S/N 10186 and higher: DVW-A510(J)) (for S/N 10031 and higher: DVW-510(J))
964	X-3167-848-1	O	DECK (R) ASSY, PULLEY
965	X-3167-849-1	O	DECK (L) ASSY, PULLEY
966	3-190-575-01	s	SPRING, TENSION
967	X-3168-049-1	s	LEAF SPRING(R) ASSY
968	X-3168-050-1	s	LEAF SPRING(L) ASSY
969	3-531-576-11	s	RIVET


*a When components No. 907 and / or No. 942 need replacing be replace for use with the components No.965 and No. 966.
*a When components No. 908 and / or No. 943 need replacing be replace for use with the components No. 964 and No.966.
PTPWH3 x 6
PSW3 x 6
PTPWH3 x 8 TYPE 2
W3, SMALL SET SCREW, HEXAGON 2.6 x 3
K2.6 x 4
E-2.3
E-3.0
cassette compartment
*a When components No. 905 and / or No. 914 and / or No. 915 need replacing be replace for use with the components No. 905, No. 914 and No. 915.
*a ; Component No. 901
Part No. A-8267-589-A to A-8267-589-C



No.	Part No.	SP	Description
1001	A-8275-398-A	o	MOUNTED CIRCUIT BOARD, DT-34BP
1002	A-8313-031-A	o	MOUNTED CIRCUIT BOARD, DR-307 (for S/N 14221 and higher: DVW-A510P(EK)) (for S/N 11355 and higher: DVW-510P(EK)) (for S/N 10076 and higher: DVW-CA510P(EK))
	A-8275-069-B	o	MOUNTED CIRCUIT BOARD, DR-200P (for S/N 10001 thru. 14220: DVW-A510P(EK)) (for S/N 10001 thru. 11354: DVW-510P(EK)) (for S/N 10001 thru. 10075: DVW-CA510P(EK))
1003	A-8276-781-B	o	MOUNTED CIRCUIT BOARD, HN-181B
1004	A-8276-621-A	o	MOUNTED CIRCUIT BOARD, HN-184
1005	A-8276-623-B	o	MOUNTED CIRCUIT BOARD, HN-185
1006	3-180-680-01	o	BRACKET, HANDLE (B), HN
1007	3-180-760-01	o	SUPPORT, DR
1008	3-180-762-02	o	COVER (A), DT SHIELD
1009	3-180-763-02	o	COVER (B), DT SHIELD
1010	3-180-819-02	o	BRACKET, DEW SENSOR
1011	3-180-852-01	o	BRACKET, TRANSISTOR
1013	3-180-873-06	o	SHEET, INSULATING (DR)
1014	3-180-886-02	o	HEAT SINK (DR)
1015	3-181-651-01	o	COVER (RS), HARNESS
1016	3-531-576-11	s	RIVET
1017	3-531-576-21	s	RIVET
1018	3-646-084-00	o	CAP, REINFORCEMENT
1019	3-646-086-00	o	HOLDER, ROD
1020	3-703-141-00	o	HOLDER, PRINTED CIRCUIT BOARD
1021	3-703-249-01	s	SCREW, PTTWH 3x6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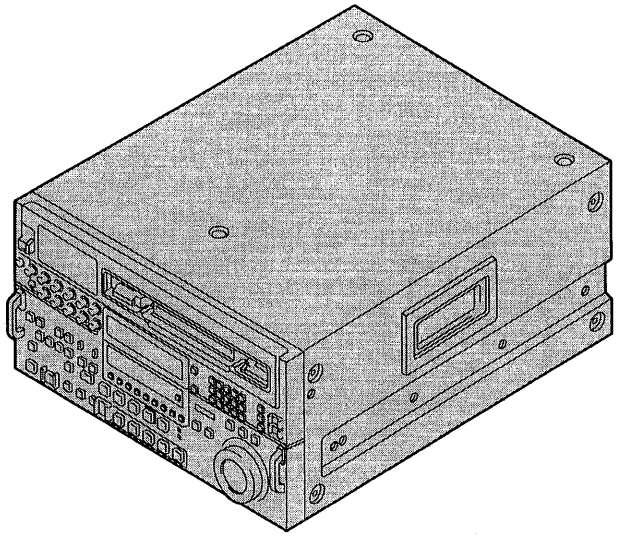
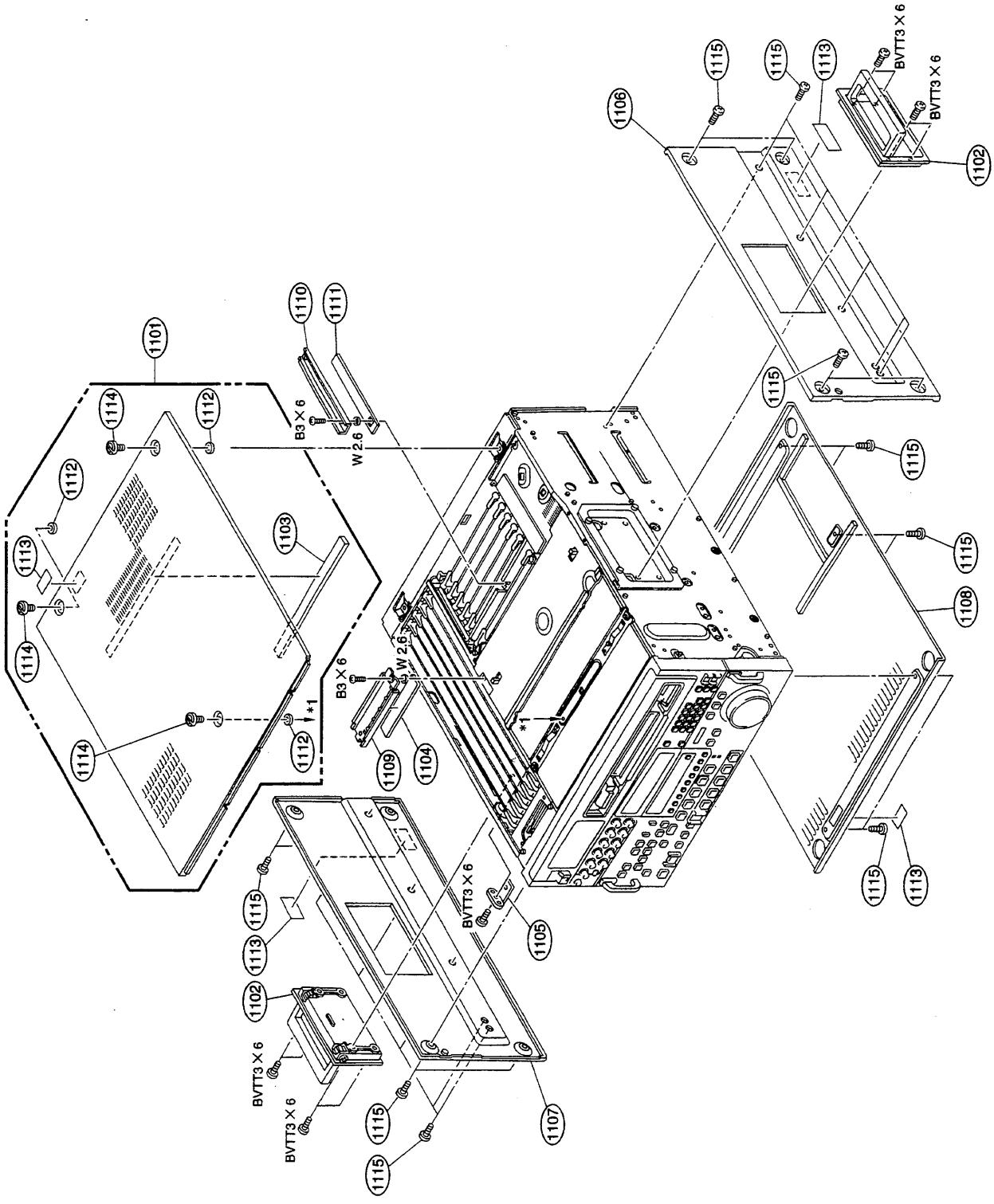


No.	Part No.	SP	Description
1101	A-8267-397-A	o	LID ASSY, ASSY
1102	X-3642-018-3	o	HANDLE ASSY
1103	3-171-369-01	o	LID (A), UPPER, AIR GUARD
1104	3-171-410-01	o	RETAINER (S), PC BOARD
1105	3-171-489-01	o	BRACKET, PLATE, BOTTOM
1106	3-171-533-04	o	CABINET (RIGHT)
1107	3-171-534-04	o	CABINET (LEFT)
1108	X-3167-285-1	o	PLATE ASSY, BOTTOM
1109	3-180-641-01	o	PLATE (L), PC BOARD RETAINER
1110	3-180-642-01	o	PLATE (S), PC BOARD RETAINER
1111	3-180-643-01	o	CUSHION, PC BOARD RETAINER
1112	3-688-102-01	o	SPACER, M4
1113	3-703-848-01	o	LABEL (N), SUB CAUTION (for DVW-A500P/500P(UC))
1114	3-717-392-01	o	SCREW, LID
1115	3-733-690-01	s	+B 4X6 (CU,NI)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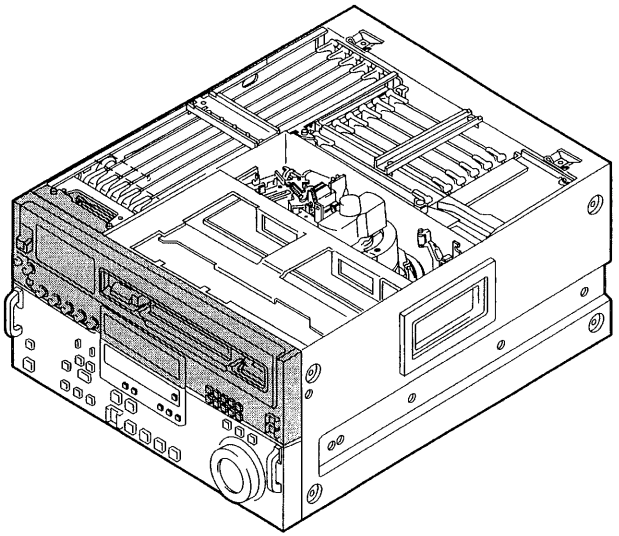
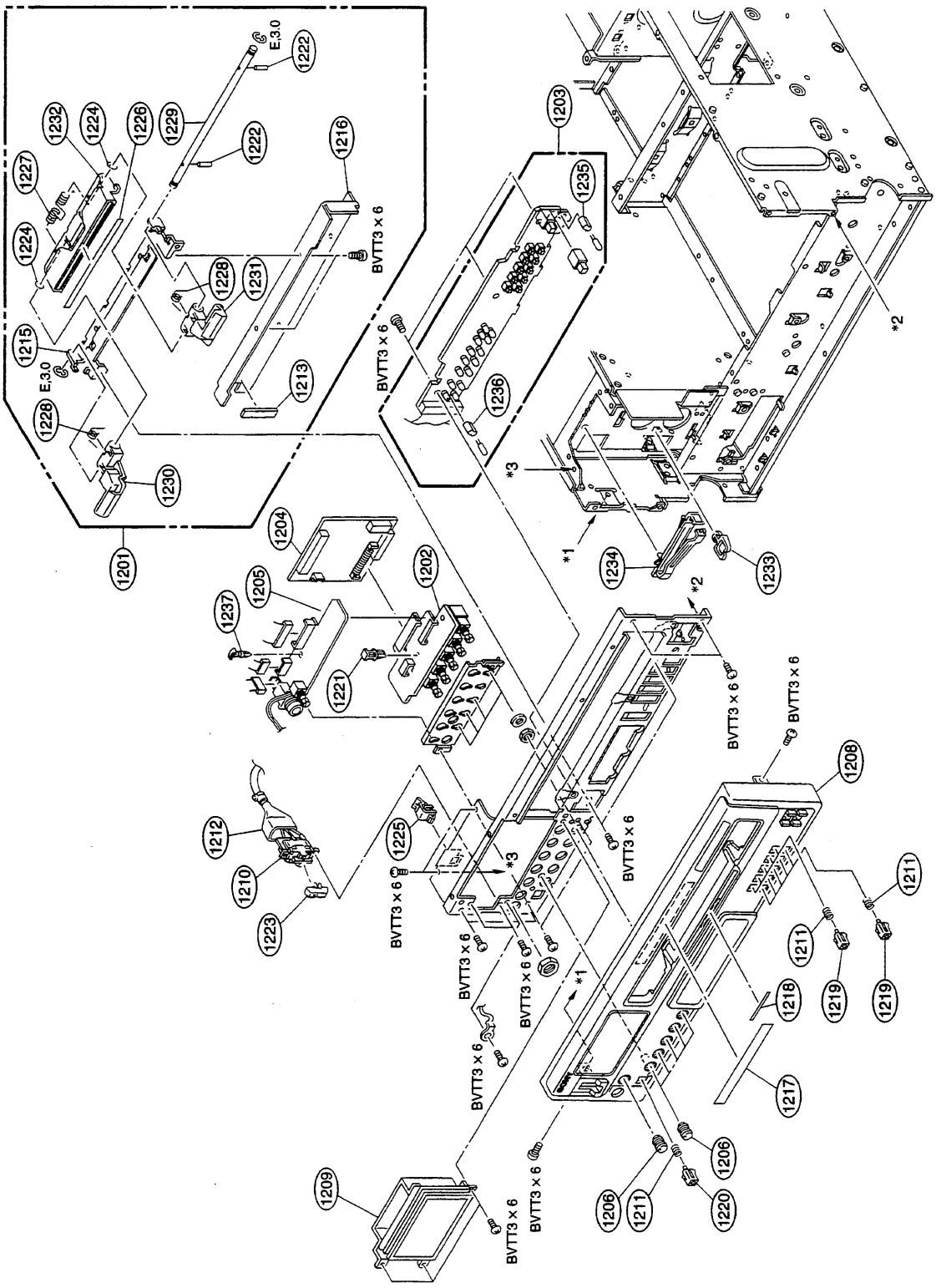


No.	Part No.	SP	Description
1201	A-8267-321-C	o	GUIDE ASSY, SC
1202	A-8275-075-A	o	MOUNTED CIRCUIT BOARD, VR-153
1203	A-8275-210-A	o	MOUNTED CIRCUIT BOARD, SWC-17B
1204	A-8275-077-B	o	MOUNTED CIRCUIT BOARD, FP-58
1205	A-8275-213-A	o	MOUNTED CIRCUIT BOARD, VR-152B
1206	X-3167-825-1	o	KNOB ASSY (P), VOL
1208	X-3167-167-5	o	SUB ASSY, FRONT PANEL
1209	1-517-185-32	s	INDICATOR MODULE, FLUORESCENT
1210 ⚠	1-762-953-11	s	SWITCH, POWER
1211	3-611-769-01	s	SPRING, COMPRESSION
1212	2-269-962-00	o	COVER, SWITCH
1213	3-180-747-01	o	GUARD (S), AIR
1215	3-180-749-02	o	SUPPORT (A), SC GUIDE
1216	3-180-750-02	o	SUPPORT (B), SC GUIDE
1217	3-183-111-01	o	LABEL (for DVW-A510P)
	3-183-474-01	o	LABEL (for DVW-510P)
1218	3-180-813-01	o	LABEL, A/D (only DVW-A510P)
1219	3-180-822-05	s	KEY TOP 6X6
1220	3-181-398-12	s	KEY TOP 6X6
1221	3-682-057-21	s	SPACER (SMALL)
1222	3-677-193-00	o	PIN, STOPPER

No.	Part No.	SP	Description
1223	3-688-814-01	s	CAP, SWITCH
1224	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
1225	3-703-141-00	o	HOLDER, PRINTED CIRCUIT BOARD
1226	3-717-614-01	o	LABEL, C-LOCK OUT
1227	3-717-615-01	o	SPRING
1228	3-717-616-01	o	SPRING
1229	3-717-617-01	o	SHAFT, SC GUIDE
1230	3-717-618-01	o	GUIDE (LEFT), SC
1231	3-717-619-02	o	GUIDE (RIGHT), SC
1232	3-717-620-01	o	PLATE, OUT, C-LOCK
1233	4-314-320-00	o	HOLDER, WIRE
1234	4-874-187-01	o	CLIP, CABLE
1235	4-937-336-11	s	HOLDER, LED
1236	4-937-336-51	o	HOLDER, LED
1237	3-704-198-01	o	SUPPORT, PC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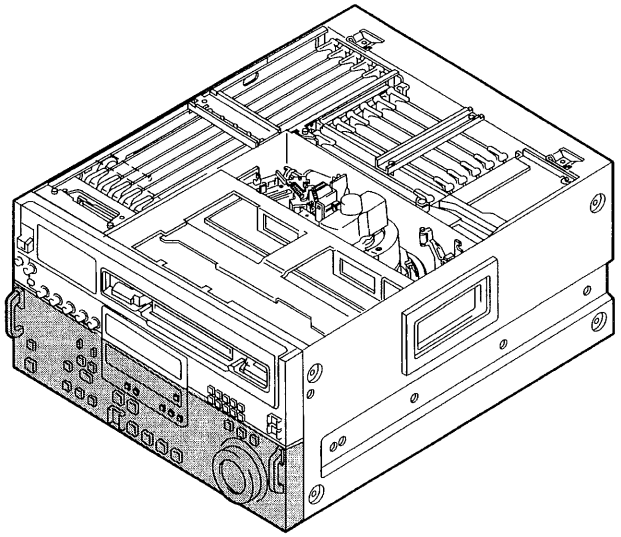
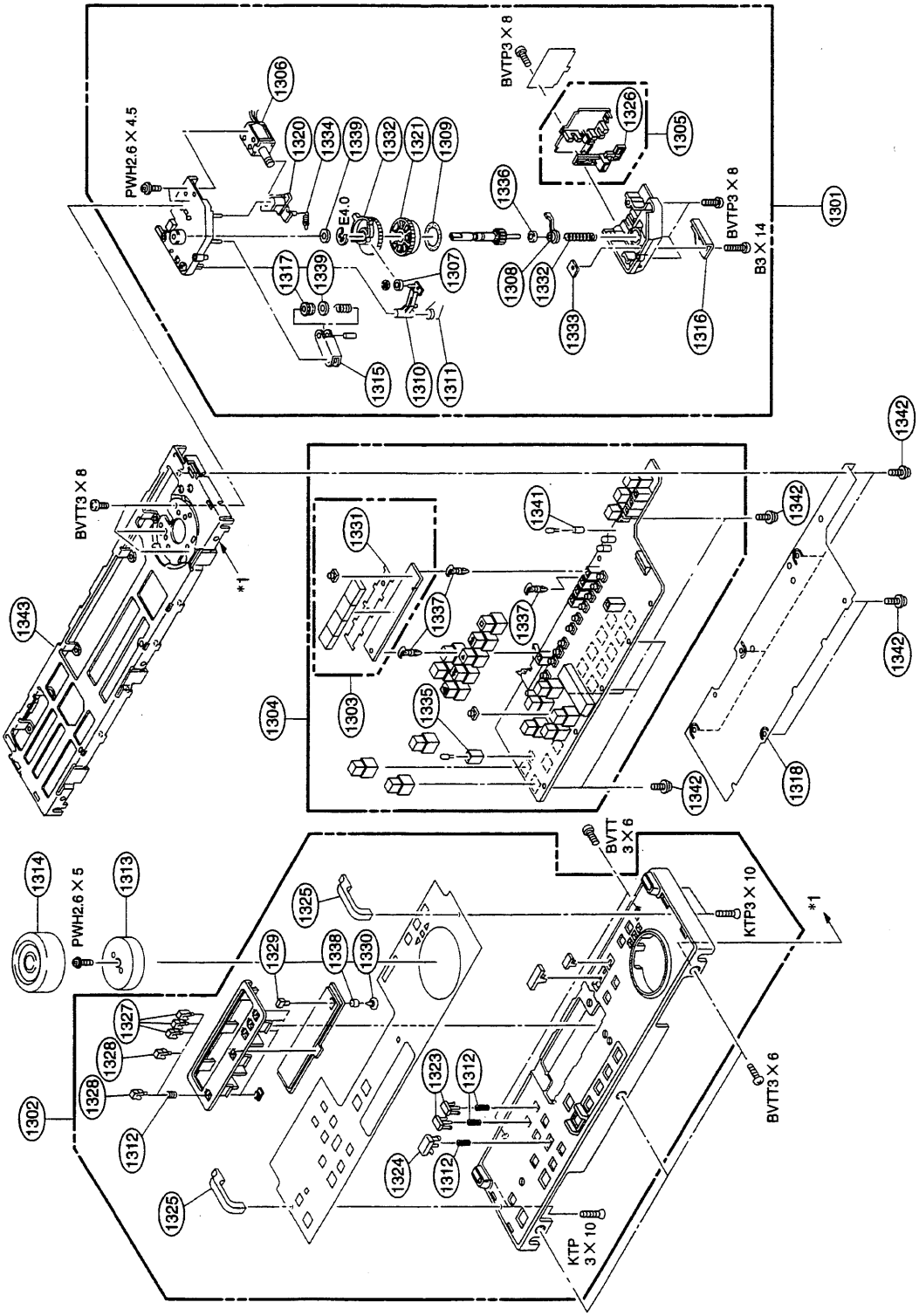


No.	Part No.	SP	Description
1301	A-8267-410-F	s	DIAL ASSY, SEARCH
1302	A-8267-577-B	o	PANEL ASSY, KEY
1303	A-8274-058-A	o	MOUNTED CIRCUIT BOARD, DP-176
1304	A-8275-209-A	o	MOUNTED CIRCUIT BOARD, KY-231B
1305	A-8276-585-B	o	MOUNTED CIRCUIT BOARD, PTC-69
1306	1-454-606-11	s	SOLENOID, PLUNGER
1307	2-124-691-01	s	ROLLER
1308	2-124-693-02	s	PLATE
1309	2-124-695-01	o	PLATE, CUSHION
1310	2-143-603-01	o	ARM, RETURN
1311	2-143-613-01	s	SPRING, TORSION
1312	2-217-533-00	s	SPRING, COMPRESSION
1313	3-180-632-01	o	KNOB, DIAL
1314	3-180-633-03	s	RUBBER, DIAL KNOB
1315	3-180-638-01	o	ARM, JOINT GEAR
1316	3-180-639-01	o	PLATE, MODE SELECTION
1317	3-180-640-02	o	GEAR, JOINT
1318	3-180-644-02	o	PROTECTOR, KY
1319	3-180-648-01	o	PROTECTOR, PTC
1320	3-180-649-02	o	LINK, SOLENOID
1321	3-180-650-03	s	FG-RING
1322	3-180-651-04	o	CAM, SD
1323	3-180-816-03	s	KEY TOP, 5x9
1324	3-180-817-03	s	KEY TOP, 9x16
1325	3-180-858-01	o	HANDLE
1326	3-180-859-02	o	HOLDER, SENSOR
1327	3-181-398-02	s	KEY TOP 6x6 (WHITE)
1328	3-181-398-12	s	KEY TOP 6x6 (GRAY)
1329	3-181-765-01	s	KEY TOP 3x5
1330	3-181-766-01	s	PIN, KEY TOP
1331	3-181-833-02	o	SPACER
1332	3-181-956-01	o	SPRING, COMPRESSION
1333	3-618-225-03	s	NUT, PLATE
1334	3-645-189-11	s	SPRING, TENSION
1335	3-668-124-00	o	HOLDER, LED
1336	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
1337	3-704-198-11	o	SUPPORT, PC
1338	3-686-086-01	s	CUSHION, BUTTON
1339	3-701-443-21	s	WASHER, POLY 5mm DIA., 0.50T
1341	4-937-336-51	o	HOLDER, LED
1342	3-703-249-01	s	SCREW, PTTWH 3x6
1343	3-180-904-03	o	CHASSIS, KEY PANEL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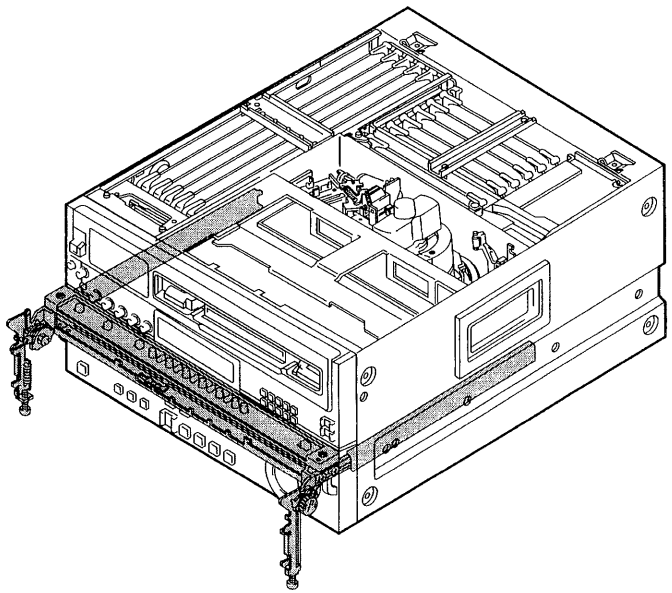
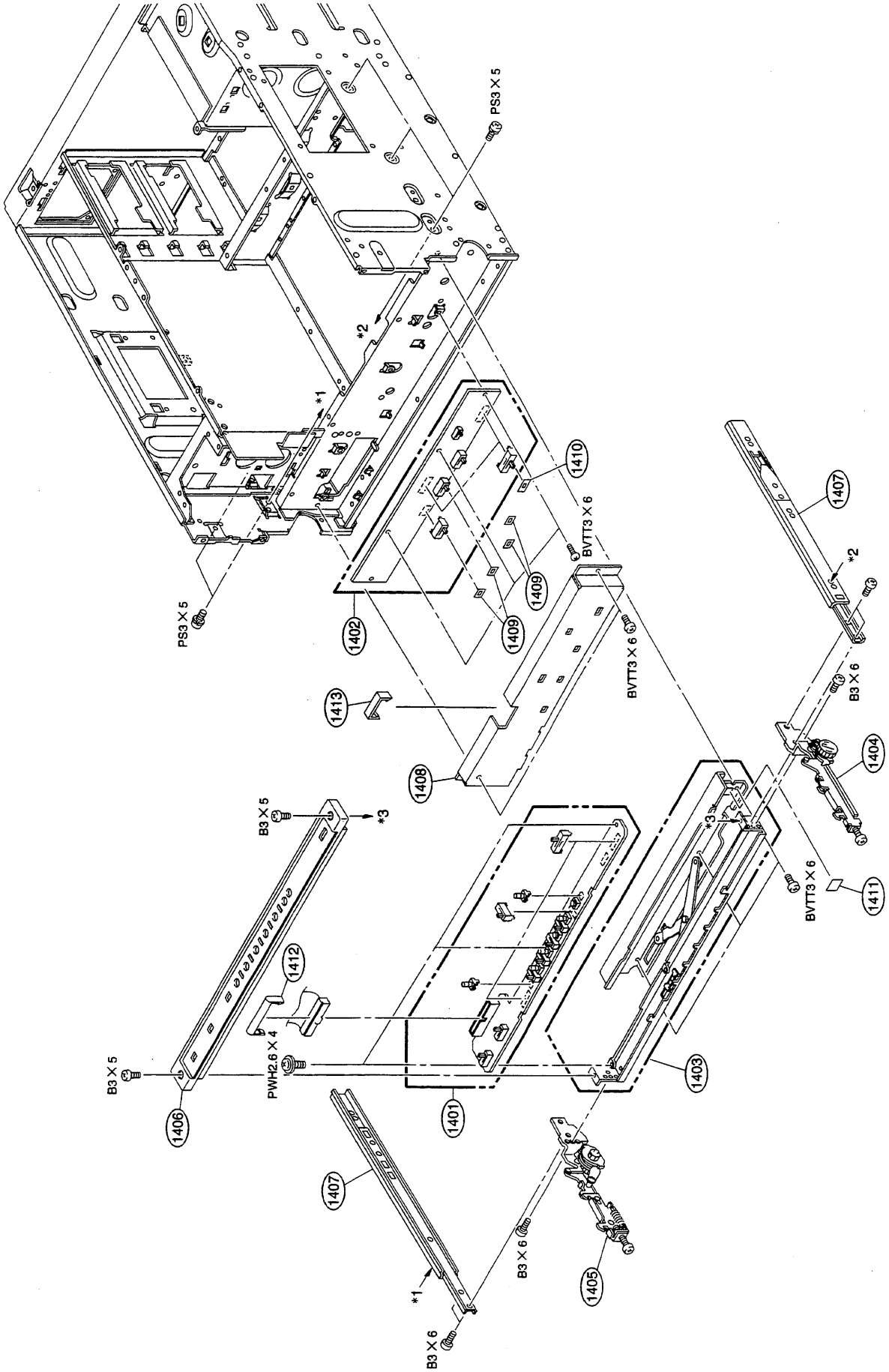


No.	Part No.	SP	Description
1401	A-8275-341-A	o	MOUNTED CIRCUIT BOARD, SWC-18BA (for DVW-A510P/CA510P)
	A-8275-211-A	o	MOUNTED CIRCUIT BOARD, SWC-18B (for DVW-510P)
1402	A-8275-350-A	o	MOUNTED CIRCUIT BOARD, SWC-19BAP (for DVW-A510P/CA510P)
	A-8275-351-A	o	MOUNTED CIRCUIT BOARD, SWC-19BP (for DVW-510P)
1403	X-3167-022-4	o	CHASSIS ASSY, SUB
1404	X-3167-065-3	o	SLIDER (R) ASSY
1405	X-3167-066-3	o	SLIDER (L) ASSY
1406	X-3167-298-3	o	PANEL ASSY (PAL), SUB (for DVW-A510P/CA510P)
	X-3167-349-3	o	PANEL ASSY (PAL), SUB (for DVW-510P)
1407	X-3717-253-1	o	RAIL ASSY, SLIDE
1408	3-183-115-01	o	PLATE, ORNAMENTAL APP SWC-19 (for DVW-A510P/CA510P)
	3-183-476-01	o	PLATE, ORNAMENTAL DPP SWC-19 (for DVW-510P)
1409	3-180-814-01	o	PLATE, ORNAMEN(SMALL), SLIDE SW
1410	3-717-393-03	o	PLATE (LARGE), ORNAMENTAL, SW
1411	3-185-303-01	o	SEAL, EJECT
1412	3-188-703-02	s	CONNECTOR, PLATE, FIXED
1413	3-191-626-01	s	PLATE(A), CONNECTOR FIXED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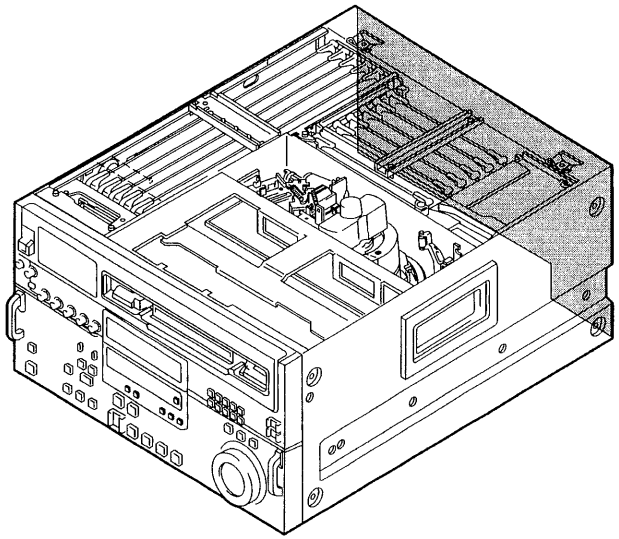
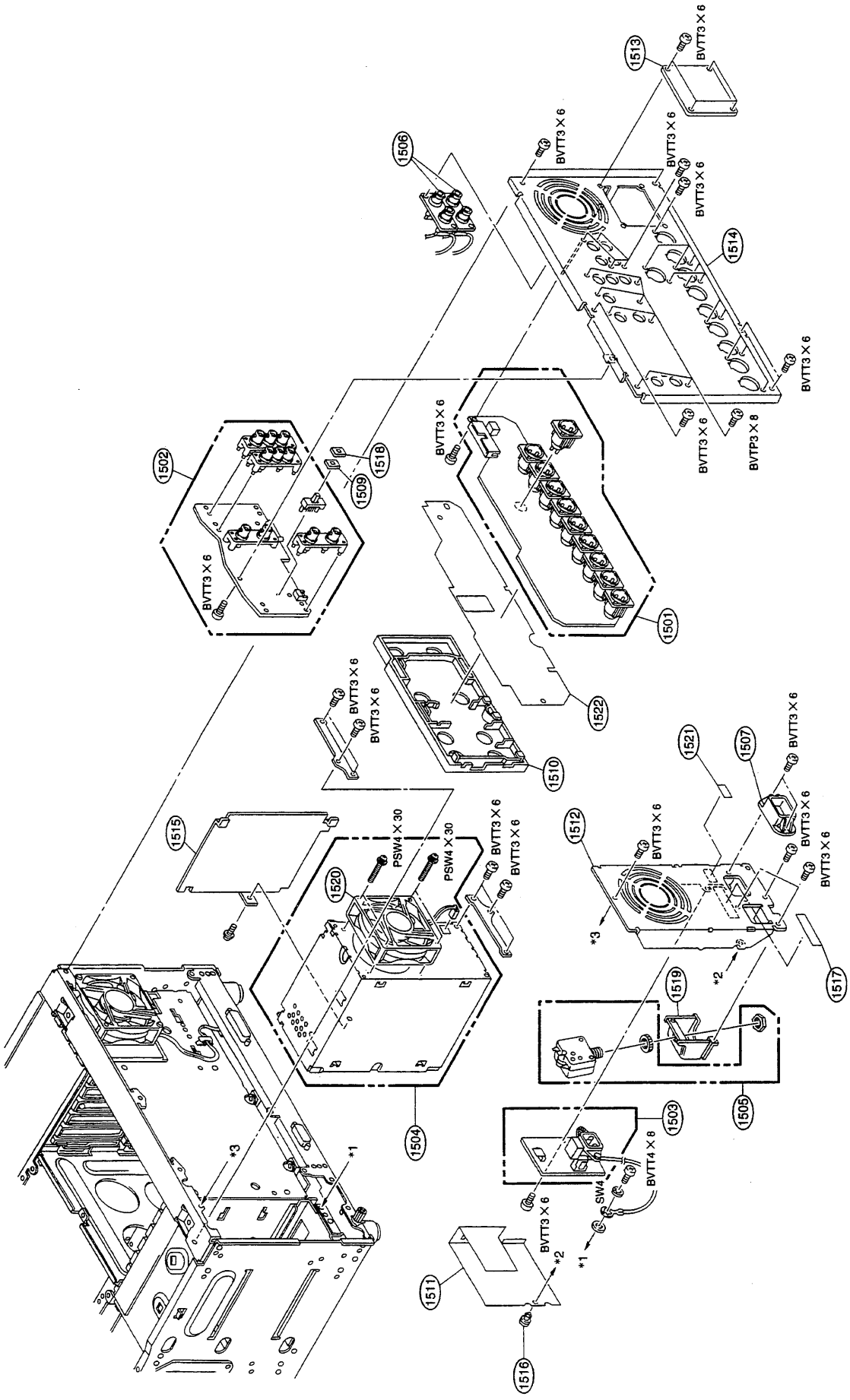


No.	Part No.	SP	Description
1501	A-8275-207-A	o	MOUNTED CIRCUIT BOARD, CP-220B
1502	A-8275-214-A	o	MOUNTED CIRCUIT BOARD, CP-218B
1503	A-8276-624-A	o	MOUNTED CIRCUIT BOARD, AC-139
1504 ⚠	1-413-831-24	s	SWITCHING REGULATOR
1505 ⚠	1-576-036-11	s	BREAKER, CIRCUIT
1506	1-750-881-11	s	CONVERTER, COAXIAL CONNECTOR
1507	2-990-241-02	s	HOLDER (A), PLUG
1509	3-173-384-01	o	SPACER, ORNAMENTAL PLATE
1510	3-180-477-03	o	COVER, HARNESS
1511	3-180-661-03	o	SHEET, INSULATED
1512	3-180-662-01	o	PANEL, POWER
1513	3-180-675-01	o	PANEL, OP
1514	3-181-084-02	o	PANEL, (P) CONNECTOR
1515	3-181-886-01	o	PLATE, SHIELD, POWER
1516	3-531-576-01	s	RIVET
1518	3-717-394-03	o	PLATE (SMALL), ORNAMENTAL, SW
1519	3-727-029-01	o	BRACKET, BREAKER
1520	1-541-431-41	s	FAN, DC
1522	3-184-425-02	o	INSULATOR, CONNECTOR PANEL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BVTT3 X 6
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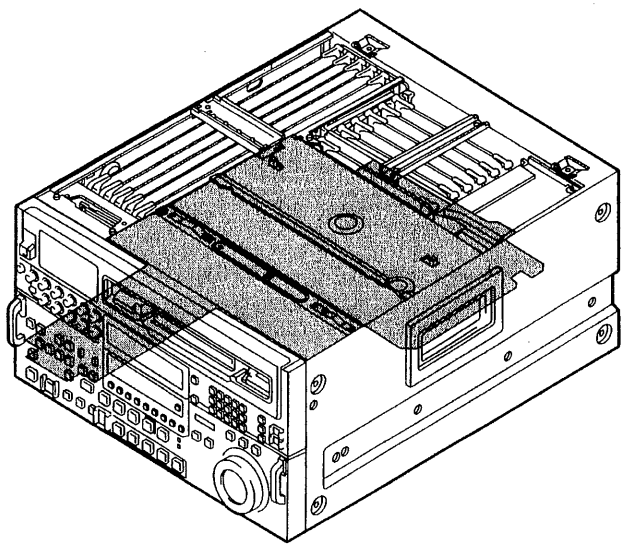
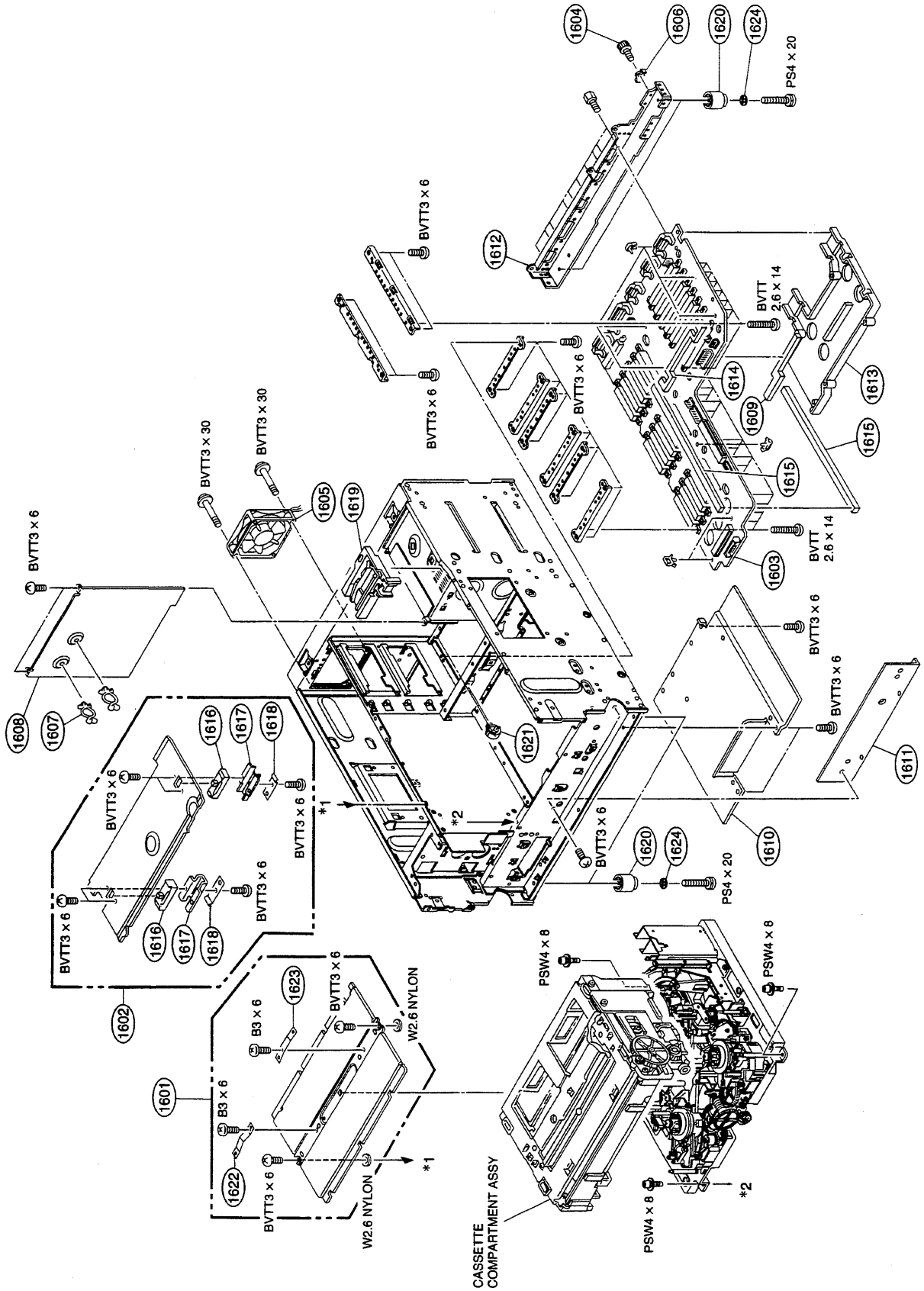
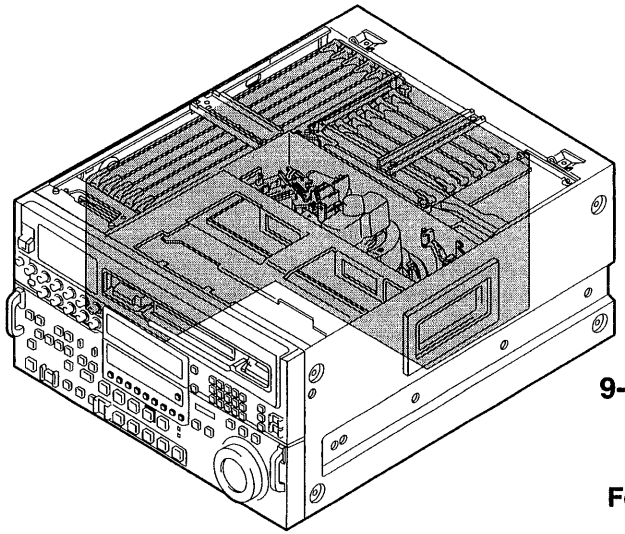
BVTT3 X 6
1515
PSW4 X 30
PSW4 X 30
BVTT3 X 6
BVTT3 X 6
1520
1512
BVTT3 X 6
BVTT3 X 6
BVTT3 X 6
*3
*2
1517
1519
1505
1504
1503
BVTT4 X 8
SW4
BVTT3 X 6
*2
*1
1511
1516
*3
*1



No.	Part No.	SP	Description
1601	A-8267-384-D	s	BRACKET ASSY, CASSETTE COMPARTMENT
1602	A-8267-385-B	o	PLATE (MD) ASSY
1603	A-8276-622-A	o	MOUNTED CIRCUIT BOARD, MB-441A (for DVW-A500P/A510P)
	A-8276-657-A	o	MOUNTED CIRCUIT BOARD, MB-441 (for DVW-500P/510P)
1604	X-2068-004-1	s	TERMINAL ASSY
1605	1-541-431-41	s	FAN, DC
1606	2-068-008-00	s	WASHER
1607	2-132-434-01	s	CLIP, WIRE
1608	3-180-479-03	o	PLATE, MR
1609	3-180-634-01	o	GUARD (MB1), AIR
1610	3-180-635-04	o	PLATE, BT
1611	3-180-636-02	o	PLATE, FT
1612	3-180-654-02	o	PANEL, D-SUB
1613	3-180-655-01	o	HARNESS (A), COVER
1614	3-180-656-01	o	GUARD (MB3), AIR
1615	3-180-657-01	o	GUARD (MB2), AIR
1616	3-180-751-01	o	MD, SLIDER
1617	3-180-752-01	o	BRACKET, SLIDER
1618	3-180-753-02	o	MD, PLATE SPRING
1619	3-181-652-03	o	HOLDER, HARNESS
1620	3-642-656-01	s	FOOT
1621	3-697-707-01	o	CLAMP (A), HARNESS
1622	3-717-306-01	o	SPRING
1623	3-182-786-01	o	SPRING, CASSETTE COMPARTMENT
1624	3-650-537-00	o	WASHER


1604
1606
1620
1624
PS4 × 20
1612
BVTT3 × 6
BVTT
2.6 × 14
1614
1613
1609
1615
1603
BVTT3 × 30
1605
1619
1608
1607
1616
1617
1618
1621
1611
1610
1602
1601
1623
B3 × 6
W2.6 NYLON
1622
*1
*2
PSW4 × 8
CASSETTE
COMPARTMENT ASSY



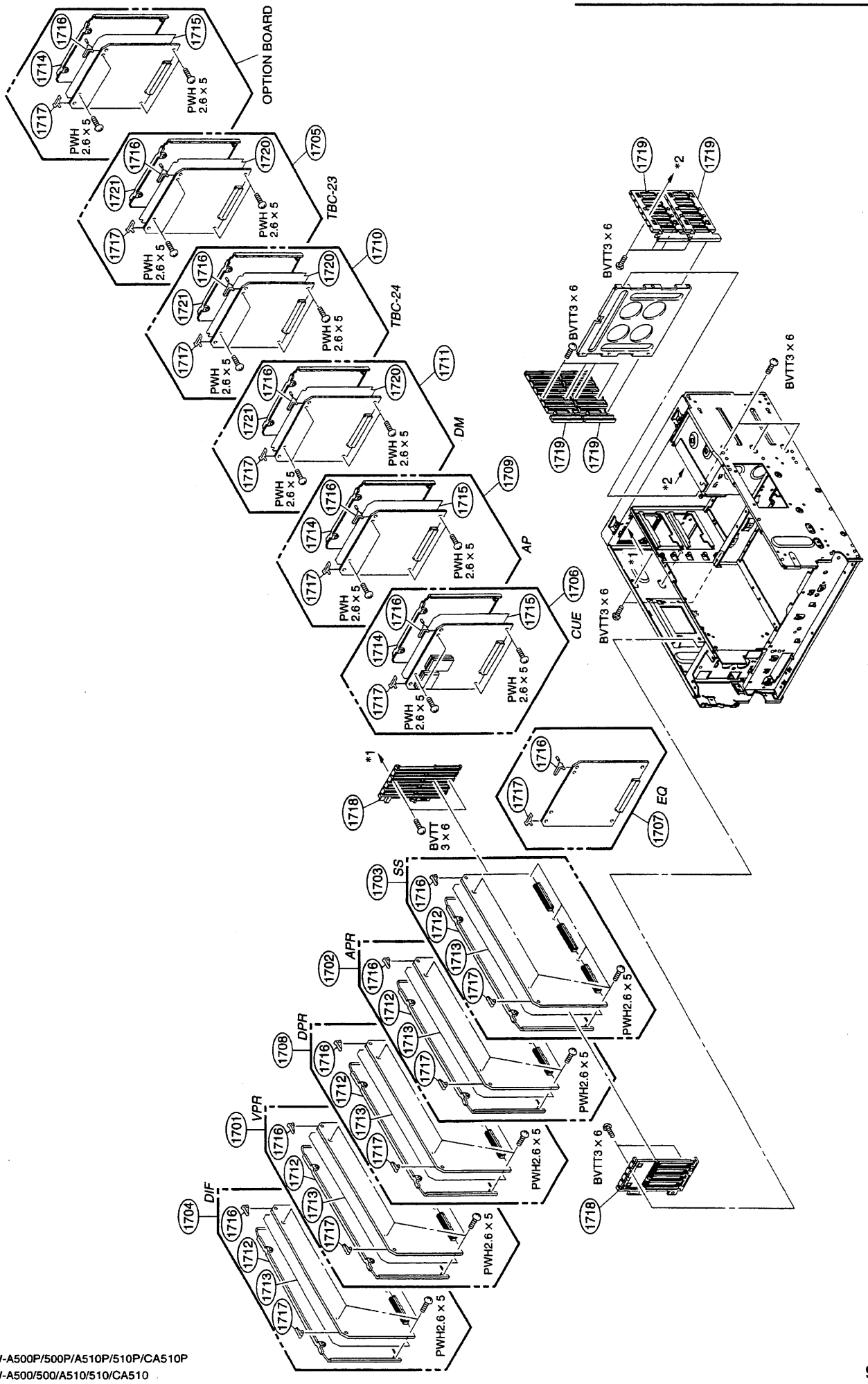
9-2-3. Mounted Circuit Board List

For DVW-A510P/CA510P

No.	Part No.	SP	Description
1701	A-8275-337-C	o	MOUNTED CIRCUIT BOARD, VPR-1BAP
1702	A-8275-393-B	o	MOUNTED CIRCUIT BOARD, APR-1BA (for S/N 14076 and higher: DVW-A510P(EK)) (for S/N 10076 and higher: DVW-CA510P(EK))
	A-8275-392-A	o	MOUNTED CIRCUIT BOARD, APR-1BAP (for S/N 10001 thru. 14075: DVW-A510P(EK)) (for S/N 10001 thru. 10075: DVW-CA510P(EK))
1703	A-8275-344-A	o	MOUNTED CIRCUIT BOARD, SS-52BAP
1704	A-8275-349-B	o	MOUNTED CIRCUIT BOARD, DIF-16B
1705	A-8275-079-B	o	MOUNTED CIRCUIT BOARD, TBC-23P
1706	A-8275-353-A	o	MOUNTED CIRCUIT BOARD, CUE-1BAP
1707	A-8275-359-B	o	MOUNTED CIRCUIT BOARD, EQ-45BA (for S/N 14301 and higher: DVW-A510P(EK)) (for S/N 10076 and higher: DVW-CA510P(EK))
	A-8275-357-A	o	MOUNTED CIRCUIT BOARD, EQ-45BAP (for S/N 10001 thru. 14300: DVW-A510P(EK)) (for S/N 10001 thru. 10075: DVW-CA510P(EK))
1708	A-8275-208-B	o	MOUNTED CIRCUIT BOARD, DPR-36H
1709	A-8275-086-A	o	MOUNTED CIRCUIT BOARD, AP-28P
1710	A-8275-087-A	o	MOUNTED CIRCUIT BOARD, TBC-24P
1711	A-8275-088-B	o	MOUNTED CIRCUIT BOARD, DM-89P
1712	3-171-453-03	o	PLATE (L), SHIELD, CARD
1713	3-171-454-02	o	SHEET (L), CARD
1714	3-171-455-01	o	PLATE (S), SHIELD, CARD
1715	3-171-456-02	o	SHEET (S), CARD
1716	3-179-084-01	s	LEVER (R), PC BOARD
1717	3-179-085-01	s	LEVER (L), PC BOARD
1718	3-180-646-02	o	GUIDE (L), PRINTED CIRCUIT BOARD
1719	3-180-674-01	o	GUIDE (S), PRINTED CIRCUIT BOARD
1720	3-696-787-03	o	SHEET (S), CARD
1721	3-696-891-03	o	PLATE, CARD-S

For DVW-510P

No.	Part No.	SP	Description
1701	A-8275-337-C	o	MOUNTED CIRCUIT BOARD, VPR-1BAP
1702	A-8275-343-B	o	MOUNTED CIRCUIT BOARD, APR-1B (for S/N 11300 and higher: DVW-510P(EK))
	A-8275-342-A	o	MOUNTED CIRCUIT BOARD, APR-1BP (for S/N 10001 thru. 11299: DVW-510P(EK))
1703	A-8275-345-A	o	MOUNTED CIRCUIT BOARD, SS-52BP
1704	A-8275-349-B	o	MOUNTED CIRCUIT BOARD, DIF-16B
1706	A-8275-354-A	o	MOUNTED CIRCUIT BOARD, CUE-1BP
1707	A-8275-359-B	o	MOUNTED CIRCUIT BOARD, EQ-45BA (for S/N 11385 and higher: DVW-510P(EK))
	A-8275-358-A	o	MOUNTED CIRCUIT BOARD, EQ-45BP (for S/N 10001 thru. 11384: DVW-510P(EK))
1708	A-8275-208-B	o	MOUNTED CIRCUIT BOARD, DPR-36H
1712	3-171-453-03	o	PLATE (L), SHIELD, CARD
1713	3-171-454-02	o	SHEET (L), CARD
1714	3-171-455-01	o	PLATE (S), SHIELD, CARD
1715	3-171-456-02	o	SHEET (S), CARD
1716	3-179-084-01	s	LEVER (R), PC BOARD
1717	3-179-085-01	s	LEVER (L), PC BOARD
1718	3-180-646-02	o	GUIDE (L), PRINTED CIRCUIT BOARD
1719	3-180-674-01	o	GUIDE (S), PRINTED CIRCUIT BOARD


OPTION BOARD
TBC-23
TBC-24
DM
AP
CUE
EQ
SS
APR
DPR
VPR
DIF
PWH 2.6 × 5
PWH2.6 × 5
BVTT 3 × 6
BVTT3 × 6
*1
*2

9-2-4. Packing Materials and Supplied Accessories List

For DVW-A510P

Ref. No. or Q'ty	Part No.	SP	Description
1pc	⚠ 1-782-929-11	s	CORD, POWER (BS 3P)
1pc	3-613-640-01	o	HOLDER (C), PLUG
1pc	3-181-533-02	o	CUSHION (LOWER)
1pc	3-181-534-02	o	CUSHION (UPPER)
1pc	3-181-535-01	o	SPACER (A)
1pc	3-181-536-01	o	SPACER (B)
1pc	3-183-117-03	o	INDIVIDUAL CARTON
1pc	3-701-616-01	o	BAG, POLYETHYLENE
1pc	3-701-634-00	o	BAG, POLYETHYLENE
4pcs	7-682-965-01	s	SCREW +PSW 4X16

For DVW-510P

Ref. No. or Q'ty	Part No.	SP	Description
1pc	⚠ 1-782-929-11	s	CORD, POWER (BS 3P)
1pc	3-613-640-01	o	HOLDER (C), PLUG
1pc	3-181-533-02	o	CUSHION (LOWER)
1pc	3-181-534-02	o	CUSHION (UPPER)
1pc	3-181-535-01	o	SPACER (A)
1pc	3-181-536-01	o	SPACER (B)
1pc	3-183-477-02	o	INDIVIDUAL CARTON
1pc	3-701-616-01	o	BAG, POLYETHYLENE
1pc	3-701-634-00	o	BAG, POLYETHYLENE
4pcs	7-682-965-01	s	SCREW +PSW 4X16

For DVW-CA510P

Ref. No. or Q'ty	Part No.	SP	Description
1pc	⚠ 1-782-929-11	s	CORD, POWER (BS 3P)
1pc	3-613-640-01	o	HOLDER (C), PLUG
1pc	3-183-868-01	o	PLATE, TOP
1pc	3-183-870-01	o	INDIVIDUAL CARTON
1pc	3-183-871-01	o	CUSHION (UPPER)
1pc	3-183-872-01	o	CUSHION (LOWER)
1pc	3-701-634-00	o	BAG, POLYETHYLENE
1pc	3-704-318-01	o	BAG, PROTECTION

9-3. SPARE PARTS LIST – OPTIONAL ACCESSORIES –
9-3. 補修部品リスト – オプション –

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9-3-1. インデックス

Model Name		Page
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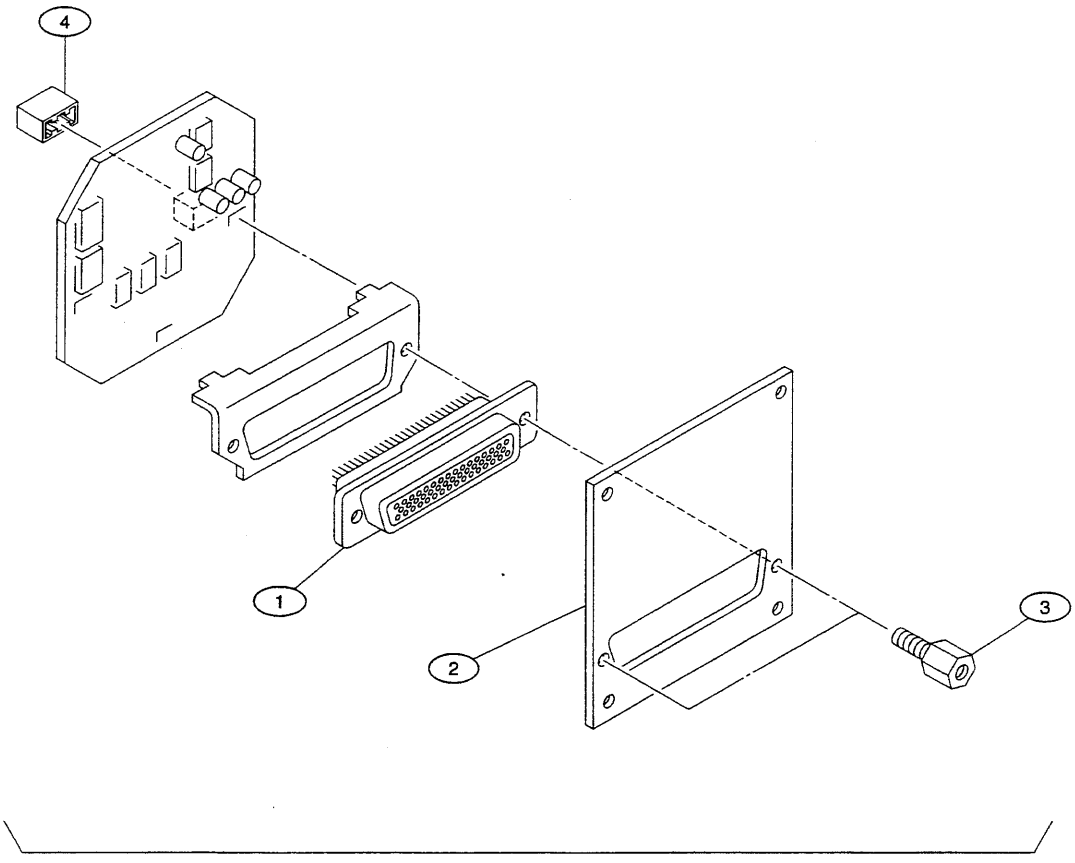
BKDW-509	Parallel (50P) Interface Kit	9-43
BKDW-510	Control Panel Extension Kit	9-44
BKDW-511	Control Panel Case	9-45

(*1) Please order the standard products.
製品をお求めください。

9-3-2. BKDW-509

Exploded View

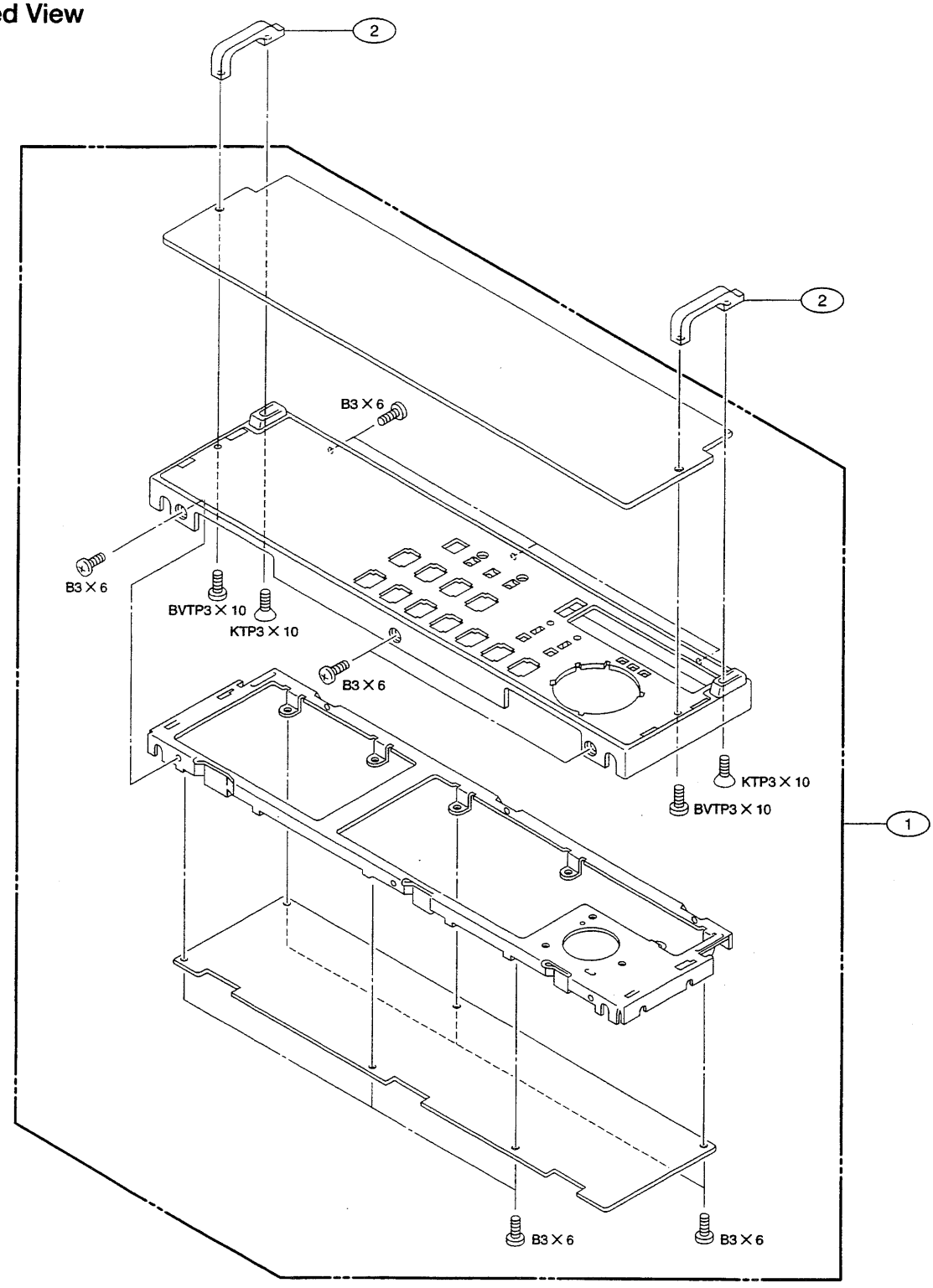


RM-130

No.	Part No.	SP	Description
1	1-563-893-21	s	SOCKET, D-SUB CONNECTOR 50P
2	3-180-788-01	o	PANEL (RM), ORNAMENTAL
3	3-673-910-31	s	SCREW, CONNECTOR
4	3-184-609-01	o	GUIDE, CONNECTOR

9-3-3. BKDW-510

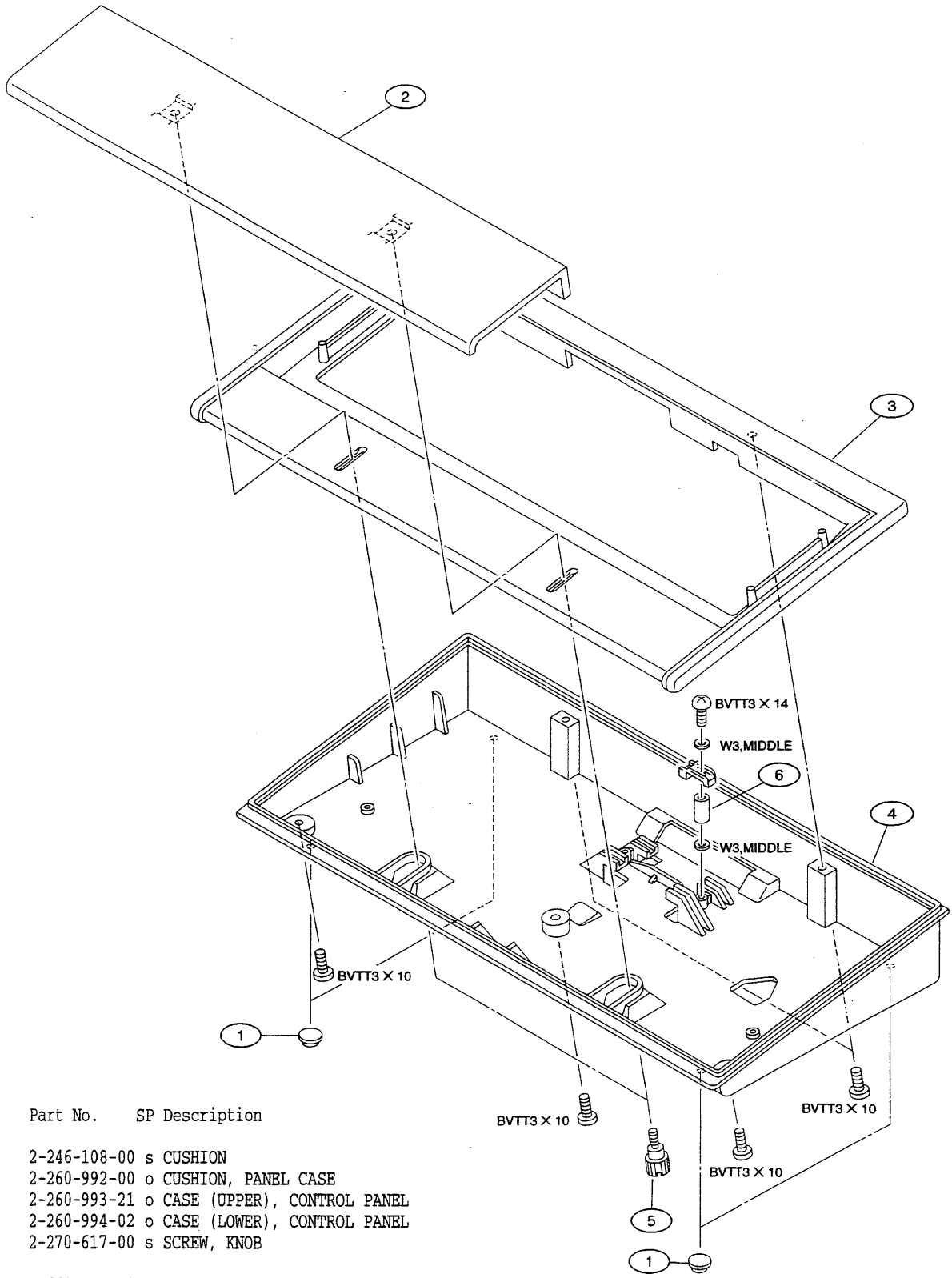
Exploded View



No.	Part No.	SP	Description
1	A-6768-668-B	o	PANEL ASSY, BLANK
2	3-717-425-01	o	HANDLE
1pc	1-751-316-11	o	CABLE ASSY, ENCAPSULATED

9-3-4. BKDW-511

Exploded View



No.	Part No.	SP	Description
1	2-246-108-00	s	CUSHION
2	2-260-992-00	o	CUSHION, PANEL CASE
3	2-260-993-21	o	CASE (UPPER), CONTROL PANEL
4	2-260-994-02	o	CASE (LOWER), CONTROL PANEL
5	2-270-617-00	s	SCREW, KNOB
6	3-661-588-00	o	SPACER, 3X5

9-4. Spare Parts List

Part No.	SP	Description
7-621-255-15	s	SCREW +P 2X3
7-621-259-25	s	CSREW +PWH 2.6X4
7-621-260-55	s	SCREW +P 2.6X25
7-621-283-10	s	SCREW +P 2X10
7-621-559-20	s	SCREW +K 2.6X4
7-621-721-06	s	SET-SCREW, SLOT 2X2.5 (FLAT)
7-621-733-08	s	SET-SCREW, HEX 2X4 (FLAT)
7-621-734-09	s	SET-SCREW, HEX 2.6X3 (WP)
7-621-740-08	s	SET-SCREW, HEX 2.6X6 (FLAT)
7-621-772-00	s	SCREW +B 2X3
7-621-772-10	s	SCREW +B 2X4
7-621-772-20	s	SCREW +B 2X5
7-621-772-50	s	SCREW +B 2X10
7-621-773-95	s	SCREW +B 2.6X6
7-621-775-20	s	SCREW +B 2.6X5
7-621-775-80	s	SCREW +B 2.6X16
7-622-207-05	s	N 2.6, TYPE 2
7-623-205-22	s	SW 2, TYPE 2
7-623-207-22	s	SW 2.6, TYPE 2
7-623-422-07	s	LW3, TYPE B
7-623-510-01	s	LUG, 4
7-623-923-11	s	WASHER 2.6, NYLON
7-623-924-11	s	WASHER 3.0, NYLON
7-624-105-04	s	STOP RING 2.3 (E TYPE)
7-624-106-04	s	STOP RING 3.0 (E TYPE)
7-624-108-04	s	STOP RING 4.0 (E TYPE)
7-628-253-00	s	SCREW +PS 2X4
7-628-253-15	s	SCREW +PS 2X5
7-628-253-20	s	SCREW +PS 2X6
7-628-253-35	s	SCREW +PS 2X8
7-628-254-30	s	SCREW +PS 2.6X10
7-671-155-01	s	BALL 3, STEEL
7-682-544-04	s	SCREW +B 3X3
7-682-545-09	s	SCREW +B 3X4
7-682-546-09	s	SCREW +B 3X5
7-682-547-09	s	SCREW +B 3X6
7-682-548-09	s	SCREW +B 3X8
7-682-550-09	s	SCREW +B 3X12
7-682-551-09	s	SCREW +B 3X14
7-682-552-09	s	SCREW +B 3X16

Part No.	SP	Description
7-682-646-09	s	SCREW +PS 3X5
7-682-648-09	s	SCREW +PS 3X8
7-682-661-01	s	SCREW +PS 4X8
7-682-661-09	s	SCREW +PSW 4X8
7-682-666-09	s	SCREW +PS 4X20
7-682-668-09	s	SCREW +PSW 4X30
7-682-902-11	s	SCREW +PWH 2.6X5
7-682-903-21	s	SCREW +PWH 3X8
7-682-947-01	s	SCREW +PSW 3X6
7-682-948-01	s	SCREW +PSW 3X8
7-682-949-01	s	SCREW +PSW 3X10
7-682-962-01	s	SCREW +PSW 4X10
7-682-965-01	s	SCREW +PSW 4X16
7-683-174-01	s	SET-SCREW, SLOT 3X4 (FLAT)
7-683-176-01	s	SET-SCREW, SLOT 3X6 (FLAT)
7-683-176-21	s	SET-SCREW, SLOT 3X6 (CONE)
7-684-023-04	s	N 3, TYPE 2
7-685-103-19	s	SCREW +P 2X5 TYPE2 NON-SLIT
7-685-105-19	s	SCREW +PTP 2X8 TYPE2 NON-SLIT
7-685-134-19	s	SCREW +P 2.6X8 TYPE2 NON-SLIT
7-685-247-19	s	SCREW +KTP 3X10 TYPE2 NON-SLIT
7-685-646-79	s	SCREW +BVTP 3X8 TYPE2 IT-3
7-685-865-09	s	SCREW +BVTT 2.6X12 (S)
7-685-866-01	s	SCREW +BVTT 2.6X14 (S)
7-685-871-01	s	SCREW +BVTT 3X6 (S)
7-685-871-09	s	SCREW +BVTT 3X6 (S, BLACK)
7-685-872-09	s	SCREW +BVTT 3X8 (S)
7-685-873-09	s	SCREW +BVTT 3X10 (S)
7-685-875-09	s	SCREW +BVTT 3X14 (S)
7-685-879-01	s	SCREW +BVTT 3X30 (S)
7-685-881-01	s	SCREW +BVTT 4X8 (S)
7-685-902-01	s	SCREW +PTPWH 2.6X5 (TYPE2)
7-685-903-11	s	SCREW +PTPWH 3X6 (TYPE2)
7-685-903-21	s	SCREW +PTPWH 3X8 (TYPE2)
7-688-001-01	s	W 2, SMALL
7-688-001-11	s	W 2, MIDDLE
7-688-002-11	s	W 2.6, MIDDLE
7-688-003-01	s	W 3, SMALL
7-688-003-11	s	W 3, MIDDLE
7-688-004-11	o	SW 4, MIDDLE

DVW-CA510P

This section contains the exclusive information of DVW-CA510P.
Please replace or add the corresponding pages from Section 1 to 9 with them.

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SECTION 1
SERVICE OVERVIEW

1-1. NOTES ON POWER SUPPLY BLOCK

1-1-1. Warning on Primary Circuit and Electric Shock

The power supply block consists of the AC-139 board and primary peripheral components. The whole AC-139 board is on the primary side circuit, so pay careful attention to the electric shock. Since the inside of a switching regulator is also on the primary side circuit, treat it with care.

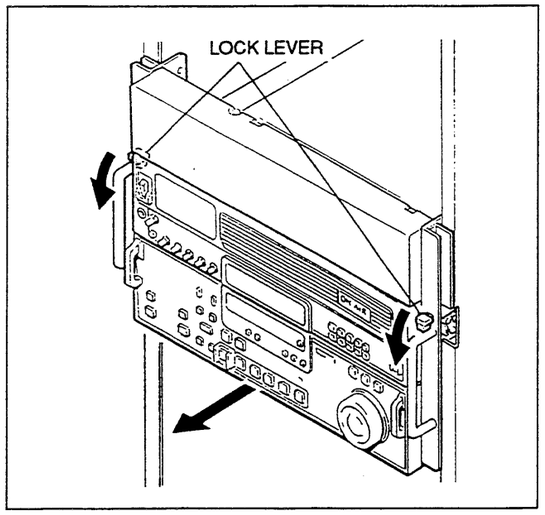
1-1-2. Notes on Resetting the Circuit Breaker

When the breaker on the power supply panel is activated and the button is ejected, remove the cause of the trouble, then push the button.

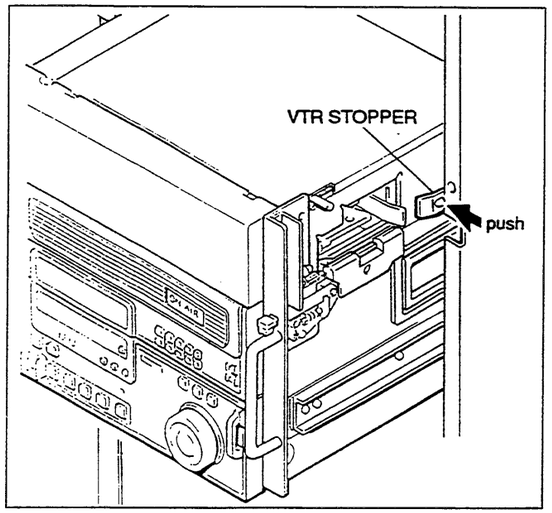
1-2. REMOVAL OF THE UNIT FROM THE RACK

This unit can be removed from the rack. This work shoud be performed by two persons.

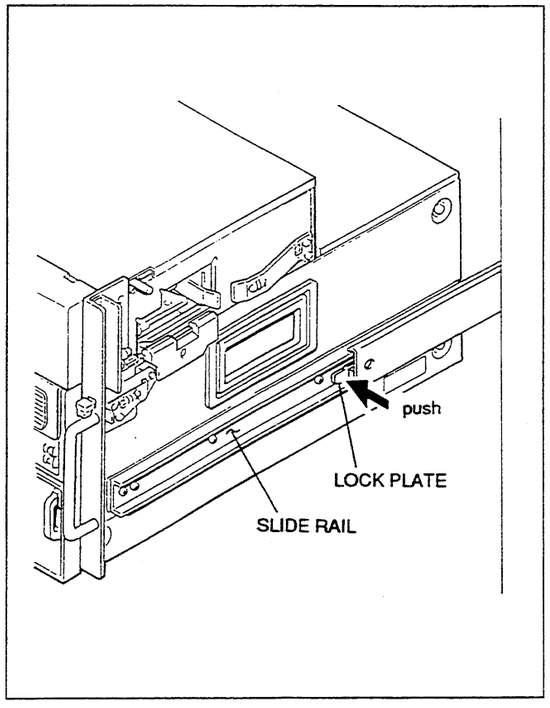
1. Pull out the unit while pushing down the lock levers on both sides.



2. Pull out the unit while pushing the VTR stopper in the direction of the arrow.



3. Cancel the both side lock plate of the slide rail and remove the unit from the rack.

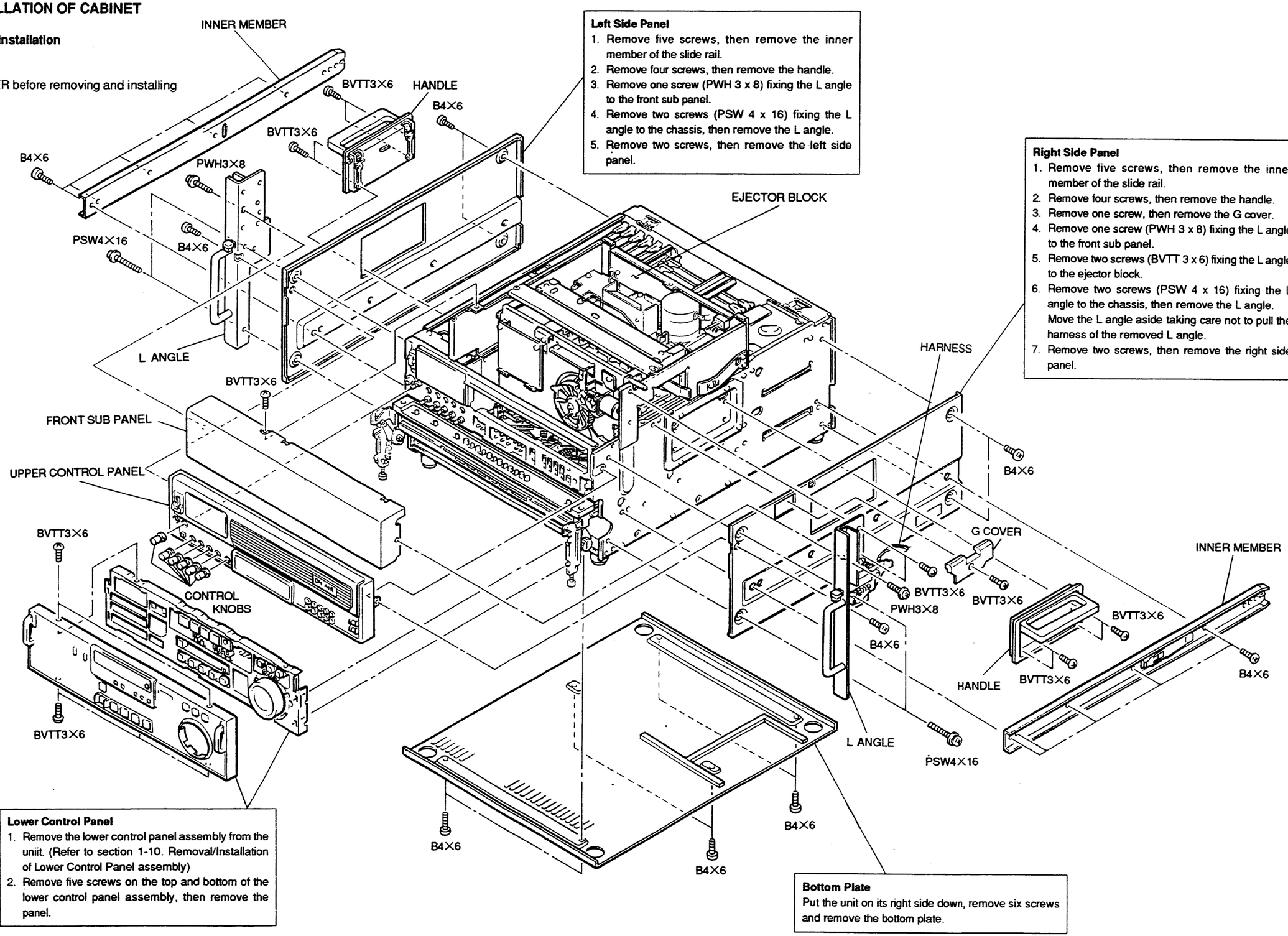


1-3-1. Cabinet Removal/Installation

1-3. REMOVAL/INSTALLATION OF CABINET

1-3-1. Cabinet Removal/Installation

CAUTION
Always switch off the POWER before removing and installing cabinet.



Left Side Panel
1. Remove five screws, then remove the inner member of the slide rail.
2. Remove four screws, then remove the handle.
3. Remove one screw (PWH 3 x 8) fixing the L angle to the front sub panel.
4. Remove two screws (PSW 4 x 16) fixing the L angle to the chassis, then remove the L angle.
5. Remove two screws, then remove the left side panel.

Right Side Panel
1. Remove five screws, then remove the inner member of the slide rail.
2. Remove four screws, then remove the handle.
3. Remove one screw, then remove the G cover.
4. Remove one screw (PWH 3 x 8) fixing the L angle to the front sub panel.
5. Remove two screws (BVTT 3 x 6) fixing the L angle to the ejector block.
6. Remove two screws (PSW 4 x 16) fixing the L angle to the chassis, then remove the L angle. Move the L angle aside taking care not to pull the harness of the removed L angle.
7. Remove two screws, then remove the right side panel.

Lower Control Panel
1. Remove the lower control panel assembly from the uniit. (Refer to section 1-10. Removal/Installation of Lower Control Panel assembly)
2. Remove five screws on the top and bottom of the lower control panel assembly, then remove the panel.

Bottom Plate
Put the unit on its right side down, remove six screws and remove the bottom plate.

1-2

Upper Control Panel/Front Sub Panel

1. Remove the right and left screws fixing the front sub panel.
2. Remove one screw at the top of the front sub panel, then remove the front sub panel.
3. Remove six control knobs on the upper control panel.
4. Remove the right and left screws fixing the upper control panel.
5. As shown in Fig. A, put fingers between the panel and chassis and remove the panel while spreading the panel edge.

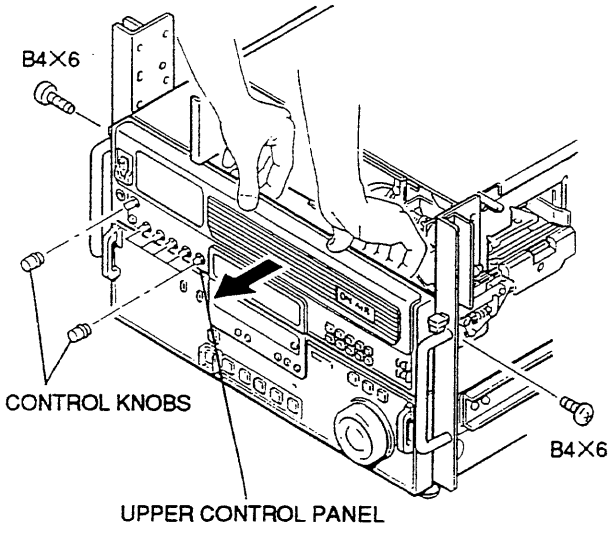


Fig. A

6. To install the panel, align the convex portion of the panel with the hole of the chassis and fix the panel with the screw. (Fig. B)

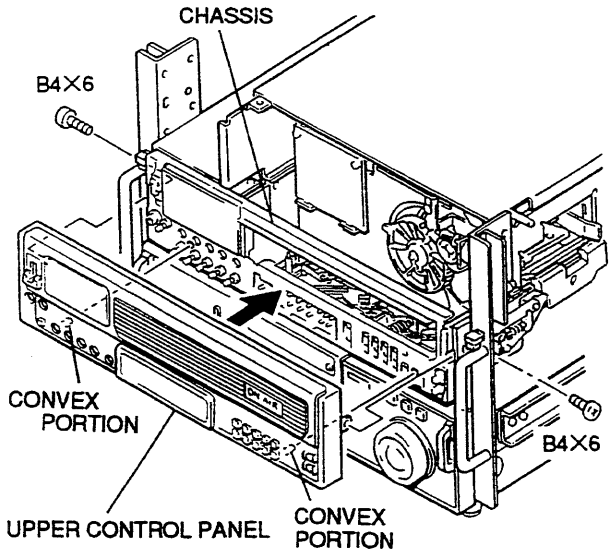


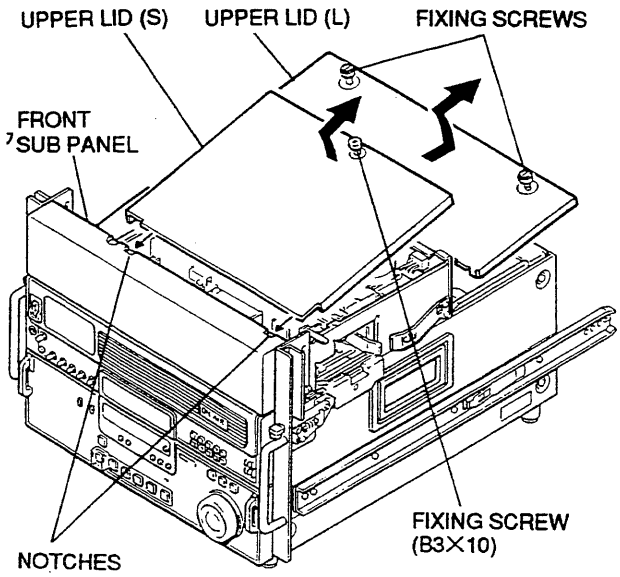
FIG. B

Upper Lid (S)

Loosen one fixing screw fully, move the upper lid (S) in the direction indicated by the arrow, and remove it. To install the upper lid (S), align the upper lid (S) with the notches on the front sub panel, push it into the notches, and fix with the screw.

Upper Lid (L)

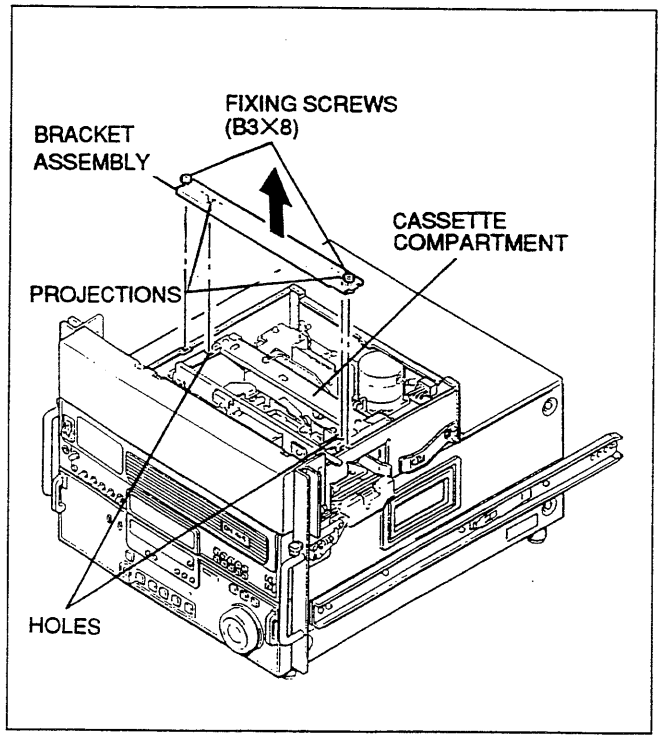
Loosen two fixing screws fully, move the upper lid (L) in the direction indicated by the arrow, and remove it.



1-3-2. Cassette Compartment Removal/Installation

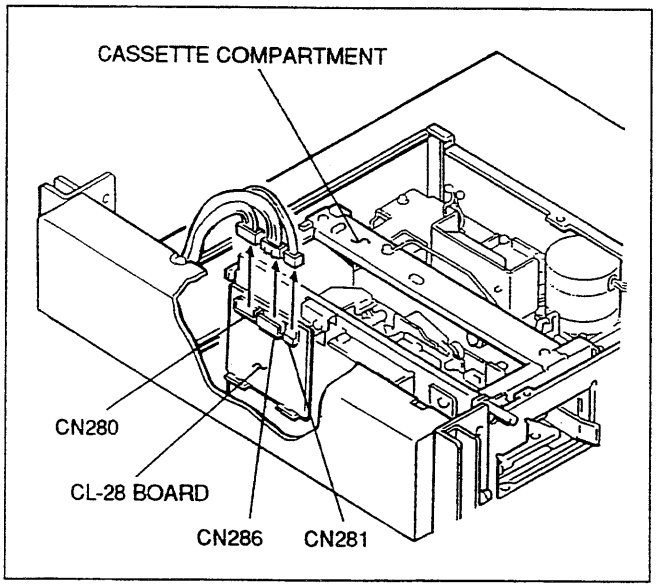
Removal

1. Turn off the POWER switch.
2. Remove the upper lid (S).
   (Refer to 1-3-1. Cabinet Removal/Installation)
3. Loosen two fixing screws fully and remove the bracket assembly.



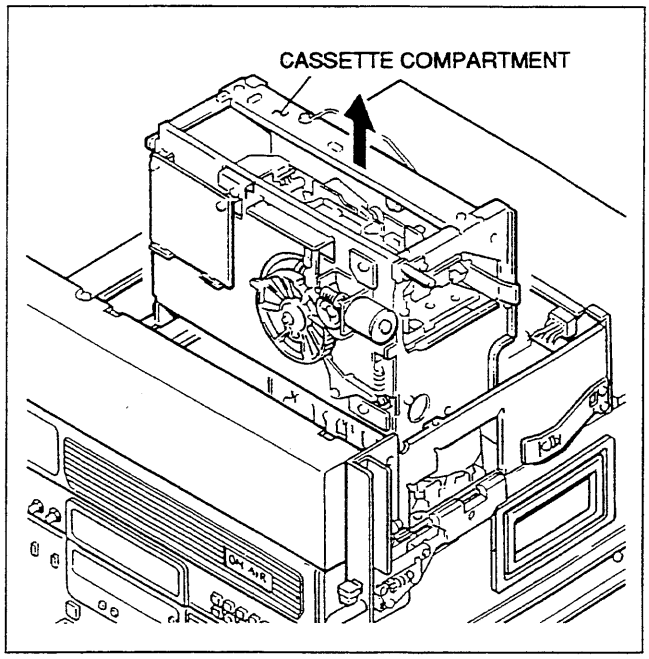
Removal of the Bracket Assembly

4. Disconnect the three connectors (CN280, CN286, and CN281) on the CL-28 board.



Disconnecting the Connectors

5. Raise the cassette compartment in the direction indicated by the arrow and remove it from the unit.



Removal of the Cassette Compartment

Installation

6. Put the harnesses of the three connectors (CN280, CN286, and CN281) disconnected in step 4 in the position where they do not become obstructive.
7. Install the cassette compartment in the unit.

NOTE

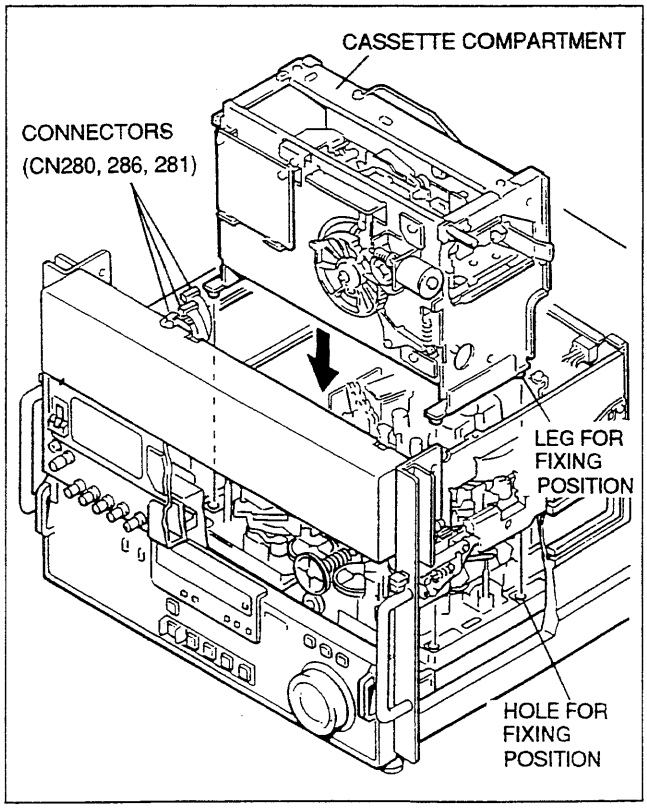
Confirm that the four legs for fixing the cassette compartment position are inserted into the four holes for fixing the mechanical chassis position.

8. Install the bracket assembly after confirming that the legs for fixing position are inserted into the holes for fixing position.

NOTE

Bracket assembly are inserted into the holes of the cassette compartment. (Refer to the figure for cassette compartment bracket assembly removal.)

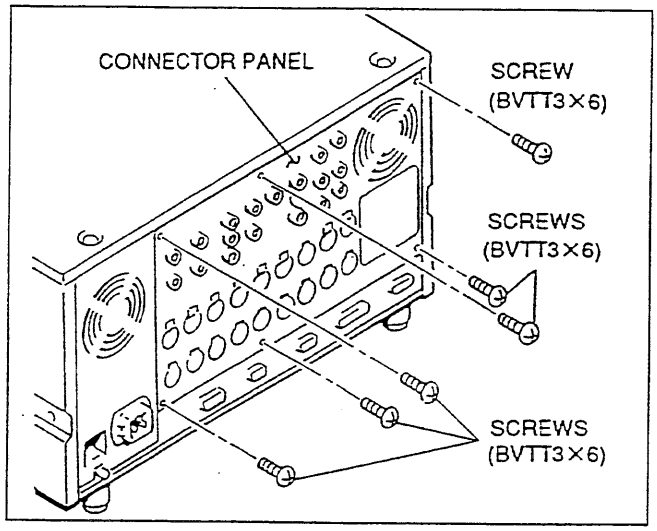
9. Connect the three connectors (CN280, CN286, and CN281) on the CL-28 board.
10. Install the upper lid (S).



Installation of the Cassette Compartment

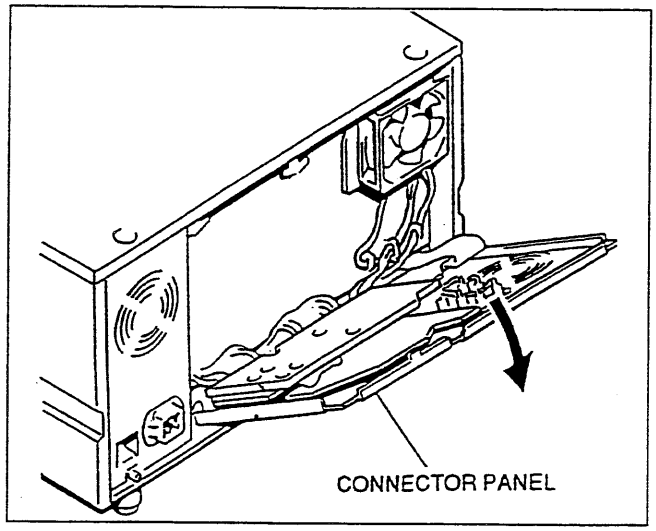
1-3-3. Connector Panel Removal/Installation

1. Turn off the POWER.
2. Remove six screws indicated → at the top and bottom on the connector panel.



Removal of Screws

3. Remove the connector panel so as not to stretch the harness as shown in the figure.
4. Install the connector panel in the reverse order of steps 1 through 3.

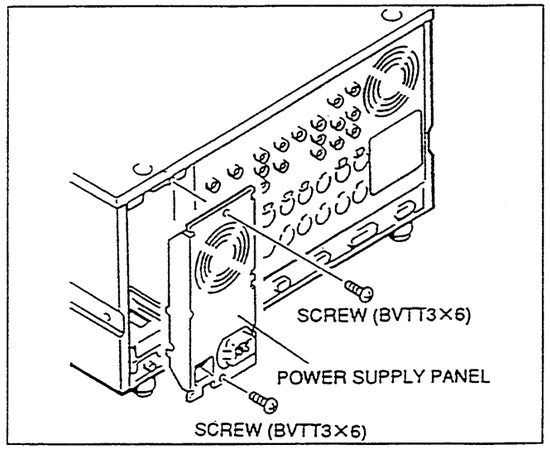


Removal of the Connector Panel

1-3-4. Power Supply Panel Removal/Installation

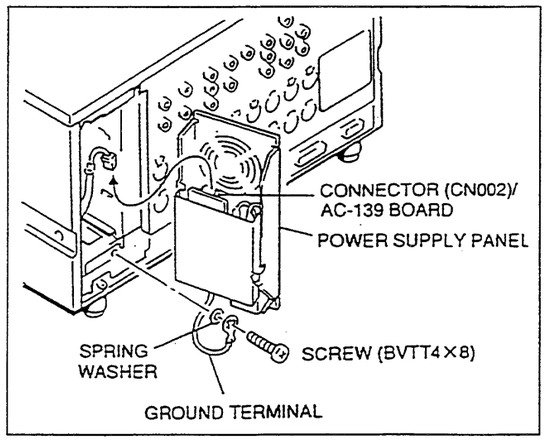
1-3-4. Power Supply Panel Removal/Installation

1. Turn off the POWER.
2. Remove two screws, and open the power supply panel.



Removal of the Power Supply Panel

3. Remove a screw and a spring washer which secure the ground terminal, then disconnect connector (CN002) on the AC-139 board, then remove the power supply panel.
4. Install the power supply panel in the reverse order of steps 1 through 3.

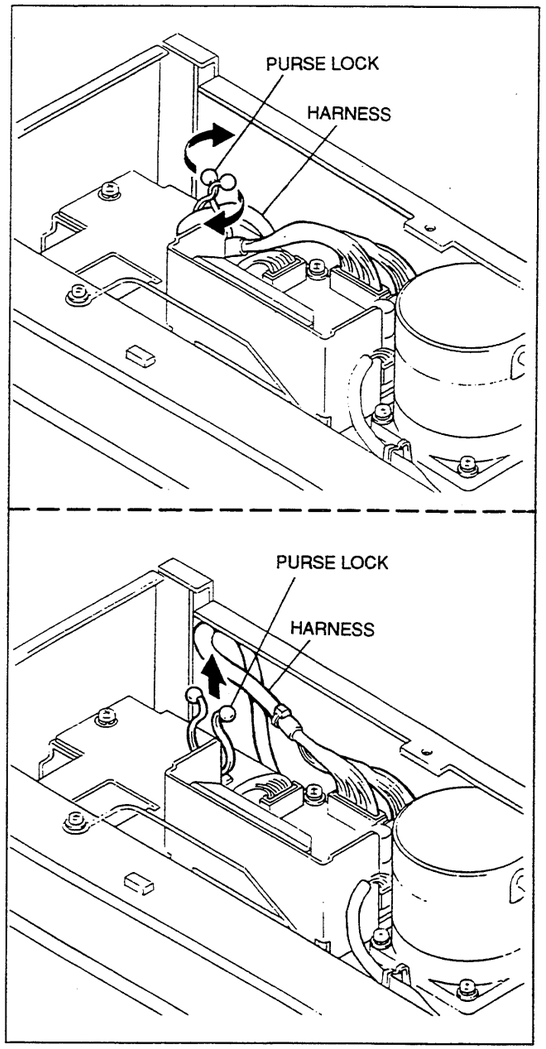


Disconnecting the Connector

1-7

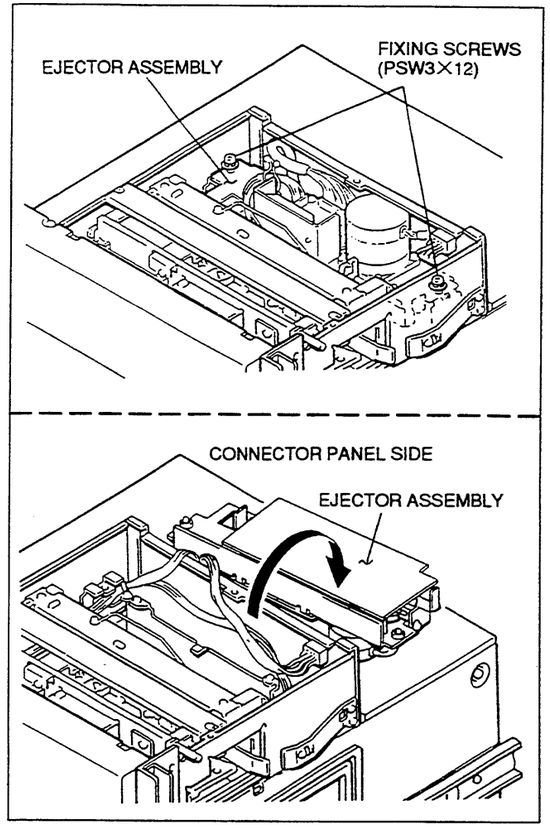
1-4. REMOVAL OF EJECTOR ASSEMBLY

1. Remove the upper lid (S). (Refer to 1-3. Removal/ Installation of Cabinet.)
2. Remove the harness of the ejector assembly from the purse lock.



1-4. REMOVAL OF EJECTOR ASSEMBLY

3. Loosen the two fixing screws of the ejector assembly fully.
4. Move the ejector assembly in the direction of the arrow shown in the figure and shift it to the connector panel side.



1-5. FUNCTIONS OF PRINTED CIRCUIT BOARD

The numbers in left colums of the board name are in common with the numbers of Section 1-6-1. Printed Circuit Board Locations.

No.	Board Name	Circuit Function	System Configuration
1	DIF-16	4:2:2 Component Serial Digital Interface with Embeded Audio	Digital Process
2	VPR-1	Video Signal Processor, D/A, HUE, GAIN Ref CK Generator, Composite Encoder	
3	DPR-36	Digital Data Processor (Decode, Error Correction)	
4	APR-1	Audio Signal Processor (D/A, AES/EBU I/F)	RF/Analog Process
5	EQ-45	PB RF Equalizer, Analog Betacam PB Buff	
6	CUE-1	CUE, TC PB & LAU PB Circuit	
7	AP-28	AFM Demodulator & LAU Noise Reduction for Analog Betacam (PB)	Analog Betacam Playback
8	DM-89	RF Demodulator for Analog Betacam (PB)	
9	TBC-24	TBC (A/D Conversion & Write Clock Gen. Blocks)	
10	TBC-23	TBC (Sequence & Reference Block)	
12	AC-139	AC Connector Board with Breaker	Power
13	SW REG	Switching Regulator	
14	HN-181	Connection Board (Drum, etc)	Connection
15	HN-185	Connection Board with Dew Sensor	
16	HN-184	Connection Board (Threading Motor,etc)	
17	SS-52	System, Servo, DT Control	System/Servo Control
18	DR-307/200	Motors (Drum, Reel, Capstan, etc) Driver, Solenoids Driver	
19	DT-34	DT Driver	
20	FP-58	Panel Function (SWs, LEDs) Control, CAV Control Level Conversion	Front Panel Function
21	VR-152	Phone level RV, Phone connector	
22	VR-153	Audio PB Level VRs	
23	SWC-17	Upper Panel Function (Switches, LEDs)	
24	SWC-18	Sub Control Panel Function	
25	SWC-19	System Set-up Panel Function Control	
26	KY-231	Lower Panel Function Control	
27	DP-176	Time Counter Display	
28	PTC-69	Search Dial Sensor	
29	CP-218	Rear Panel Connector Board (Analog Video Signal Buffer)	Rear Panel Function
30	CP-220	Rear Panel Connector Board (Analog/Digital Audio,TC)	
31	RM-130	Parallel (50P) Interface (optional accessory BKDW-509)	Option
32	MB-441	Mother Board	Other
33	PTC-54	Threading FG	
34	CCM-15	Threading Motor/Reel Shift Motor	
35	TR-79	T Tension Sensor,Thread/Unthread End Sensor	
36	PTC-59	Cassette's Holes Sensor	
37	RM-141	T Reel Motor	
38	RM-82	S Reel Motor	
39	SE-228	Reel FG	
40	PTC-71	Reel Position Sensor	
41	TR-78	S Tension Sensor	
42	PD-35	Pinch Solenoid Connection	
43	DU-91	Cassette Out Sense, Cassette Sense, Arm Position Sense	Cassette Compartment & Betacart Use
44	SE-225	Cassette In Sense, Cassette Up Sense	
45	SE-226	Cassette Down Sense	
46	CL-28	Cassette Compartment	
47	IF-36	Betacart Interface	
48	LED-200	ON AIR Lamp	

1-5. FUNCTIONS OF PRINTED CIRCUIT BOARD

1-6. LOCATIONS OF MAIN PART

1-6-1. Printed Circuit Board Locations

The numbers in the figures are in common with the numbers in Section 1-5. Functions of Printed Circuit Board.

INDEX

AC-139 ..... ⑫
AP-28 ..... ⑦
APR-1 ..... ④

CCM-15 ..... ㉞
CL-28 ..... ㊻
CP-218 ..... ㉙
CP-220 ..... ㉚
CUE-1 ..... ⑥

DIF-16 ..... ①
DM-89 ..... ⑧
DP-176 ..... ㉗
DPR-36 ..... ③
DR-307/200 ..... ⑱
DT-34 ..... ⑲
DU-91 ..... ㊸

EQ-45 ..... ⑤

FP-58 ..... ⑳

HN-181 ..... ⑭
HN-184 ..... ⑯
HN-185 ..... ⑮
IF-36 ..... ㊼

KY-231 ..... ㉖

LED-200 ..... ㊽

MB-441 ..... ㉜

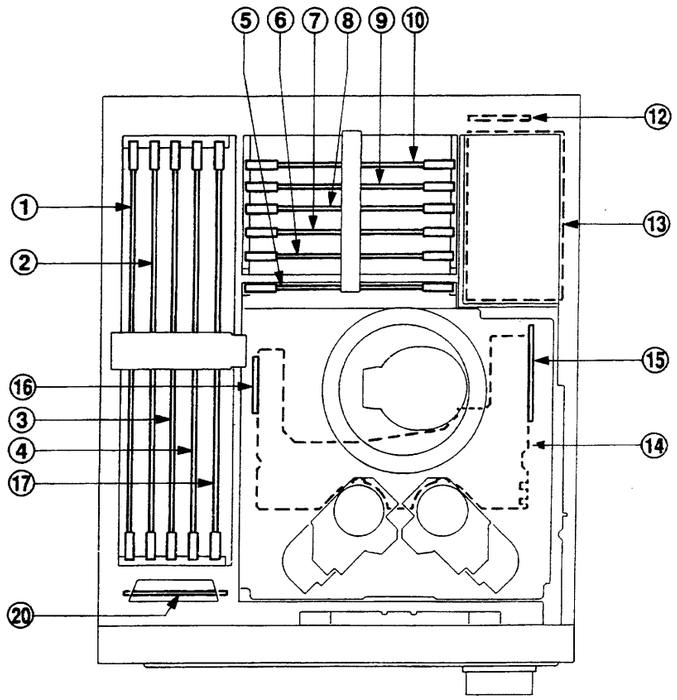
PC-70 ..... ㊺
PD-35 ..... ㊷
PTC-54 ..... ㉝
PTC-59 ..... ㊱
PTC-69 ..... ㉘
PTC-71 ..... ㊵

RM-130 ..... ㉛
RM-141 ..... ㊲
RM-82 ..... ㊳

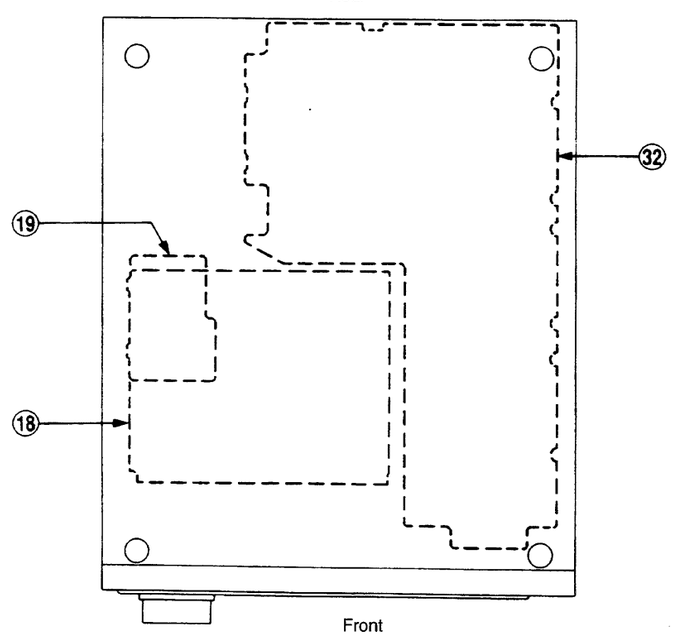
SE-225 ..... ㊹
SE-226 ..... ㊺
SE-228 ..... ㊴
SS-52 ..... ⑰
SW REG ..... ⑬
SWC-17 ..... ㉓
SWC-18 ..... ㉔
SWC-19 ..... ㉕

TBC-23 ..... ⑩
TBC-24 ..... ⑨
TR-78 ..... ㊶
TR-79 ..... ㉟

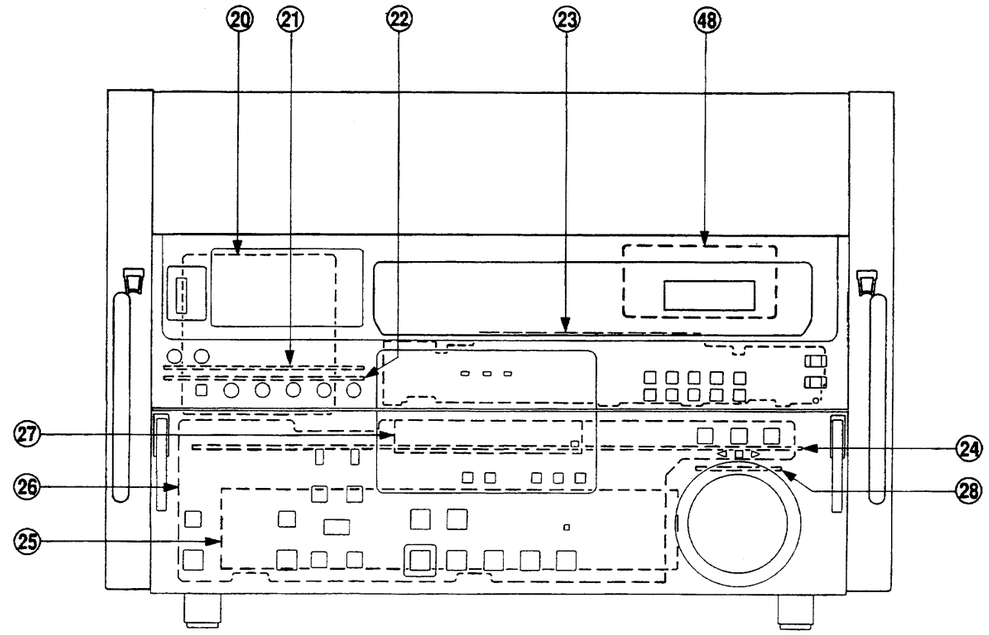
VPR-1 ..... ②
VR-152 ..... ㉑
VR-153 ..... ㉒



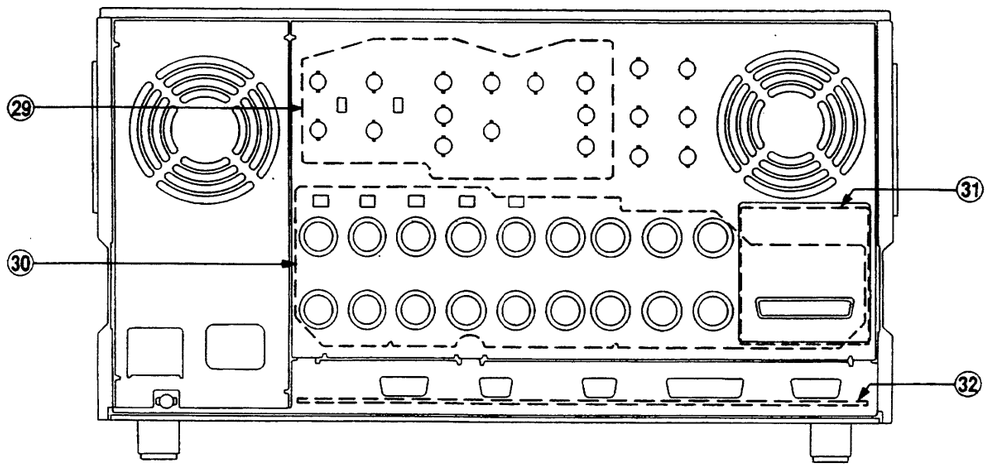
<Top view>



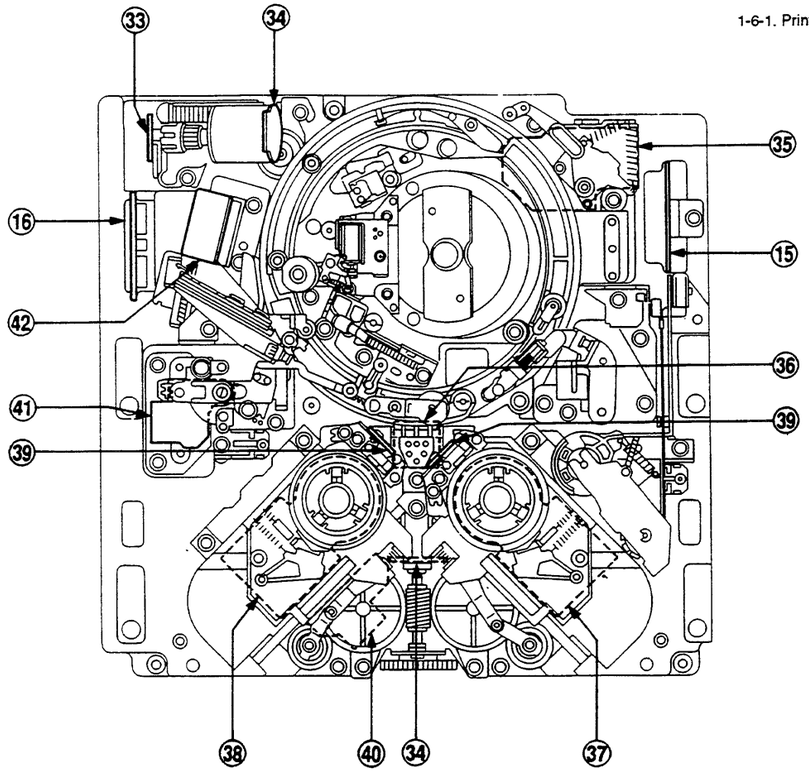
<Bottom view>



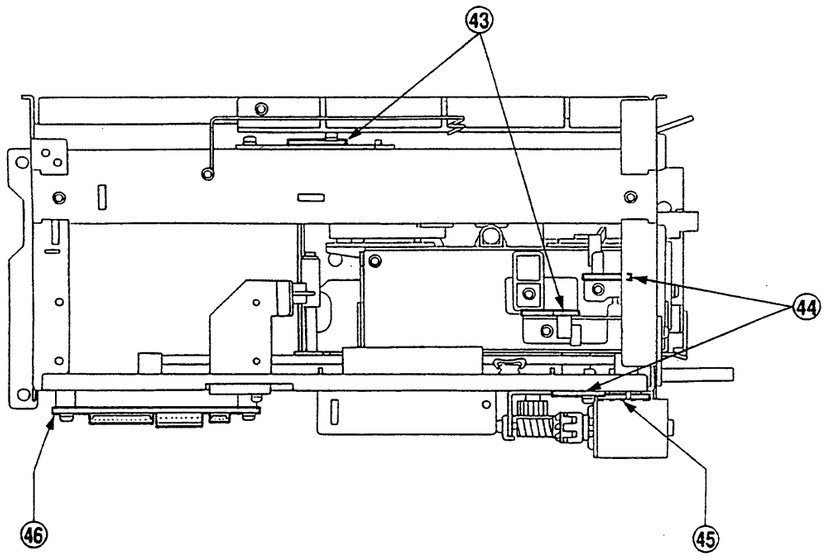
<Front view>



<Rear view>

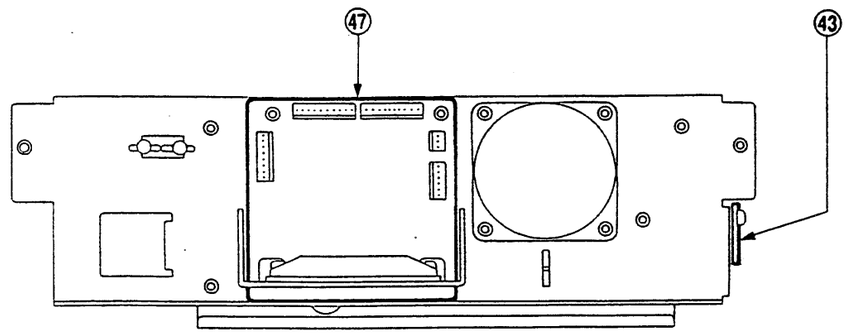


<Top view>



<Top view of casssette compartment>

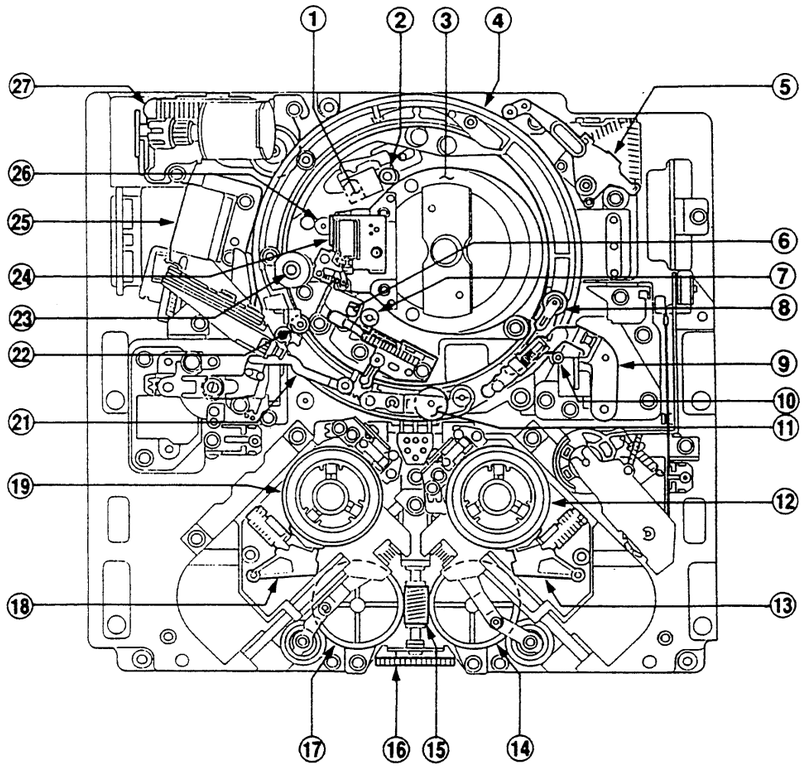
1-6-1. Printed Circuit Board Locations



<Top view of ejector assembly>

1-11

1-6-2. Main Mechanical Part Locations

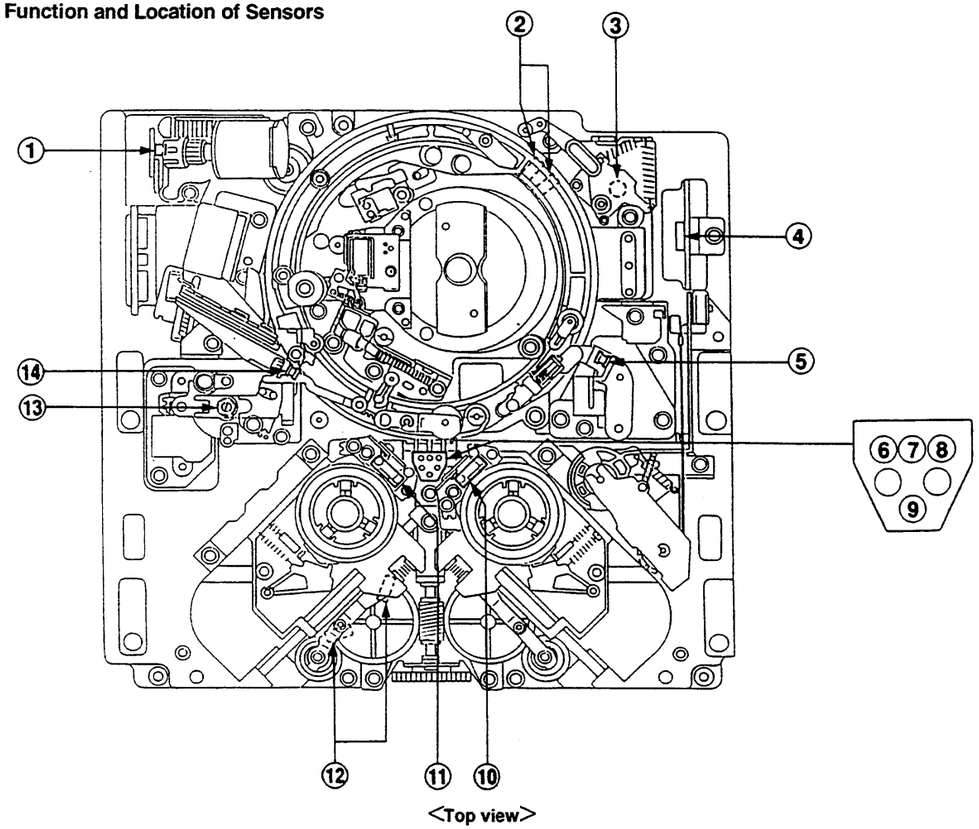


<Top view>

INDEX

① Audio/TC head
② TG-3 tape guide
③ Head drum
④ Threading ring
⑤ T tension regulator arm
⑥ CTL head
⑦ TG-2 tape guide
⑧ Audio/TC head cleaner
⑨ T drawer arm
⑩ TG-10 tape guide
⑪ Pinch roller
⑫ T reel table
⑬ T brake assembly
⑭ T worm wheel
⑮ Worm gear
⑯ Drive gear
⑰ S worm wheel
⑱ S brake assembly
⑲ S reel table
㉑ S tension regulator arm
㉒ TG-0 tape guide
㉓ Capstan shaft
㉔ Cleaning roller block
㉕ Pinch press block
㉖ TG-4 tape guide
㉗ Threading gear block

1-6-3. Function and Location of Sensors



<Top view>

① **Threading motor rotation sensor**
The threading motor rotation sensor detects the rotation speed of the threading motor.
The FG output signal of this detection sensor is input to the servo circuit to control the threading speed so that the tape is not damaged during threading and unthreading.

② **Threading-end/unthreading-end sensor**
This sensor detects whether the threading ring reaches the threading-end or unthreading-end position.

③ **T tension regulator arm sensor**
During recording and playback, this sensor detects the tension arm position and controls the reel torque to keep a constant T tape tension.

④ **Condensation sensor**
This sensor detects whether the dew condensation occurs in the unit.

⑤ **Tape top sensor**
This sensor detects the top of the tape, and in addition detects the tape end of the tape that runs in the reverse direction.

⑥ **Reel hub diameter sensor**
The reel hub diameter of a cassette tape varies depending on the length of the tape wound on the cassette tape. The reel hub diameter sensor detects the reel hub diameter using a tub on the back side of the cassette tape. The output signal of this sensor is input to the servo circuit to control the rotation speed and torque of the reel motor.

⑦ **Metal tape sensor**
Using a tub on the back side of the cassette tape, this sensor detects whether an oxide tape or metal tape is being inserted into the unit. (Only during analog tape playback)

⑧ **Tape thickness sensor**
Using a tub on the back side of the cassette tape, this sensor detects the thickness of the tape wound on a cassette tape that is being inserted into the unit.

⑨ **Analog/digital tape sensor**
Using a tub on the back side of the cassette tape, this sensor detects whether an analog tape or digital tape is being inserted into the unit.

⑩ **T reel table rotation sensor**
This sensor detects the rotation of the take-up reel table. The FG output signal of this sensor is input to the servo circuit to control the rotation speed of the reel motor.

⑪ **S reel table rotation sensor**
This sensor detects the rotation of the supply reel table. The FG output signal of this sensor is input to the servo circuit to control the rotation speed of the reel motor.

⑫ **Reel L/S position sensor**
This sensor detects whether the reel table moves to the correct position according to the size of the inserted cassette tape.

⑬ **S tension regulator arm sensor**
During recording and playback, this sensor detects the tension arm position and controls the reel torque to keep a constant S tape tension.

⑭ **Tape end sensor**
This sensor detects the end of the tape that runs in the forward direction.

⑮ **Cassette-out sensor**
This sensor detects whether a cassette is being pushed out of the unit.

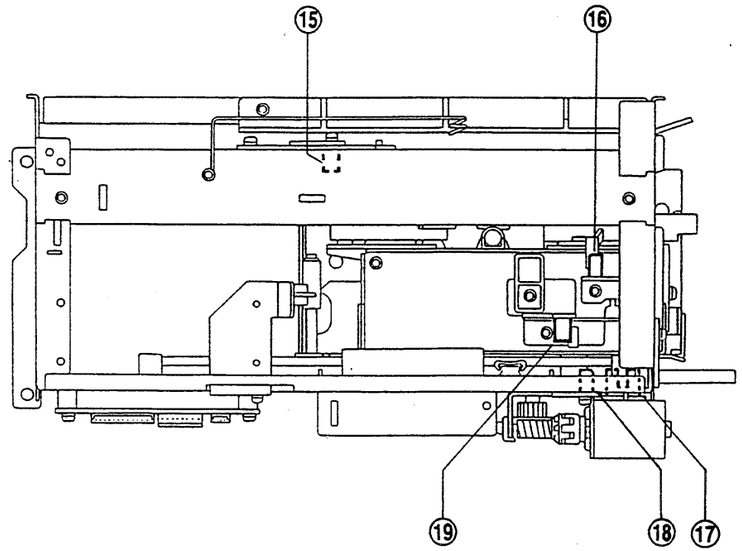
⑯ **Cassette-in sensor (L)**
This sensor detects whether a cassette is being inserted.

⑰ **Cassette-down (2) sensor**
⑱ **Cassette-down (1) sensor**
The cassette-down (1) sensor detects the movement of the cassette compartment through combined ON/OFF operation of the cassette-down (2) sensor, the cassette-down (1) sensor, and a cassette-in sensor.

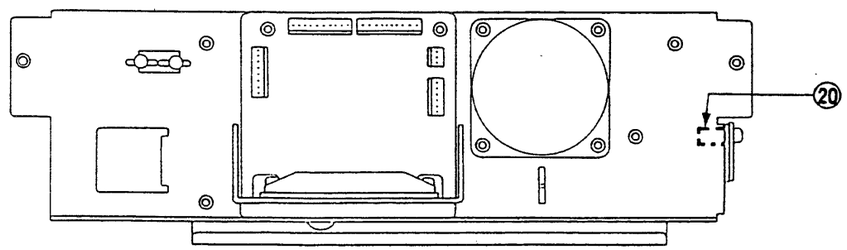
⑲ **Cassette sensor**
This sensor detects the existence of a cassette in a cassette compartment.

⑳ **Ejector arm sensor**
This sensor detects whether an ejector arm is returned to the starting position.

1-6-3. Function and Location of Sensors



<Cassette compartment>



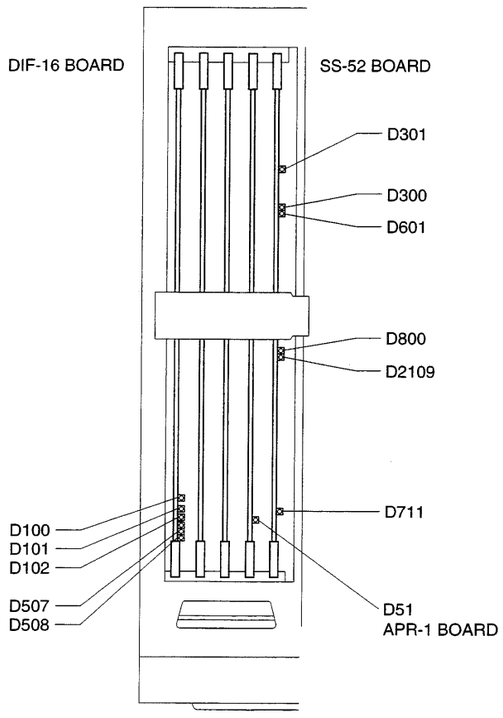
<Ejector>

1-7. LED INDICATOR INFORMATION ON BOARDS

Lot No. 907 and higher

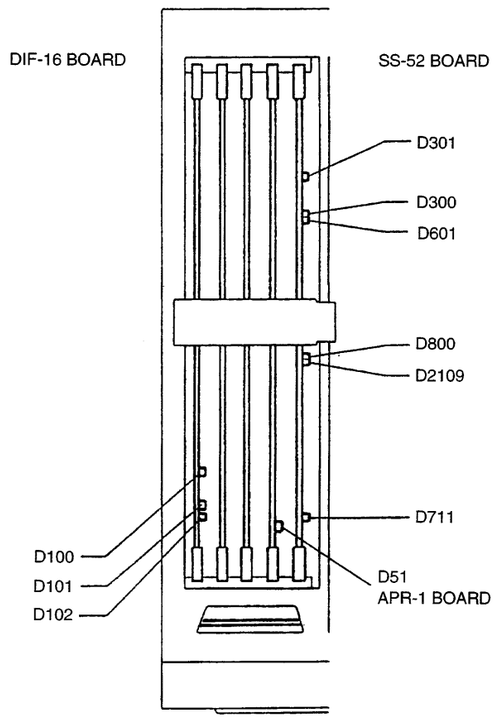
DVW-A510P (EK): S/N 14001 and higher
DVW-510P (EK): S/N 11255 and higher
DVW-CA510P (EK): S/N 10076 and higher

<Top view>



DVW-A510P (EK): S/N 10001 through 14000
DVW-510P (EK): S/N 10001 through 11254
DVW-CA510P (EK): S/N 10001 through 10075

<Top view>



DIF-16 Board

LED No.	Name	Color	Description	Normal State
D100	DIF TEST YP	Red	Lights when the Y PARITY test mode is executed in the maintenance mode.	Goes off
D101	PARA IN P ERROR	Red	Lights when an error occurs in the video signal that is sent from VPR board to DIF board.	Goes off
D102	TX625/$\overline{525}$	Green	Indicates the state of 4: 2: 2 component serial digital interface output. This state is set 625/50 by C.P.U BUS CONTROL.	Goes off
*D507	ENC1 ADJUST	Green	Lights when the VCO frequency is almost 27 MHz adjusting the D1 ENC1 VCO in the maintenance mode A23 : DIF VR.	Unsettled
*D508	ENC2 ADJUST	Green	Lights when the VCO frequency is almost 27 MHz adjusting the D1 ENC2 VCO in the maintenance mode A23 : DIF VR.	Unsettled

SS-52 Board

LED No.	Name	Color	Description	Normal State
D300	———	———	Unused	———
D301	SYS 1	Amber	Blinks during SYS 1 V25 CPU normal operation.	Blinks
D601	SYS 2	Amber	Blinks during SYS 2 Z80 CPU normal operation.	Blinks
D711	SV	Amber	Checks the ROM and RAM for communication when the power switch is set to ON. Lights for scores ms at intervals 1 to 2 seconds. (For the blinking pattern when abnormality occurred, refer to the figure shown right.)	Blinks
D800	DRUM	Amber	Blinks during drum microcomputer normal operation. Usually lights for 30 msecond at intervals of about one second. The blinking interval is inverted when the drum is locked.	Blinks
D2109	DT	Amber	Blinks during DT microcomputer FMC-16 CPU normal operation.	Blinks

APR-1 Board

LED No.	Name	Color	Description	Normal State
D51	APR 1	Amber **Red	Blinks during APR 1 microcomputer normal operation (when a 1/2VD signal is received from the SS-52 board).	Blinks

DM-89 Board (for DVW-A510)

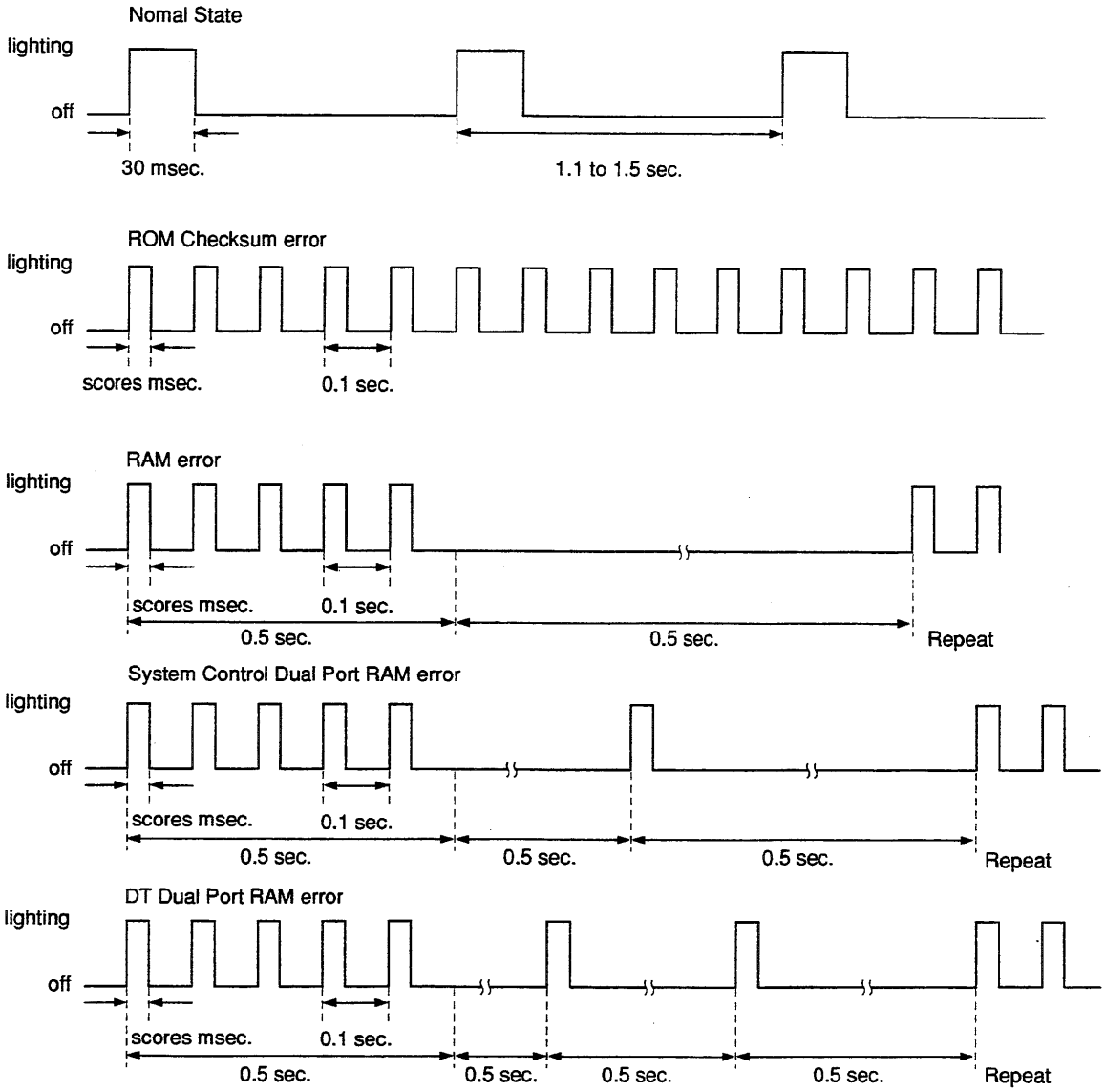
LED No.	Name	Color	Description	Normal State
D902	ADJUST	Amber	Usually lights for about 10 msecond at intervals of about one second. The blinking interval is inverted when the unit is in the adjustment mode (when switch S901-1 is set to ON).	Blinks

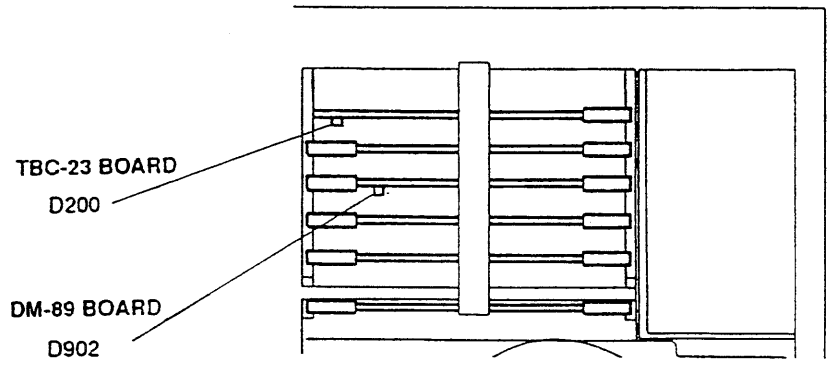
TBC-23 Board (for DVW-A510)

LED No.	Name	Color	Description	Normal State
D200	TBC	Amber	Lights once a second during TBC microcomputer normal operation.	Blinks

*: Lot No. 907 and higher
**: Lot No. 910 and higher

<Blinking Pattern of D711 on SS-51 Board>



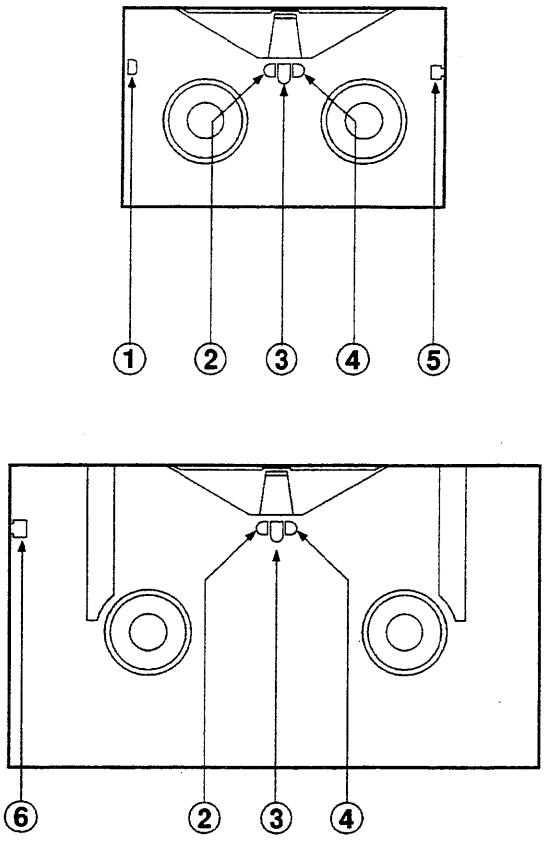


< Top view >

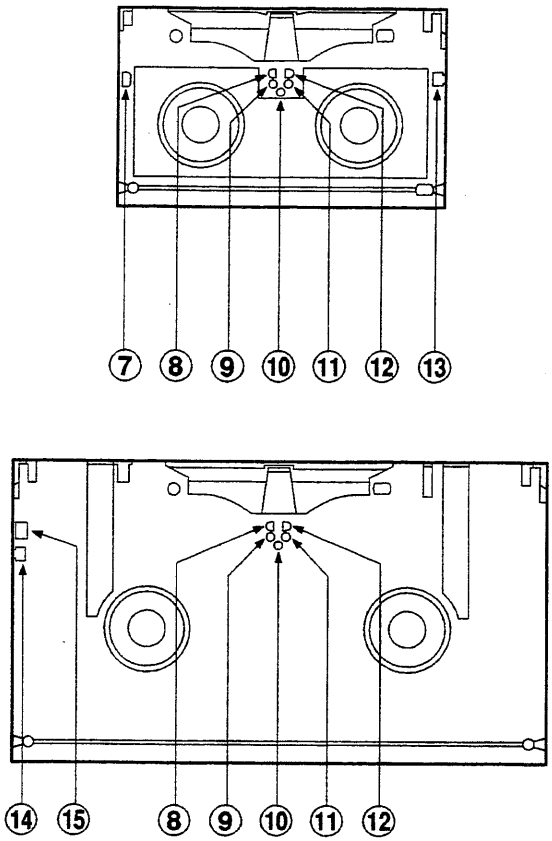
1-8. MECHANISM OF CASSETTE

As shown in the figure below, plugs and tabs are provided at the back side of the cassette tape.

Analog cassette tape



Digital cassette tape



① S cassette REC inhibit tab (for oxide tape)
② Video tape thickness detection tab
③ Metal tape detection tab
④ Reel hub diameter detection tab
⑤ S cassette REC inhibit plug (for metal particle tape)
⑥ L cassette REC inhibit plug

⑦ S cassette analog REC inhibit plug (originally open)
⑧ Video tape thickness detection tab
⑨ SPARE ID
⑩ Digital tape detection hole
⑪ SPARE ID
⑫ Reel hub diameter detection tab
⑬ S cassette digital REC inhibit plug
⑭ L cassette digital REC inhibit plug
⑮ L cassette analog REC inhibit plug (originally open)

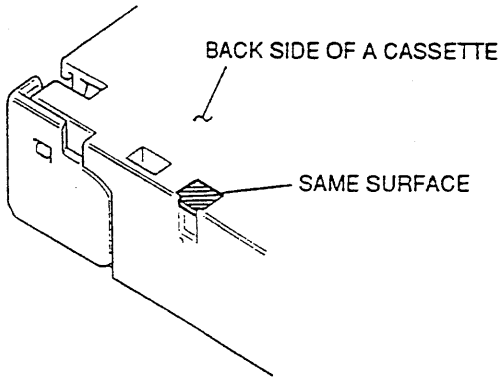


Fig 1.

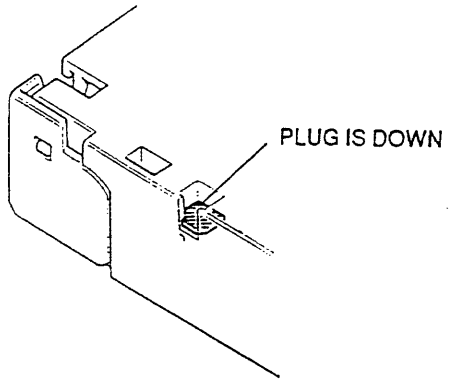


Fig 2.

The presence or absence of these plugs and tabs determines the cassette status as shown in the table below.

Analog cassette tape

No.	Plug and tab	Cassette status with or without plugs and tabs	
		With plugs and tabs	Without plugs and tabs
①	S cassette REC inhibit tab (for oxide tape)	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
②	Video tape thickness detection tab	A 20 µm thick tape is wound on the cassette.	A 15 µm thick tape is wound on the cassette.
③	Metal tape detection tab	An oxide tape is wound on the cassette.	A metal tape is wound on the cassette.
④	Reel hub diameter detection tab	For small hub	For large hub
⑤	S cassette REC inhibit plug (for metal particle tape)	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
⑥	L cassette REC inhibit plug		

Digital cassette tape

No.	PLUG AND TAB	CASSETTE STATUS WITH OR WITHOUT PLUGS AND TABS	
		WITH PLUGS AND TABS	WITHOUT PLUGS AND TABS
⑦	S cassette analog REC inhibit plug (originally open)	————	Analog signals cannot be recorded.
⑧	Video tape thickness detection tab	————	A 14 µm thick tape is wound on the cassette.
⑨	SPARE ID	————	————
⑩	Digital tape detection hole	An analog tape is wound on the cassette.	A digital tape is wound on the cassette.
⑪	SPARE ID	————	————
⑫	Reel hub diameter detection tab	For small hub	For large hub
⑬	S cassette digital REC inhibit plug	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
⑭	L cassette digital REC inhibit plug	Can be recorded (refer to Fig. 1).	Cannot be recorded (refer to Fig. 2).
⑮	L cassette analog REC inhibit plug (originally open)	————	Analog signals cannot be recorded.

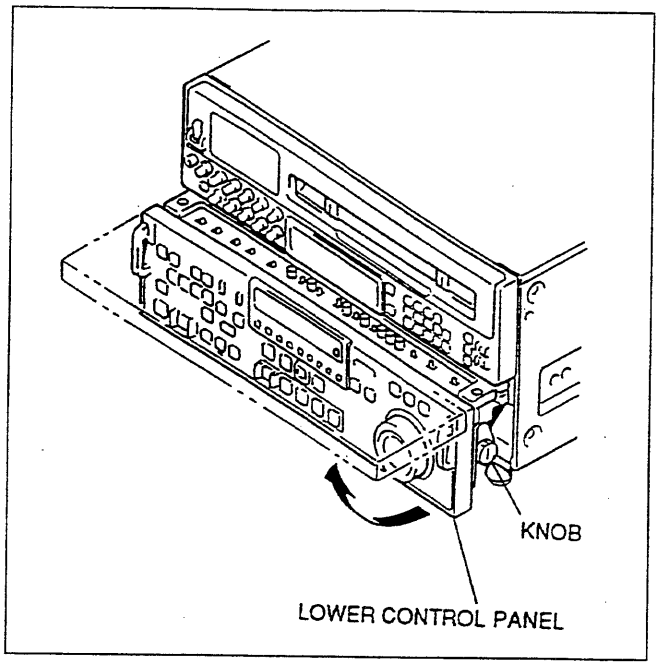
1-9. HOW TO PULL OUT/PUSH IN THE LOWER CONTROL PANEL

1. Take both side handles of a lower control panel and pull them slightly forward. Pull them more strongly, then the lower control panel is fixed.
2. Lift the lower control panel. The panel can be moves maximum 90 degrees.

NOTE
The lower control panel can be tilted up to 90 degrees by approximately 15 degree step. When using the lower control panel on the tilt, turn the knobs clockwise to hold the panel firmly.

3. When put back the panel assembly in the unit, replace it horizontally to the front side of the unit and then push it in the unit.

NOTE
Put back the panel assembly in the unit surely after using the unit.

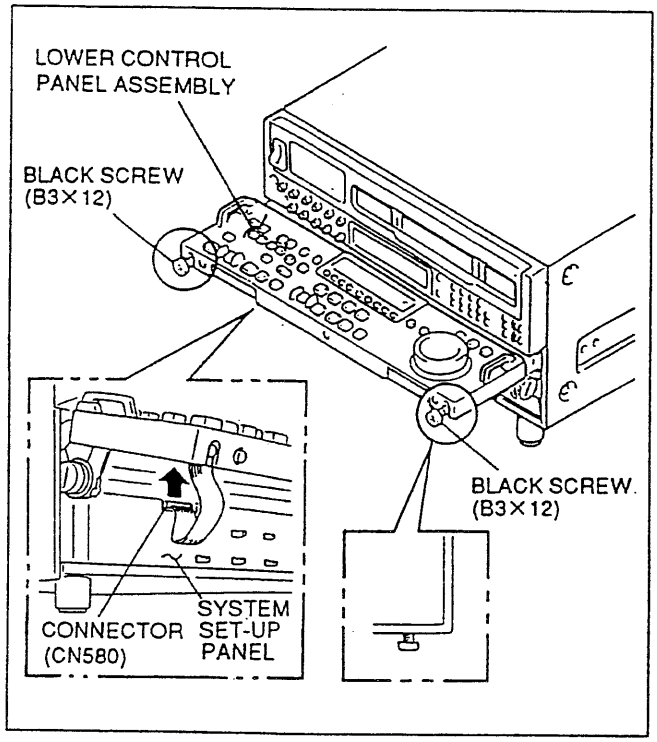


Pulling out/Pushing in the Lower Control Panel

1-10. REMOVAL/INSTALLATION OF LOWER CONTROL PANEL ASSEMBLY

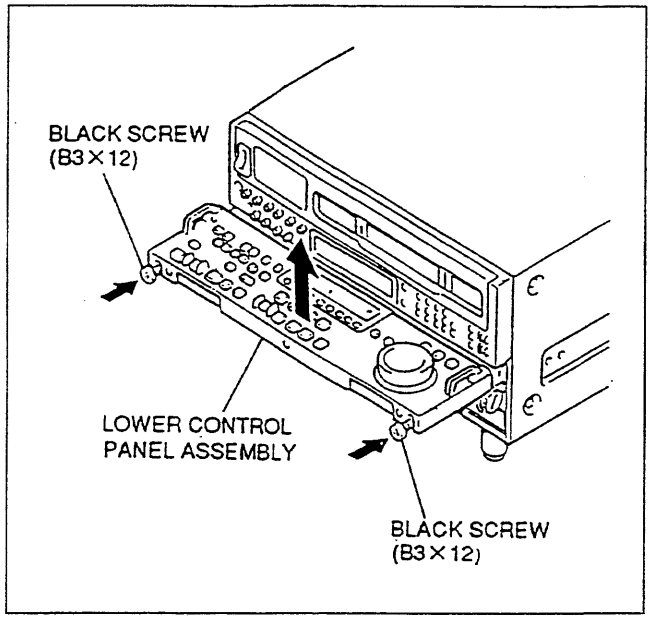
Removal

1. Fix a lower control panel at 90 degrees.
(Refer to Sec. 1-8. How to Pull out/Push in Lower Control Panel.)
2. Disconnect the connector (CN580) on the system set-up panel.
3. Loosen the two black screws on the lower control panel assembly. (Loosen the screws until screw's top are exposed from the lack of the lower control panel assembly.)



Disconnecting the Connector

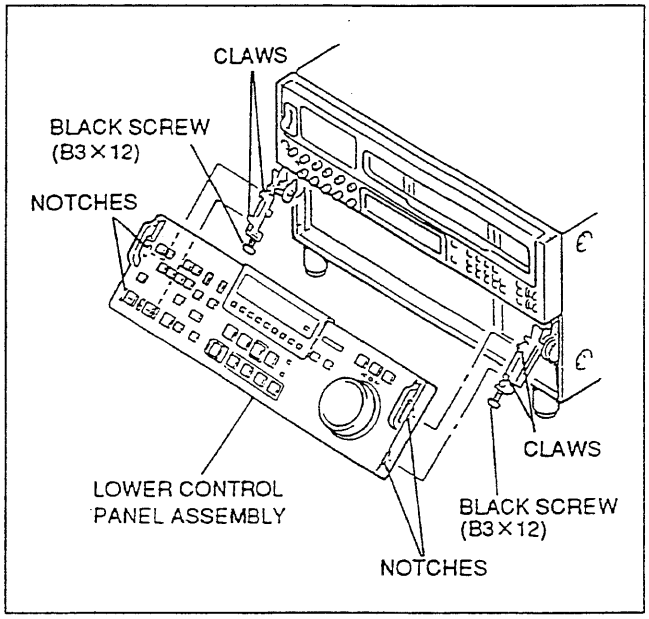
4. While pushing the loosen black screws in the direction of the arrow, remove the lower control panel assembly from the arms.



Removal of the Panel Assembly

Installation

5. Connect the harness of the panel assembly to the connector (CN580) on the system set-up panel.
6. Fix the arms at 45 degrees.
7. Set the notches of the panel assembly to the claws of the arms and insert the panel assembly until making a click sound.
   Then fix the assembly with the two screws.
8. When putting back the panel assembly in the unit, replace it horizontally to the front side of the unit and then push it in the unit.



Installation of the Panel Assembly

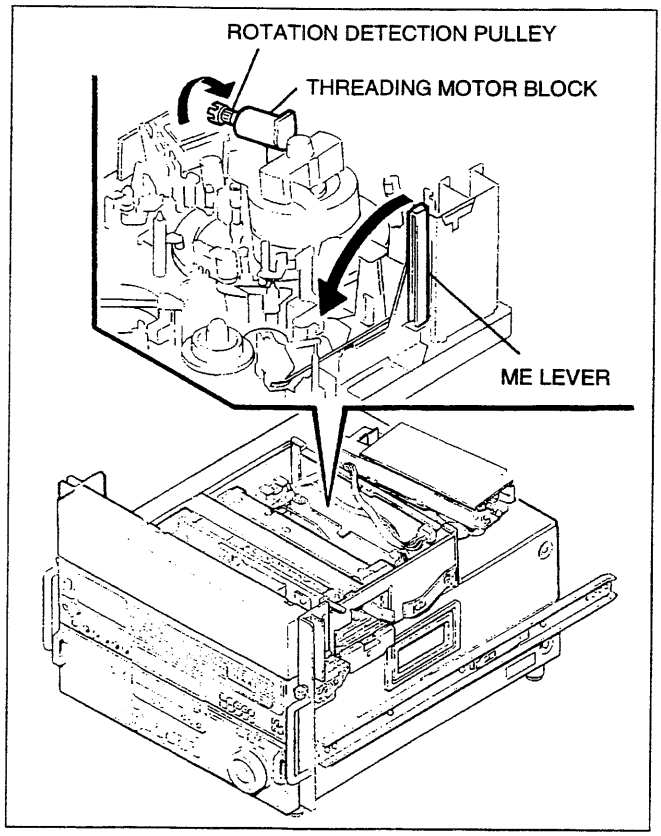
1-11. HOW TO TAKE OUT THE CASSETTE WHEN THE TAPE IS SLACKING

When the tape is slacked in the VTR, take out the cassette tape in the procedure below while taking care not to damage the tape.

1. Turn off the POWER.
2. Remove the upper lid(s).
   (Refer to Section 1-3. Removal/Installation of Cabinet.)
3. Remove the ejector assembly.
   (Refer to Section 1-4. Removal/Installation of Ejector Assembly.)
4. Rotate the rotation detection pulley of the threading motor block in the direction of the arrow with fingers by about a half turn and slacken the tape.
5. Shift the ME lever toward the front panel and wind the tape inside the cassette.

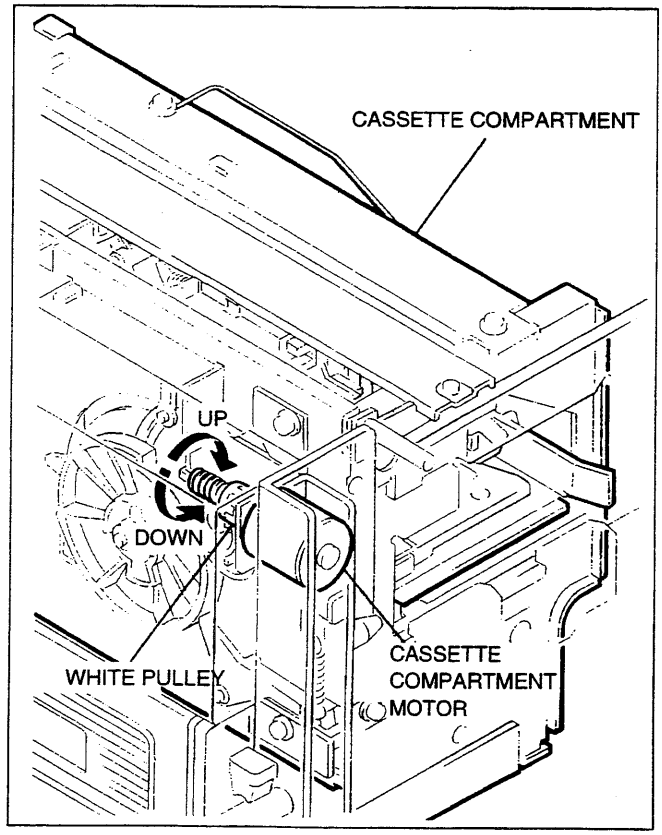
   NOTE
   Do not shift the ME lever during normal operation (during reel table operation).

   Repeat steps 4 and 5 until the unit is put into the unthreading-end state and until the tape is wound completely.
6. Fix the lower control panel assembly at the position of 90 degrees.
   (Refer to Section 1-8. How to Pull out/Push in Lower Control Panel.)



Winding of a Tape

7. Turn the yellow pulley of the cassette compartment motor shown in the figure clockwise until the cassette tape is ejected completely.



Ejection of a Cassette Tape

1-12. CLEANING WHEN THE HEADS ARE CLOGGED

If the video heads are clogged, clean the heads as the following procedure.
If the video heads are clogged after cleaning by cleaning tape, clean them by cleaning piece.

1-12-1. Cleaning by Cleaning Tape

NOTE
Make sure to use the cleaning tape BCT-5CLN. If the cleaning is performed by other cleaning tape, not the BCT-5CLN, unusual friction or damage of the video head may occur.

1. Insert the cleaning tape BCT-5CLN in the unit.
2. Press the EJECT button simultaneously with PLAY button.
   Head cleaning starts.
3. After 5 seconds, the cleaning tape will be ejected automatically.

NOTE
Be sure to eject the cleaning tape after cleaning to avoid damages to the heads.

4. Confirm that the head clog is clear.

1-12-2. Cleaning by Cleaning Cloth

Caution

- Turn the power off before cleaning.
- Each block in the mechanical deck consists of a precision part and is adjusted precisely. Be careful not to damage each part and to apply an excessive force during cleaning.
- Do not touch the greased portions during cleaning. If grease attaches to a cleaning cloth, replace the cleaning cloth by new one. If a cleaning cloth smeared with grease is used, grease may attach to the places where it should not.
- Do not insert a cassette tape before a cleaning fluid completely evaporates after cleaning.

Tools

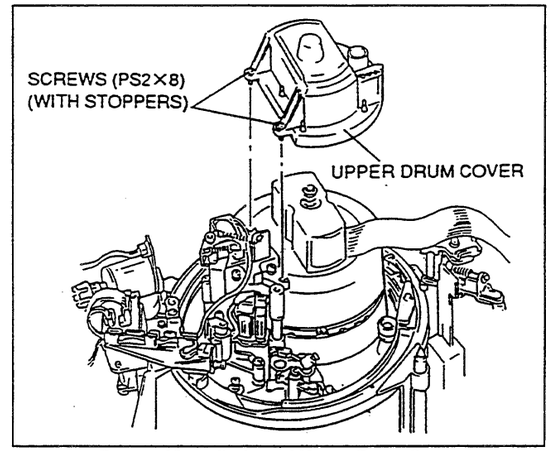
- Cleaning cloth: 3-184-527-01
- Cleaning fluid: 9-919-573-01

CAUTION
Do not use a cotton swab to clean the rotary heads.

Procedures

1. Turn the power off.
2. Remove the upper lid(s).
   (Refer to Section 1-3.)
3. Remove the Ejector assembly.
   (Refer to Section 1-4.)
4. Remove the cassette compartment.
   (Refer to Section 1-3-2.)
5. Loosen the two screws and remove the upper drum cover.

NOTE
These screws cannot be removed because of stoppers.



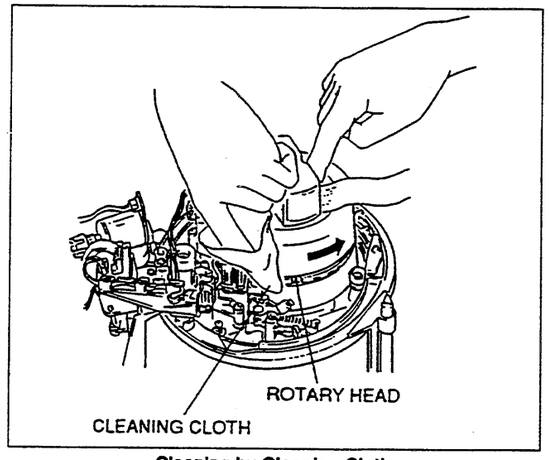
Removal/Installation of Upper Drum Cover

6. Press the cleaning cloth moistened with cleaning fluid slightly against the rotary heads.
7. Rotate the inner drum slowly counterclockwise two or three turns and clean the rotary heads.

CAUTION
Be sure to rotate the inner drum counterclockwise and clean the rotary heads along the circumference. Do not rotate the inner drum in the direction opposite to the specified direction (clockwise) or clean it in the vertical direction. This may damage the rotary heads.

8. After cleaning, wipe it with a dry cleaning cloth two or three times.
9. Tighten the two screws while pressing the upper drum cover towards the drum support direction.

   Tightening torque: 14.7×10^{-2} N•m (1.5 Kgf•cm)



Cleaning by Cleaning Cloth

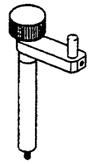
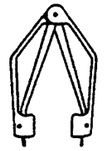
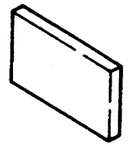
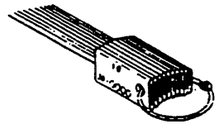
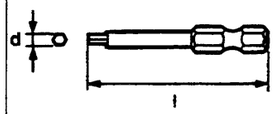
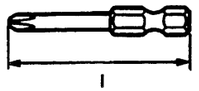
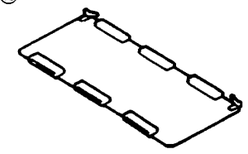
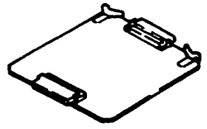
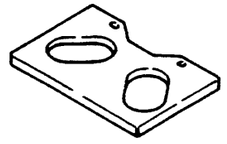
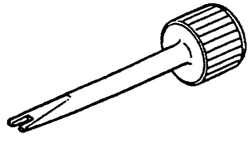
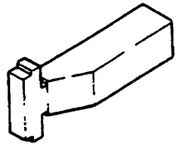
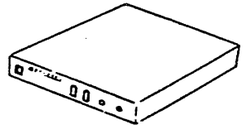
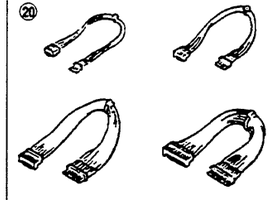
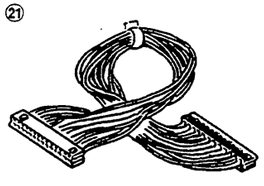
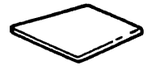
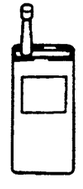
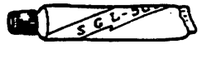
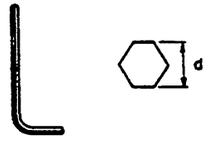
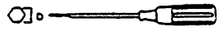
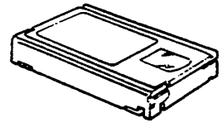
1-13. FIXTURE AND MEASURING EQUIPMENT FOR ADJUSTMENT

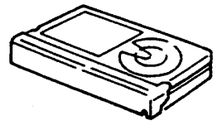
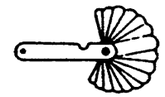
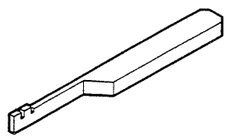
1-13-1. Fixture

Fig. No.	Part No.	Description	Inscription No.	For use
1	J-6001-820-A	Drum Eccentricity Gauge (3)	———	Inner drum eccentricity adjustment
2	J-6001-830-A	Drum Eccentricity Gauge (2)	———	
3	J-6001-840-A or J-6325-530-A	Drum Eccentricity Gauge (1) or Drum Eccentricity Gauge (6)	———	
4	J-6087-000-A	Drum Eccentricity Gauge (5)	———	
5	J-6324-030-A	Drum Eccentricity Gauge (7)	MW-403	
6	J-6035-070-A	Extraction Tool (for PLCC socket)	———	Extraction of IC (PLCC type)
7	J-6080-029-A	Small Dental Mirror (Round type ϕ 12)	———	Cassette pillar height adjustment
8	J-6086-570-A	Reference Flat Plate	SL-657	Audio/TC head zenith adjustment
9	J-6152-450-A	Wire Clearance Check Gauge Set	———	Clearance check
10	J-6251-090-A	Torque screwdriver's hexagonal bit (d=2.5 mm, l=120 mm)	———	Tightening screws to fix a drum assembly and inner drum assembly
	J-6323-440-A	Torque screwdriver's hexagonal bit (d=0.89 mm, l=50 mm)	———	Tightening screws to fix a tension regulator roller
	J-6323-500-A	Torque screwdriver's hexagonal bit (d=2 mm, l=75 mm)	———	Tightening screws to fix a reel FG sensor
11	J-6323-420-A	Torque screwdriver's bit (+ 2 mm, l=75 mm)		Tightening screws to fix a brush/slip ring assembly
	J-6323-430-A	Torque screwdriver's bit (+ 3 mm, l=90 mm)		Tightening screws to fix a reel motor assembly or a ring roller
12	J-6252-510-A	Torque screwdriver (6 kg•cm)	JB-5251	Tightening screws
	J-6252-520-A	Torque screwdriver (12 kg•cm)	JB-5252	Tightening screws
13	J-6420-350-A	Extension Board (L), EX-366	———	Large-sized printed circuit board for check and adjustment
14	J-6420-360-A	Extension Board (S), EX-378	———	Small-sized printed circuit board for check and adjustment
15	J-6320-870-A	Reel Motor Shaft Slantness Check Fixture	MW-087	Reel motor shaft slantness adjustment
16	J-6320-880-A	Cassette Reference Plate (L)	MW-088	Reel table height adjustment, Reel motor shaft slantness adjustment
17	J-6322-610-A	Tape Guide Adjustment Driver	MW-261	Tape path alignment
18	J-6329-350-A	Reel Table Height Gauge	MW-935	Reel table height adjustment
19	J-6332-240-A	VISC Phaase Adjusting Jig	———	VICS Alignment
20	J-6420-320-A	Extension Cable Set	———	Extension of the Switching regulator

Fig. No.	Part No.	Description	Inscription No.	For use
21	1-952-684-11	Extension Cable (14P)	———	Repair of the TBC-23/24 boards
22	3-184-527-01	Cleaning Cloth (15 cm x 15 cm)	———	Cleaning
23	7-432-114-11	Locking Compound 200g	———	Inhibits loosening of screws.
24	7-661-018-18	Diamond Oil NT-68 50 ml	———	
25	7-651-000-10	Sony Grease (SGL-601) 50 g	———	
26	7-700-736-01	L-shaped Hexagonal Wrench (d=1.27 mm)	———	
	7-700-736-05	L-shaped Hexagonal Wrench (d=1.5 mm)	———	
	7-700-736-06	L-shaped Hexagonal Wrench (d=0.9 mm)	———	
27	7-700-766-04	Hexagonal Wrench Driver (d=2.5 mm)	———	
28	8-960-073-51	Alignment Tape, ZR5-1P	———	Digital Video and Audio alignments
	8-960-073-61	Alignment Tape, ZR2-1P	———	Tracking adjustments (for digital)
29	8-960-096-91	Alignment Tape, CR5-1B PS (metal particle tape)	———	Analog Video alignments
	8-960-096-86	Alignment Tape, CR8-1B PS (metal particle tape)	———	Analog Audio alignments
	8-960-098-44	Alignment Tape, CR5-2A PS (oxide tape)	———	Analog Video alignments
	8-960-098-45	Alignment Tape, CR8-1A PS (oxide tape)	———	Analog Audio alignments
30	9-911-053-00	Thickness Gauge	———	Clearance check
31	9-919-573-01	Cleaning Liquid	———	Cleaning
32	J-6530-760-A	TG-0 Adjustment Fixture	DF-076	TG-0 Adjustment

1-13-1. Fixture

①	②	③	④
⑤ 	⑥ 	⑦	⑧ 
⑨ 	⑩ 	⑪ 	⑫
⑬ 	⑭ 	⑮	⑯ 
⑰ 	⑱ 	⑲ 	⑳ 
㉑ 	㉒ 	㉓ 	㉔
㉕ 	㉖ 	㉗ 	㉘ 

㉙ 	㉚ 	㉛	㉜ 

1-23

1-13-2. MEASURING EQUIPMENT

It is recommended to use the measuring equipments listed below or the equivalents.
Each equipment is available as a standard product.

Equipment	Model Name	Remarks
Analog Composite Signal Generator	SONY TEKTRONIX 1411	for VPR-1 board alignment
	SONY TEKTRONIX TSG-271A	
Analog Component Signal Generator	SONY TEKTRONIX TSG-300 or TSG-371	for generating SMPTE/EBU format analog signals
Digital Component Signal Generator	SONY TEKTRONIX TSG-422(OP.1S)	for generating 4:2:2 format digital signals
Spectrum Analyzer	ADVANTEST R3261A	with external trigger function bandwidth: more than 100 MHz
Oscilloscope	SONY TEKTRONIX 2465B	
Component/Composite Wave Form Monitor	SONY TEKTRONIX WFM 300A	for measuring video levels
Wave Form/Vector Monitor	SONY TEKTRONIX 1751 or 1781R	for measuring analog composite SCH
Audio Level Meter	HEWLETT PACKARD HP3400A	
Audio Analyzer	SONY TEKTRONIX AA501A(OP.02)	for measuring distortion and levels
Audio Generator	SONY TEKTRONIX SG505(OP.02)	
Frequency Counter	ADVANTEST TR5821AK	
Digital Voltmeter	ADVANTEST TR6845	
Monitor with Serial Digital Input	SONY BVM-1410 (with optional accessoy BKM-2085-14)	
Network Analyzer	ANRITSU MS-420B	
DA Converter Board (D-1)	SONY BKPF-102CA	for VPR-1 board alignment
Digital Video Interface Unit	SONY PFV-D50/D100/D200	for VPR-1 board alignment

1-14. ERROR LOGGER FUNCTION

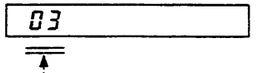
- CH COND RED (Channel Condition Red)
  When the red CHANNEL CONDITION Lamp on the upper control panel lights;
- REF ALARM (Reference Alarm)
  When a reference signal is missing (no signal is input to the INPUT REF VIDEO connector)
- TAPE EJECT
  When the cassette tape is ejected;
  (If no error is occured from when the cassette tape was ejected last time until it is ejected this time, the preceding time code is overwritten by this time code.)
- ERROR-xx
  When a trouble is detected;
  (The corresponding error code is recorded.)

When any one of the conditions mentioned above occurs, the corresponding message and time code are stored. After the power switch is turned on, the error logger function always monitors the unit to detect the errors. The contents of these data items can be read and checked in the form of a list.

Error Logger Screen

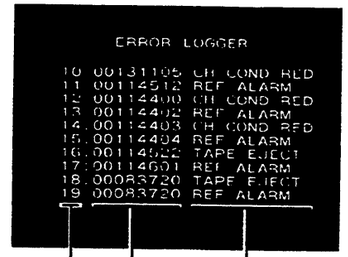
To enter the error logger screen, press the MENU button while pressing and holding the ENTRY button on the lower control panel.
The error logger data is superimposed on the monitor screen (output to the VIDEO OUTPUT COMPOSITE 3 connector or
SERIAL V/A OUTPUT 4 connector). Moreover, the time counter on the lower control panel displays the error logger data by only the number of storage error times.
A maximum of 99 error data items can be stored. To display the error data items that are not displayed on the screen, turn the search dial to scroll up them. When 99 data items are exceeded, the old data is erased and the data sequence is advanced.
To exit the error logger screen, press the MENU button on the lower control panel.

Time Counter Display



Number of Error Log Total Times

Monitor Screen



Error Message

Time Code

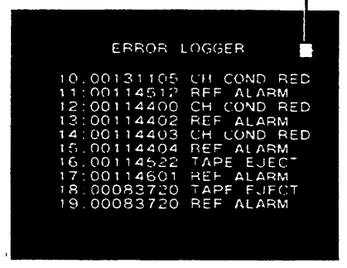
Number of Error Log Times

Tape Operation during Error Logger Screen Display

With the error logger screen displayed, press the SET button on the lower control panel to display a block sign on the monitor screen. This enables the tape operation.
To return to the error logger screen, press the MENU button on the lower control panel.

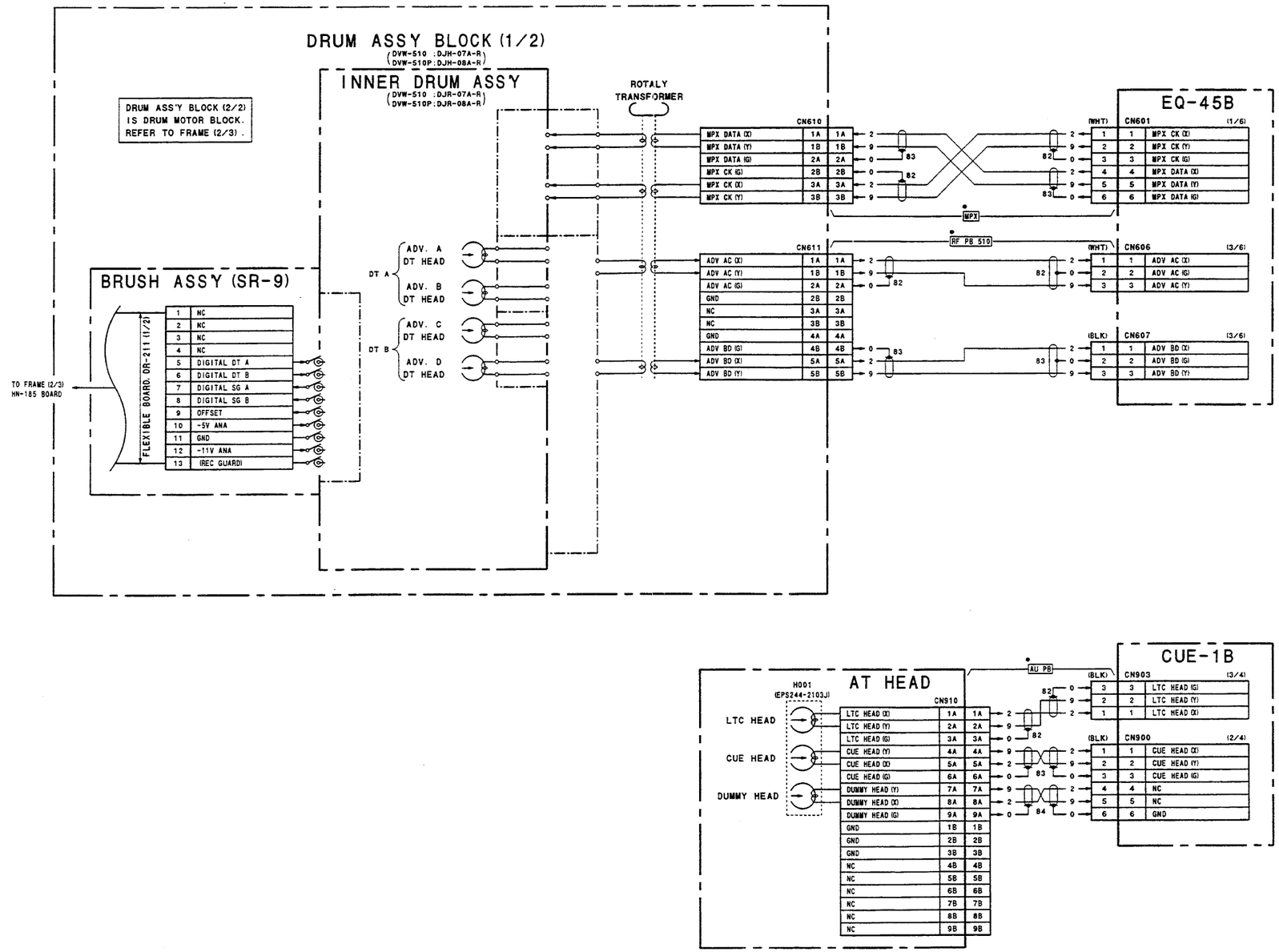
Block Sign

Monitor Screen



Error Logger Data Erasure

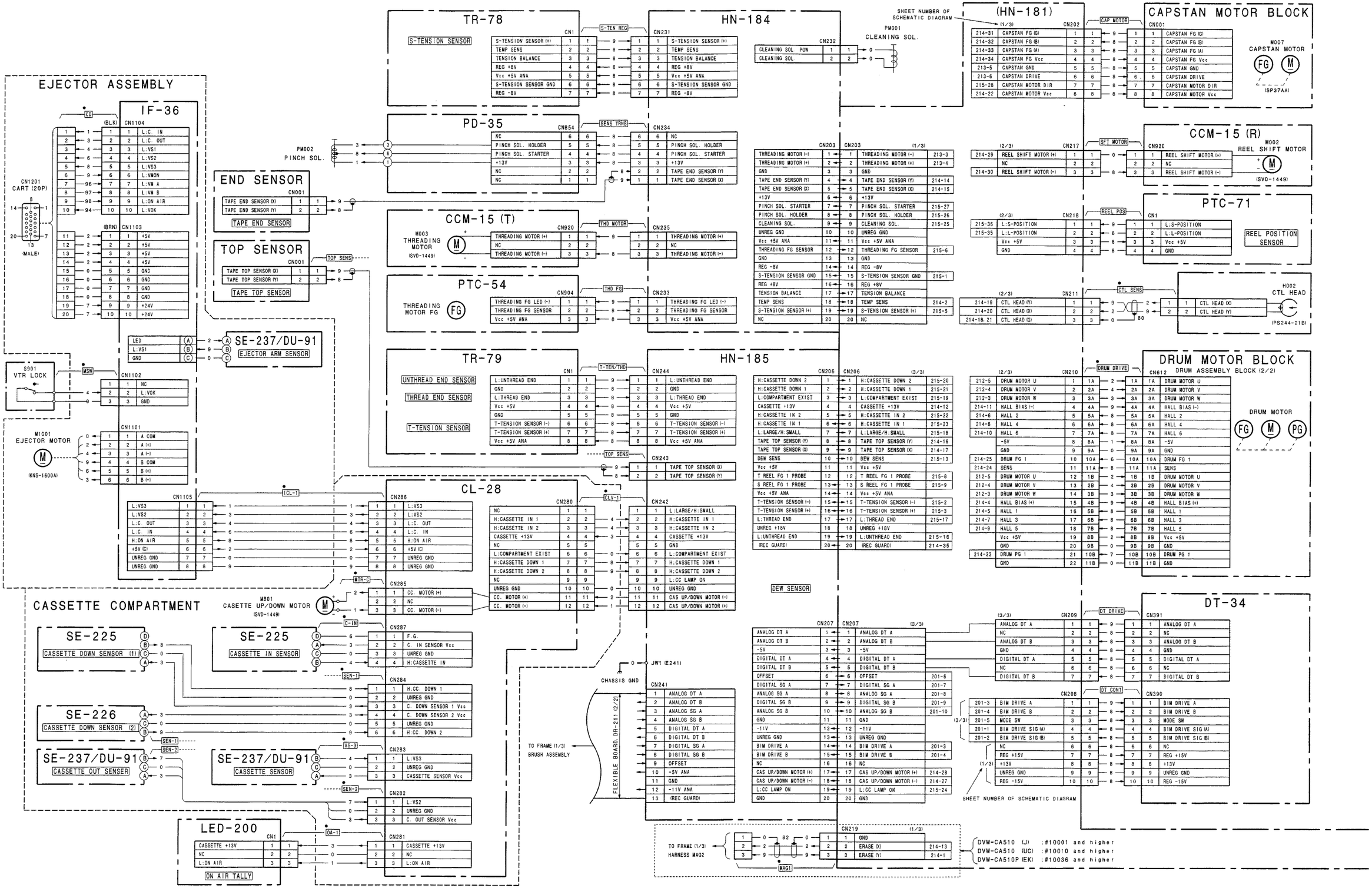
To erase the error logger data, press the RESET button on the lower control panel in the error logger screen display.

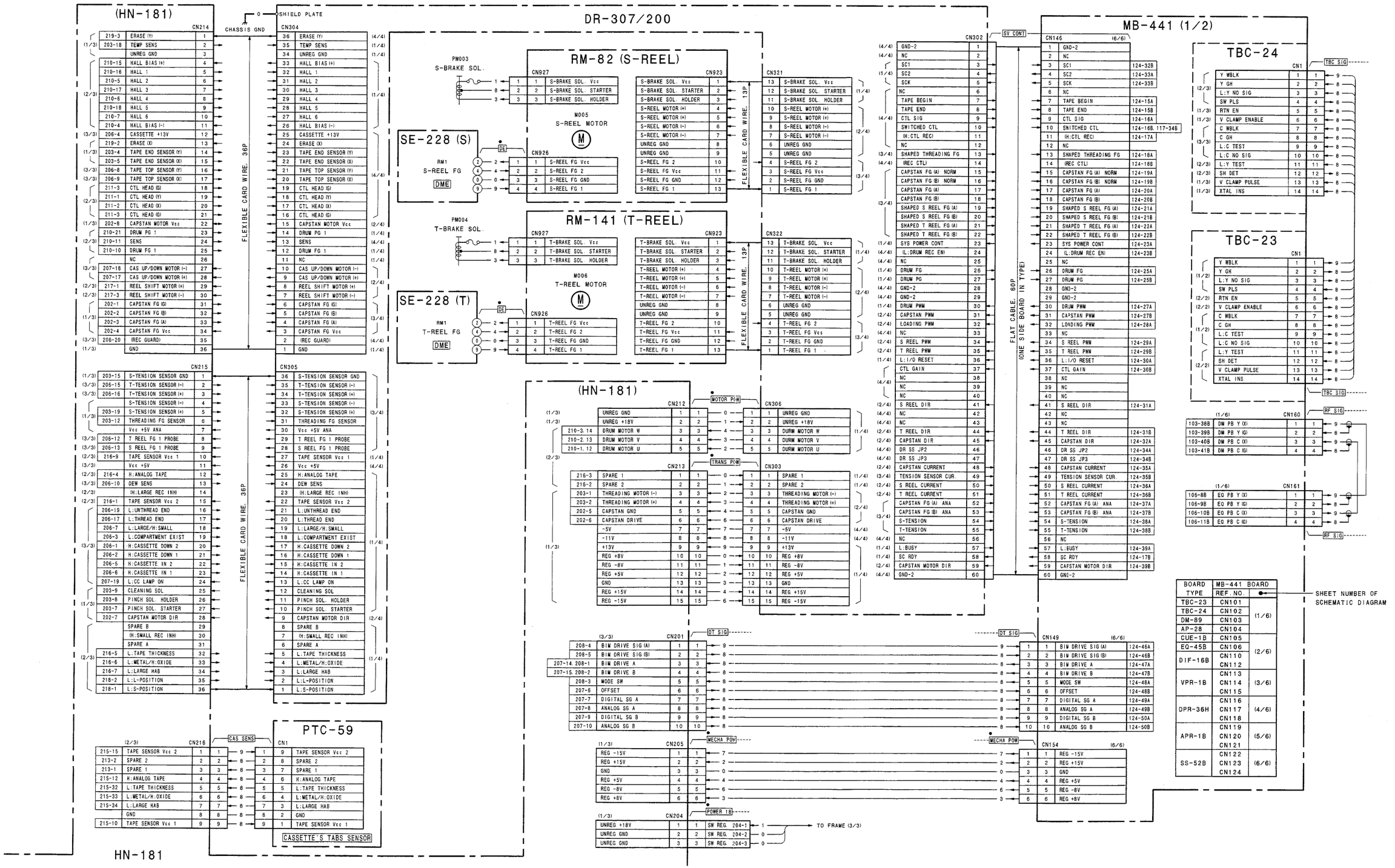


Drum/Heads (Except CTL Head)

FRAME WIRING (1/3)

DVW-510/510P


EJECTOR ASSEMBLY
IF-36
CN1104
CN1201 CART (20P)
(MALE)
CN1103
CN1102
CN1101
S901 VTR LOCK
M1001 EJECTOR MOTOR
(KNS-1600A)
SE-237/DU-91
EJECTOR ARM SENSOR
END SENSOR
CN001
TAPE END SENSOR
TOP SENSOR
TAPE TOP SENSOR
PM002 PINCH SOL.
TR-78
S-TENSION SENSOR
CN1
CN231
HN-184
CN232
PM001 CLEANING SOL.
PD-35
CN854
CN234
CCM-15 (T)
M003 THREADING MOTOR (SVD-1449)
CN920
CN235
PTC-54
THREADING MOTOR FG
CN904
CN233
TR-79
UNTHREAD END SENSOR
THREAD END SENSOR
T-TENSION SENSOR
CN244
HN-185
CN206
CN243
CL-28
CN286
CN280
CN242
CN285
M801 CASSETTE UP/DOWN MOTOR (SVD-1449)
CASSETTE COMPARTMENT
SE-225
CASSETTE DOWN SENSOR (1)
SE-225
CASSETTE IN SENSOR
SE-226
CASSETTE DOWN SENSOR (2)
SE-237/DU-91
CASSETTE OUT SENSER
SE-237/DU-91
CASSETTE SENSOR
CN287
CN284
CN283
CN282
CN281
LED-200
ON AIR TALLY
CHASSIS GND
JW1 (E241)
CN241
FLEXIBLE BOARD DH-211 (2/2)
TO FRAME (1/3) BRUSH ASSEMBLY
DEW SENSOR
CN207
CN219
TO FRAME (1/3) HARNESS MAG2
MAG1
SHEET NUMBER OF SCHEMATIC DIAGRAM
(HN-181)
CN202
CAPSTAN MOTOR BLOCK
CN001
M007 CAPSTAN MOTOR
(SP37AA)
CCM-15 (R)
CN920
M002 REEL SHIFT MOTOR
(SVD-1449)
PTC-71
CN1
REEL POSITION SENSOR
H002 CTL HEAD
(PS244-21B)
DRUM MOTOR BLOCK
CN612
DRUM ASSEMBLY BLOCK (2/2)
DRUM MOTOR
CN210
CN208
DT-34
CN391
CN209
CN390
DVW-CA510 (J) :#10001 and higher
DVW-CA510 (UC) :#10010 and higher
DVW-CA510P (EK) :#10036 and higher

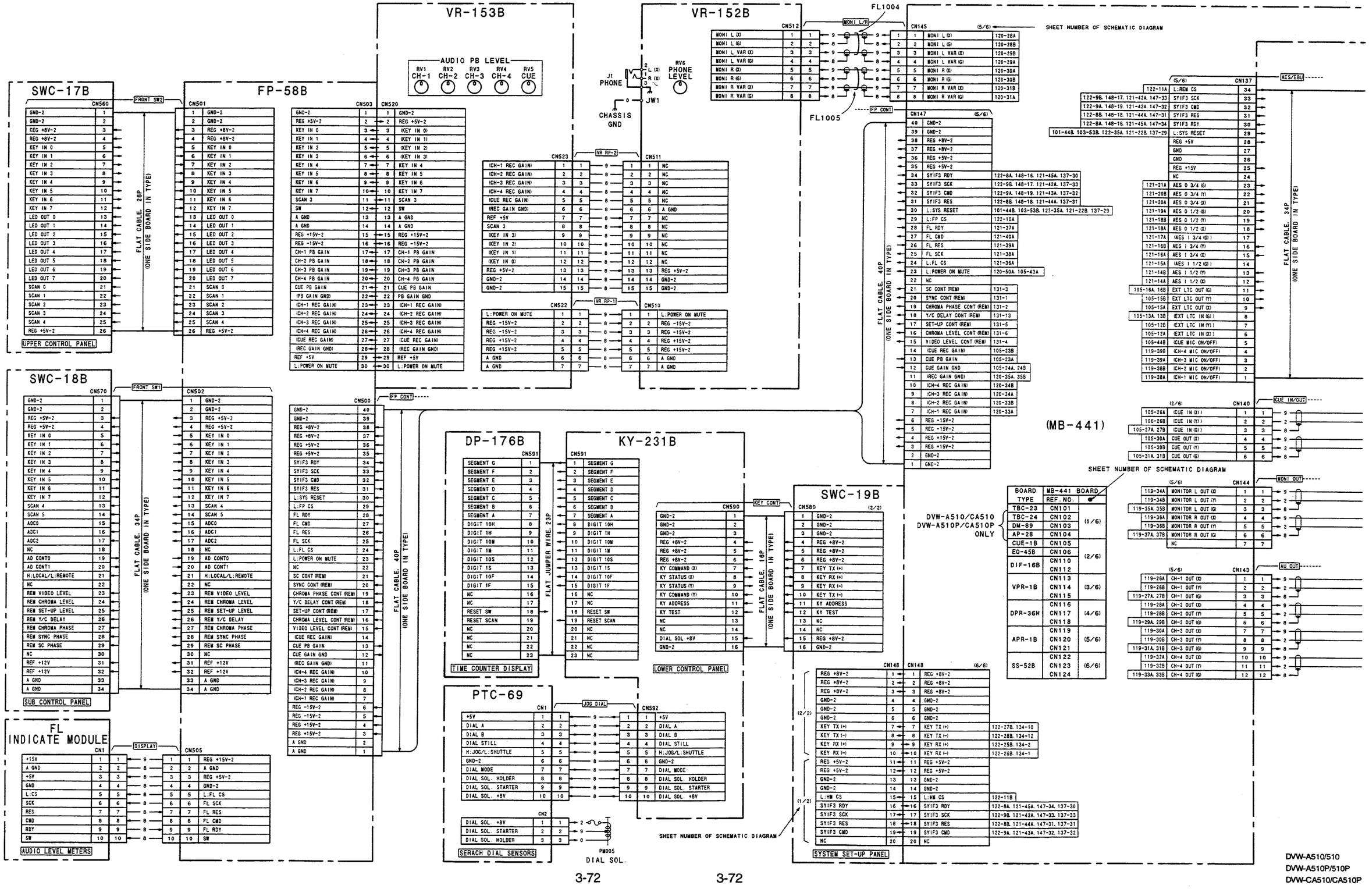


Cassette Compartment, Mecha. Deck (Inc. CTL Head)

FRAME WIRING (2/3)

DVW-CA510/CA510P

FL1004 and FL1005 are not equipped in the DVW-A510/510/CA510.



DVW-A510/510
DVW-A510P/510P
DVW-CA510/CA510P

b) C001: CASSETTE COMP. SW

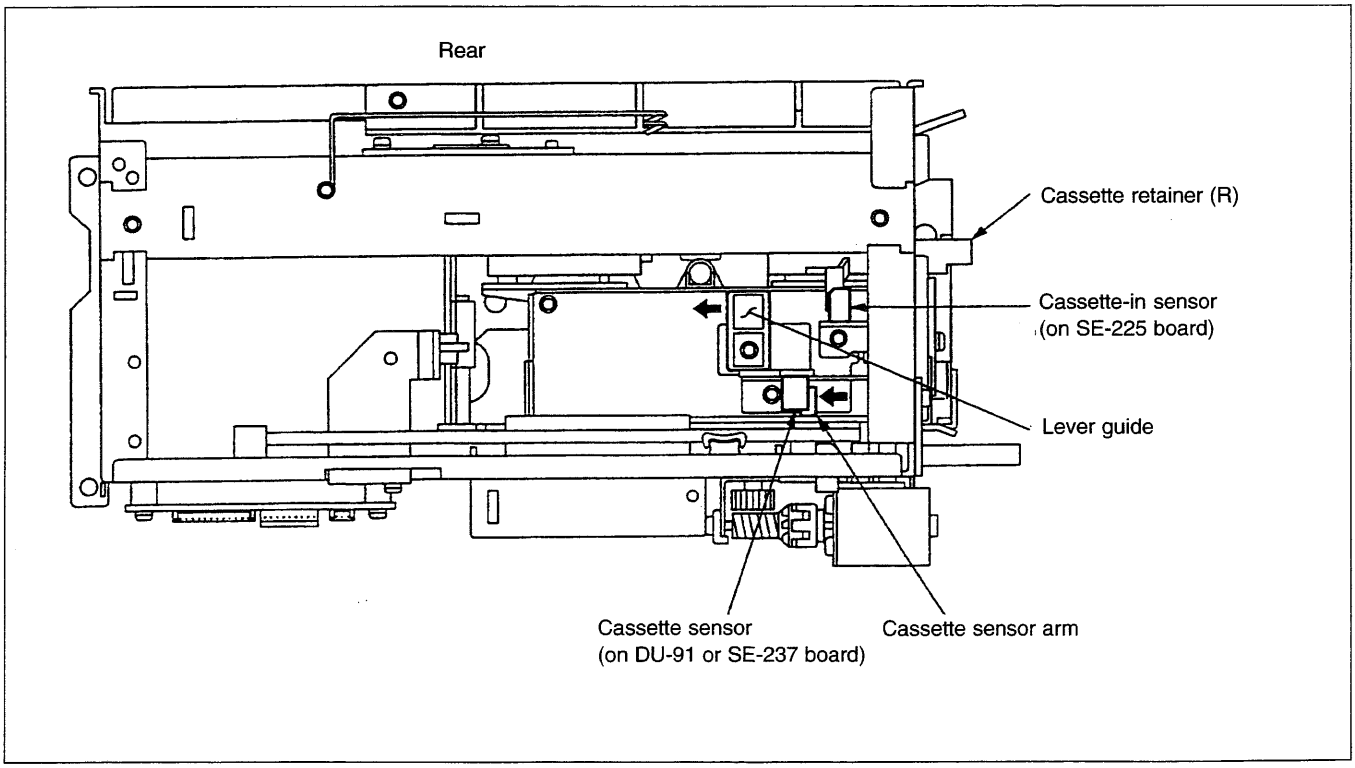
```
SERVO CHECK
 INPUT CHECK

C001:CASSETTE COMP. SW
 SW1: CASSETTE IN SW 1
 SW2: CASSETTE IN SW 2
 SW3: LARGE CASSETTE SW

      3  1      2
```

This mode checks the functions of the cassette-in sensor and cassette sensor in the compartment block.

Note:
Since the maintenance mode and the sensors of compartment block on this unit do not match. Therfore, this mode cannot check the function of a sensor. As a result, the AND of the above two sensors' state is reflected on the display of the monitor screen. Switch numbers "1" and "2" change to/from "■".
LARGE CASSETTE SW does not exist in this unit. Therfore, switch number "3" on the monitor screen does not change. If switch number "3" changes to "■", check the sensor input circuit on the DR-307/200 board.

(1) Slide the lever guide to the left until the cassette retainer (R) is lowered.
The display on the monitor screen does not change yet.
(2) Confirm that the two switch numbers ("1" and "2") on the monitor screen change to "■" when the cassette sensor arm is pushed manually.
(3) Confirm that "■" returns to the switch numbers when the cassette sensor arm is released.
(4) Raise the cassette retainer (R) so that the lever guide to the former position.
(5) Confirm that the display on the monitor screen does not change even if the cassette sensor arm is pushed manually.

In case of NG;
When the monitor screen display changes in step (1).
Check the cassette sensor on the DU-91or SE-237 board.
Also check IC2 on the CL-28 board.
When the monitor screen display changes in step (5).
Check the cassette-in sensor on the SE-225 board.
Also check IC2 on the CL-28 board.
When the monitor screen display does not change in step (2) or (3).
Check IC2 on the CL-28 board.
Also check the sensor input circuit on the DR-307/200 board.



Top View of the Cassette Compartment

c) C002: TOP/END SENSOR

This mode checks the function of the tape top and end sensors.

Confirm that the "OFF" display on the monitor screen changes to "ON !" when a screwdriver is brought near sensors ① and ② in the figure below. Also confirm that the display changes from "ON !" to "OFF" when the screwdriver is released from the sensors.

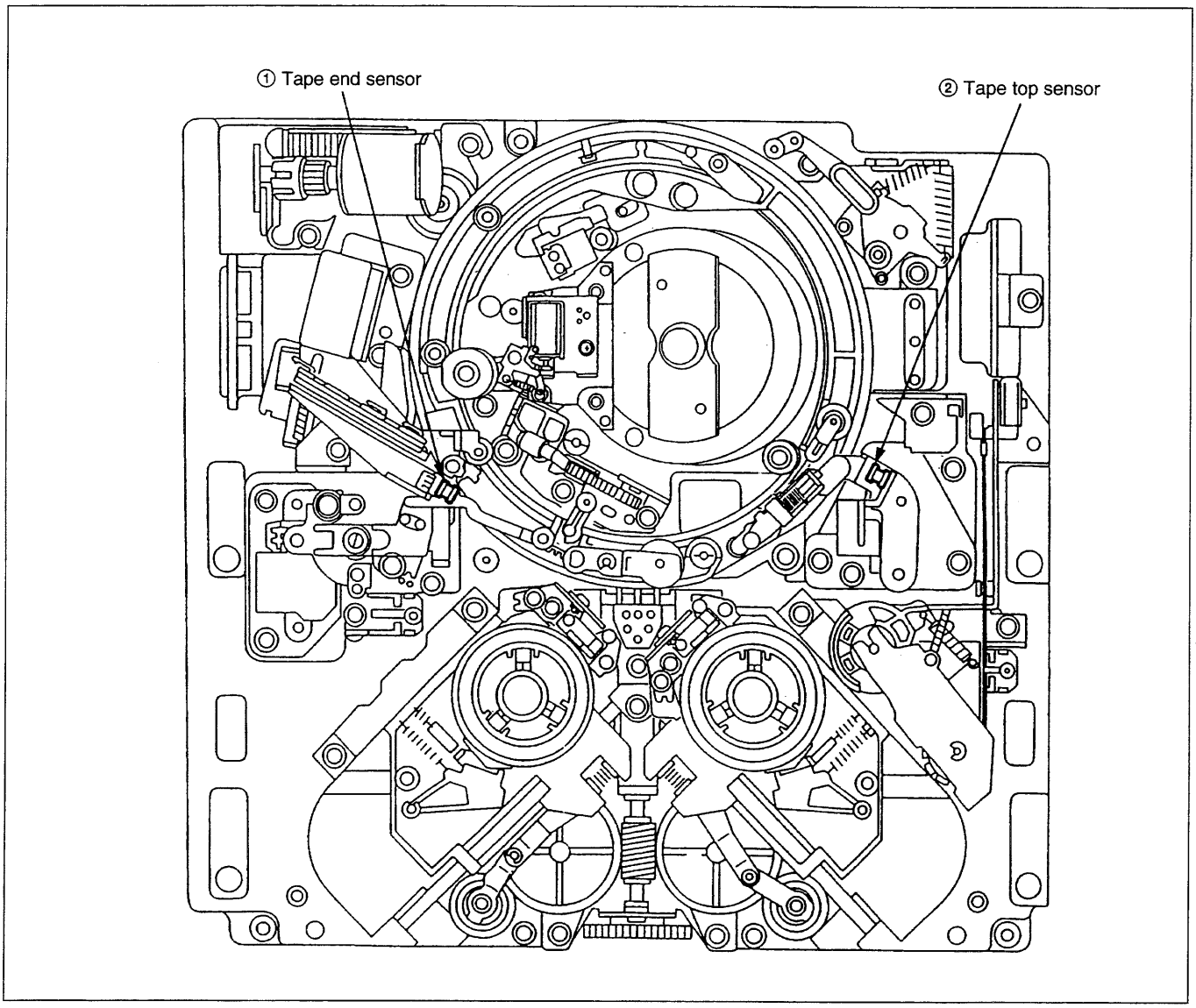
```
SERVO CHECK
 INPUT CHECK

C002:TOP/END SENSOR


  END              TOP
SENSOR           SENSOR

  OFF              OFF
```

In case of NG;

When "ON !" is not displayed in the specified position or when the display does not return from "ON !" to "OFF" .

Check only the sensors.

Also check the sensor input circuit on the DR-307/200 board.



d) C013: CASSETTE COMP.

This mode checks the operation of the cassette compartment motor, and the function of the cassette down sensor.

```
SERVO CHECK
 MOTOR CHECK
C013:CASSETTE COMP.

          UP




 S300(SS-52): CHECK
 S301(SS-52): RETURN
```

(1) Press the SET button (or switch S300 on the SS board).
Confirm that the compartment block goes down. At that time, confirm that the display on the monitor screen changes as shown below.

UP → HORIZ. → DOWN

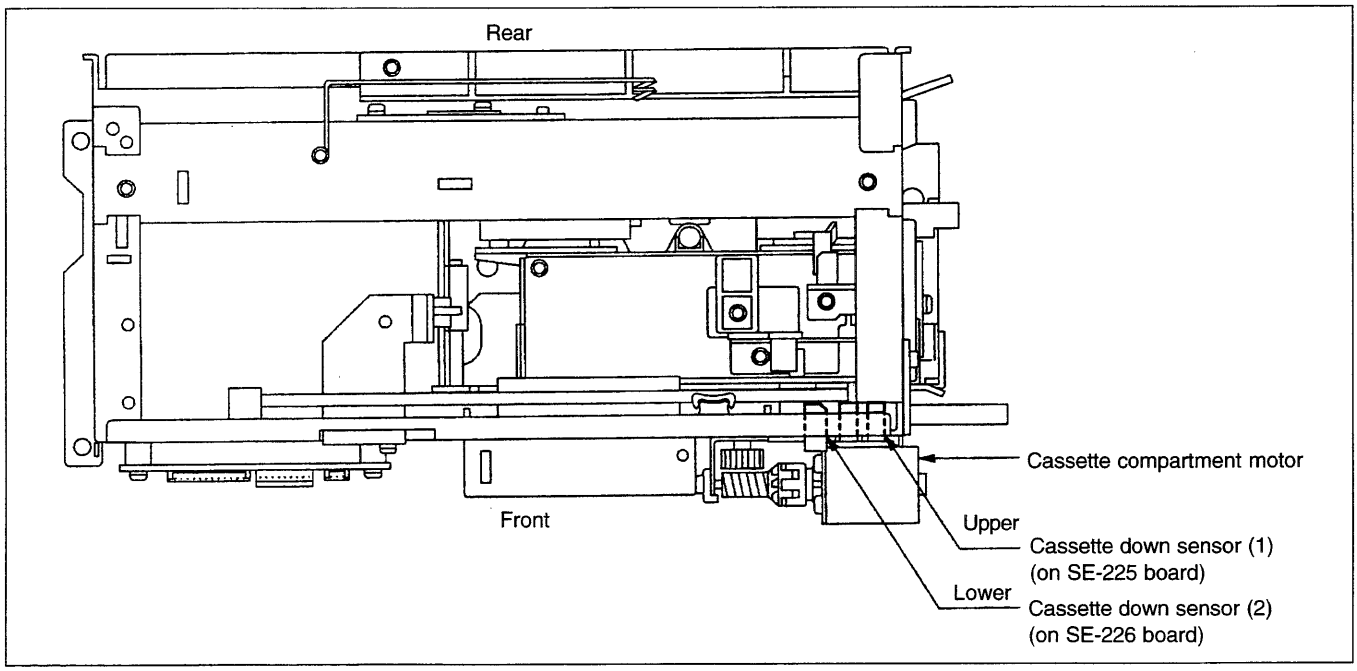
(2) Press the SET button (or switch S300 on the SS board) again.
Confirm that the compartment block goes up. At that time, confirm that the display on the monitor screen changes as shown below.

DOWN → HORIZ. → UP

In case of NG;

When the cassette compartment motor does not rotate.
Check the cassette compartment motor.
Also check the cassette compartment motor driver circuit (DR-307/200 board).

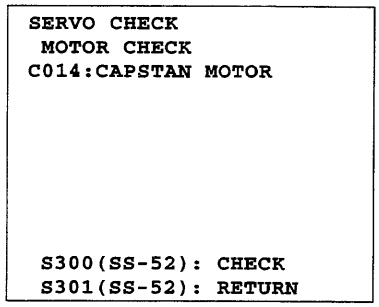
When the compartment block goes up and down normally, but the display does not change.
Check the cassette down sensor (SE-225 or SE-226 board).
Also check the sensor input circuit on the DR-307/200 board.



Top View of the Cassette Compartment

e) C014: CAPSTAN MOTOR

This mode checks the rotation direction of the capstan motor.



(1) Press the SET button (or switch S300 on the SS board).
Confirm that the capstan motor rotates in the forward direction (↻) and that the "FORWARD .... OK" display appears on the monitor screen.

(2) Press the SET button (or switch S300 on the SS board) again.
Confirm that the capstan motor rotates in the reverse direction (↺) and that the "REVERSE .... OK" display appears on the monitor screen.

In case of NG;

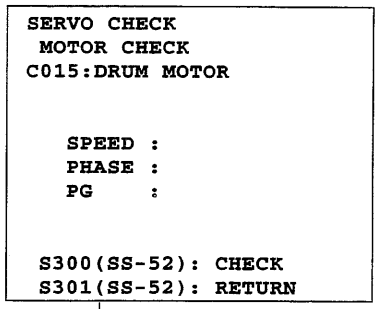
When the capstan motor does not rotate.
Check the capstan motor.
Also check capstan motor driver circuit (DR-307/200 board).

When the capstan motor rotates normally, but the "OK" display does not appear on the monitor screen.
Check the capstan motor.
Also check the capstan FG amplifier input circuit (DR-307/200 board).

f) C015: DRUM MOTOR

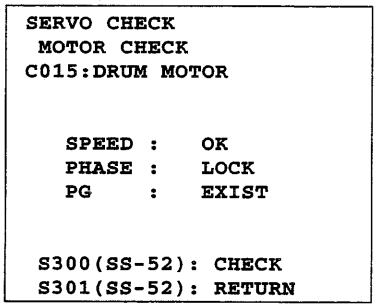
This mode checks the rotation of the drum motor.

(1) Press the SET button (or switch S300 on the SS board) to initiate this check.
The display on the monitor screen at that time is as shown below.
SPEED : NG
PHASE : UNLOCK
PG : NO EXIST



SET or S300

(2) Confirm that the display on the monitor screen changes as shown at right after a little while.



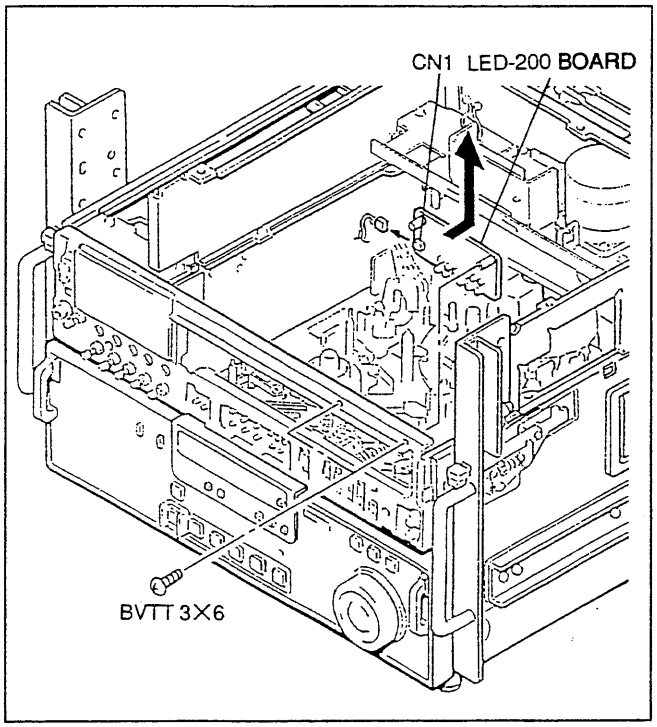
Check completed (OK)

In case of NG;

When the display on the monitor screen does not change.
Check the drum motor driver circuit (DR-307/200 board), the drum FG amplifier circuit (DR-307/200 board), and the drum PG amplifier circuit (DR-307/200 board).

6-3-16.LED-200 Board

1. Turn off the power.
2. Remove the upper control panel and front sub panel. (Refer to section 1-3-1.)
3. Remove the cassette compartment assembly. (Refer to section 1-3-2.)
4. Disconnect the connector (CN1).
5. Remove two screws, and remove the LED-200 board.



6. Install the LED-200 board in the reverse order of steps 1 through 5.

SECTION 7
PERIODIC MAINTENANCE AND INSPECTION

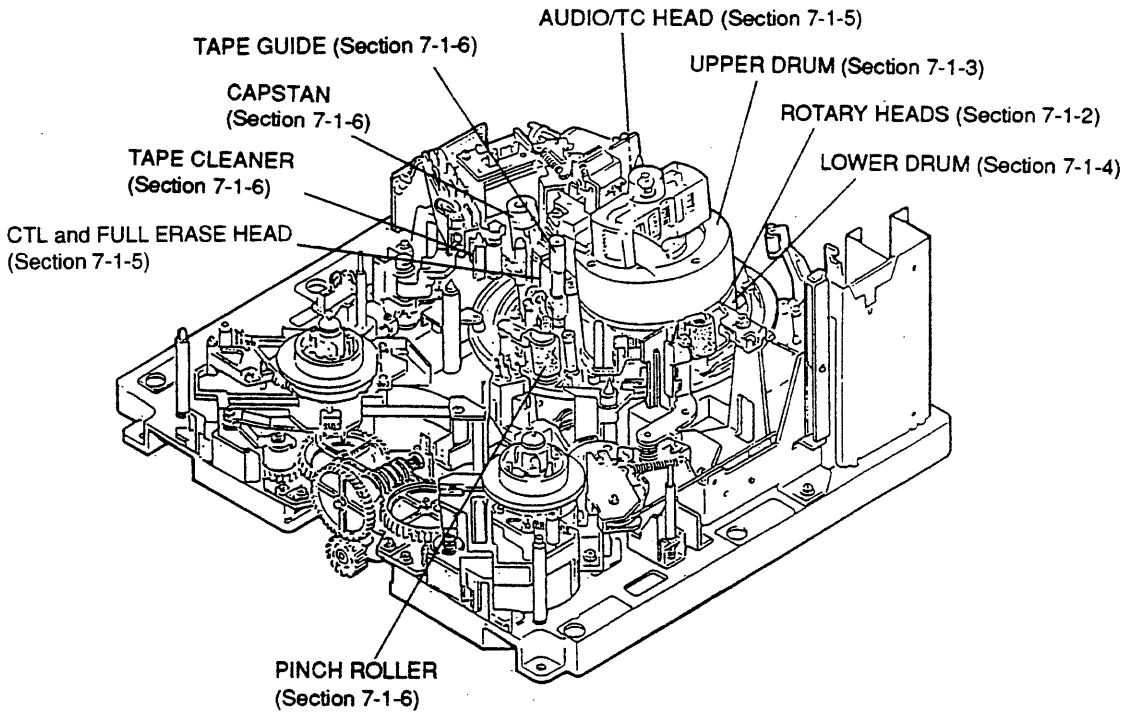
7-1. CLEANING

To make the most of the functions, fully realize the performance of this unit, and to lengthen the life of the unit and tape, clean the components often.

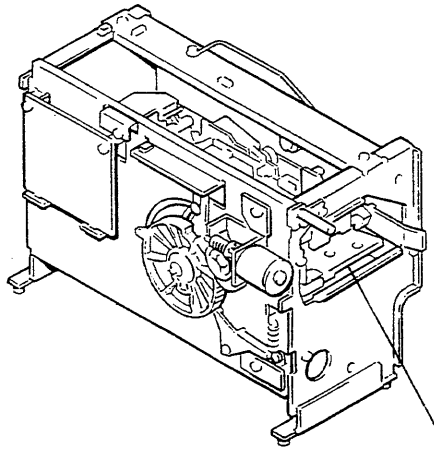
7-1-1. General Information for Cleaning

1. Index

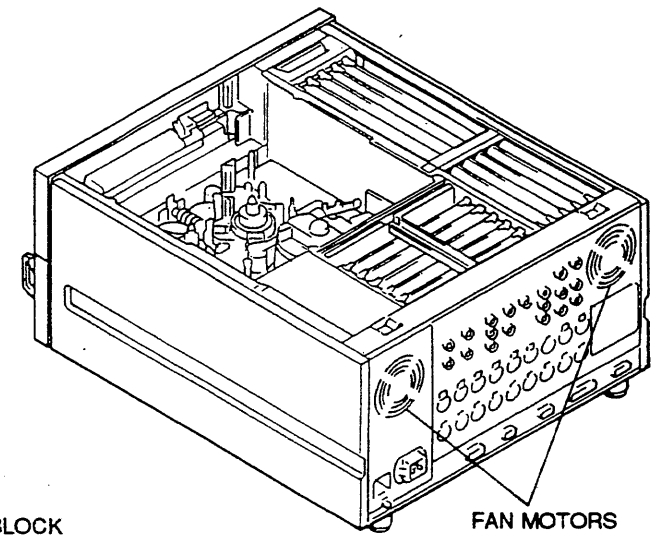
〈Mechanical Deck Block〉



〈Cassette Compartment〉



〈Unit〉



2. Cautions

- Turn the power off before cleaning.
- Each block in the mechanical deck consists of a precision part and is adjusted precisely. Be careful not to damage each part and to apply an excessive force during cleaning.
- Do not touch the greased portions during cleaning. If grease attaches to a cleaning cloth, replace the cleaning cloth by new one. If a cleaning cloth smeared with grease is used, grease may attach to the places where it should not.
- Do not insert a cassette tape before a cleaning fluid completely evaporates after cleaning.

3. Preparation

(1) Turn the power off.
(2) Remove the upper lid. (Refer to Section 1-3-1.)
(3) Remove the ejector assembly. (Refer to Section 1-4.)
(4) Remove the cassette compartment. (Refer to Section 1-3-2.)

7-1-8. Cassette Compartment Cleaning

Cautions
- Be careful not to apply an excessive force to the compartment when cleaning the cassette compartment.

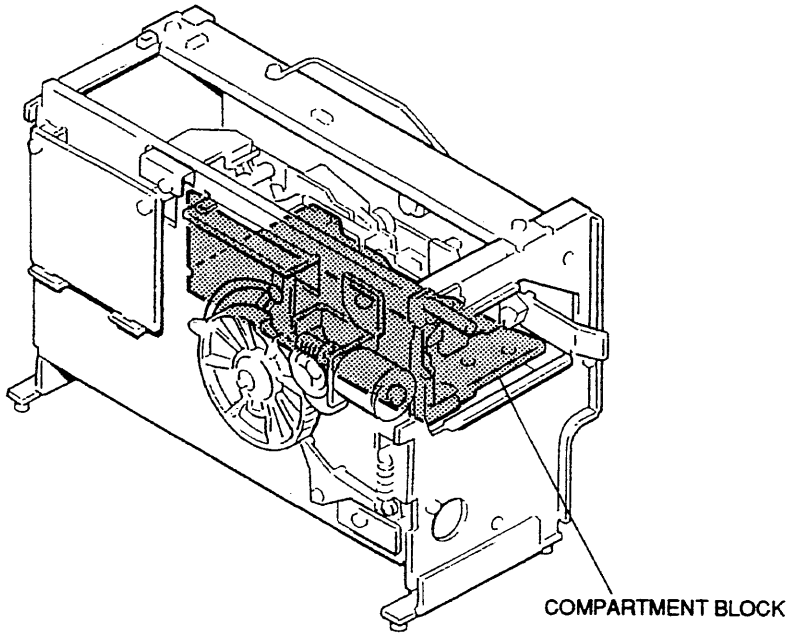
Tools
- Cloth (or Gauze)
- Vacuum cleaner

Procedures
1. Remove the cassette compartment from the unit. (Refer to Section 1-3-2.)

2. Remove the dust on the cassette compartment from the cassette insertion inlet using a vacuum cleaner.

3. Clean the compartment (shaded portion in the figure) with a dry cloth (or gauze).

Caution
Do not apply an excessive force to the compartment block.



Cassette Compartment Cleaning

7-2. PERIODIC CHECK

To make the most of the functions, fully realize performance of the unit, lengthen the life of the unit and tape, a periodic check is recommended.

7-2-1. Hours Meter

This unit can display an hours meter on the time counter display of the upper control panel or on the monitor connected to this unit. Perform a periodic check with this hours meter as a reference.

1. **Display procedure**
   Refer to Section 1-10-2 in Installation Manual.

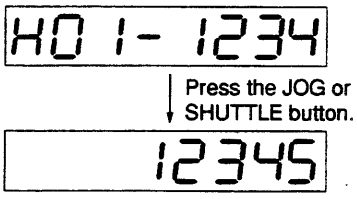
2. **Contents of display**

SET-UP MENU	DESCRIPTION	TIME COUNTER DISPLAY	MONITOR DISPLAY
H01: OPERATION HOURS	Accumulated hours when the power of the unit is on	Display the time by ten hours. (Note)	Display the time by an hour.
H02: DRUM RUNNING HOURS	Accumulated hours when the drum rotates in the threading end state	Display the time by ten hours. (Note)	Display the time by an hour.
H03: TAPE RUNNING HOURS	Accumulated hours when the tape runs in the F. FWD, REW, PLAY, SEARCH, REC and EDIT modes (not including STILL mode)	Display the time by ten hours. (Note)	Display the time by an hour.
H04: THREADING COUNTER	Accumulated number of threading and unthreading times	Display the number by ten times. (Note)	Display the actual number

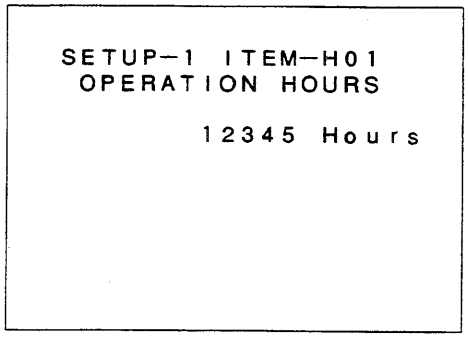
(Note) While pressing the JOG or SHUTTLE button on the lower control panel, display the time by an hour (or display the actual number).

〈**Example**〉
In a case of the total hours that the power of the unit has been turned on is 12,345 hours:

- Time Counter Display



- Monitor Display



7-2-2. Periodic Check List

The replacement time shown in the table below is not the guarantee term of parts. Use this table as guidelines for maintenance and inspection. The replacement time of parts varies depending on the operating environment and conditions of the unit.

To maintain the steady performance, it is recommended to clean the tape running system and perform the RF system automatic adjustment every the following hours as a guide.

- every 50 hours (H02) : Cleaning by cleaning tape (Refer to Section 1-12-1.)
- every 200 hours (H02) : Perform the cleaning as the following procedure.
  1. Cleaning by cleaning tape (Refer to Section 1-12-1.)
  2. Cleaning by cleaning cloth (Refer to Section 7-1-2 through 7-1-6.)
- every 500 hours (H02) : Execute the "A12: ADV EQUALIZER" (Refer to Section 5-8.)

Note: The part marked with " ↓ " in the table is replaced simultaneously with when the part in the column below its mark is replaced.

☆ : Replace the part. ◇ : Perform check (adjustment).

No.	Item	Menu No.	Inspection Hours (h)						Replacement Parts		
			1000	2000	3000	4000	5000	6000	Part Name	Part No.	Q'ty
Drum Block											
1	Inner Drum Assembly (Note 1)	H02	☆	☆	↓	☆	☆	↓	INNER DRUM ASSY DJR-06A-R: DVW-CA510P	A-8260-747-	1
2	Brush/Slip Ring Assembly	H02	—	—	↓	—	—	↓	SR13 ASSY (RP), BRUSH: DVW-CA510P	A-8267-571-	1
3	Drum Assembly (Note 1)	H02	—	—	☆	—	—	☆	DRUM ASSY DJH-06A-R: DVW-CA510P	A-8260-743	1
Cleaners											
4	Cleaning Roller (Note 4)	H02	☆	☆	↓	☆	☆	↓	ROLLER ASSY, V CLEANING	X-3167-281-	1
5	Rotary Head Cleaner Assembly	H02	—	—	☆	—	—	☆	CLEANER ASSY, VIDEO HEAD	A-8267-398-	1
6	AT Head Cleaner	H02	☆	☆	☆	☆	☆	☆	ARM ASSY, CL	X-3167-053-	1
Tape Running System											
7	Pinch Roller	H03	☆	☆	☆	☆	☆	☆	ARM ASSY, PINCH	X-3167-054-	1
8	Audio/TC Head (Note 2)	H03	—	—	◇	—	—	☆	HEAD, AUDIO PS244-2103J	8-825-779-02	1
9	CTL Head	H03	—	—	☆	—	—	☆	HEAD, CTL PS244-21B	8-825-554-83 8-825-554-84	1 1
10	Capstan Motor	H03	—	—	—	—	—	☆	MOTOR, DC SP37AA	1-698-179-12	1
Driving System											
11	Pinch Solenoid (Note 3)	H03	—	—	—	—	—	☆	SOLENOID, PLUNGER	1-454-338-00	1
		H04	Replace when used 200,000 times								
12	Brake Lining	H03	—	—	☆	—	—	☆	LINING ASSY	X-3717-205-	2
13	Reel Motor Assembly	H03	—	—	☆	—	—	☆	S Side: RM(PC) ASSY T Side: RM(TPC) ASSY	A-8267-964- A-8310-086-	1 1
Others											
14	Fan Motor	H01	Replace when used 10,000 H						FAN, DC	1-541-431-41	2
15	Filter of the Upper Drum Cover	H02	☆	☆	☆	☆	☆	☆	FILTER	3-182-649-	1

(Note 1) In an environmental condition of high humidity and excessive dust to operate the unit, it may cause in shortening the life of the heads.
Therefore, it is recommended to use the unit in an air-conditioned place at middle tempareture and humidity of the specifications, and lesser dust circumstances. In addition, the tapes should be kept in the same conditions.

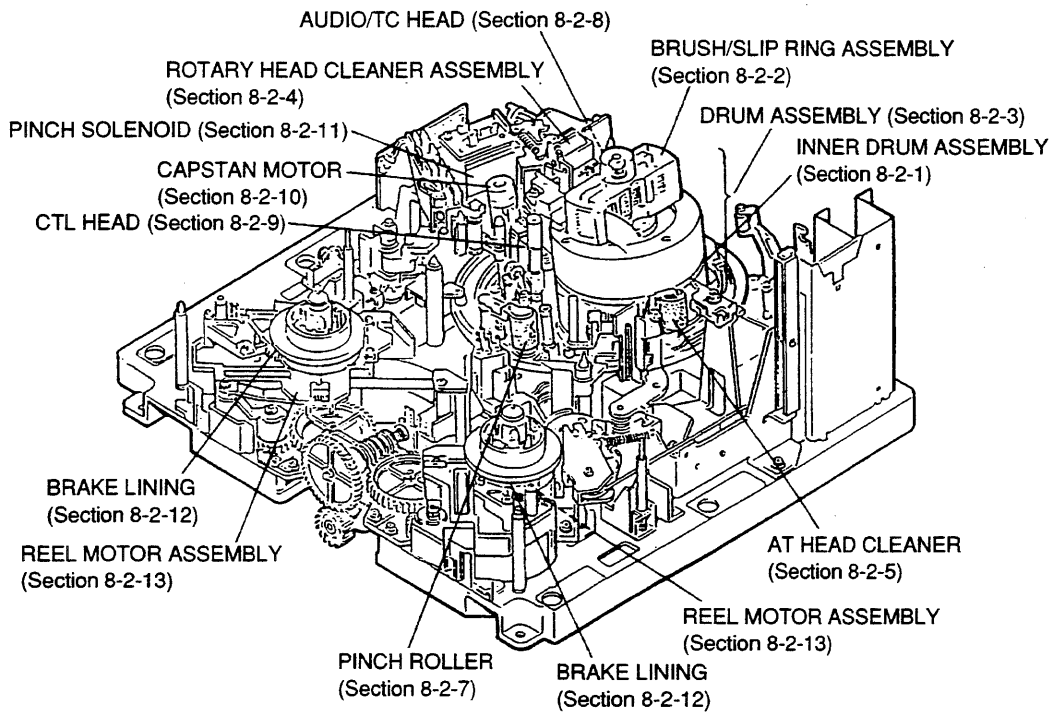
(Note 2) ◇: Adjust the audio frequency response. (Refer to Section 8-7.)

(Note 3) Replace the pinch solenoid when the replacement time or count is reached whichever is earlier.

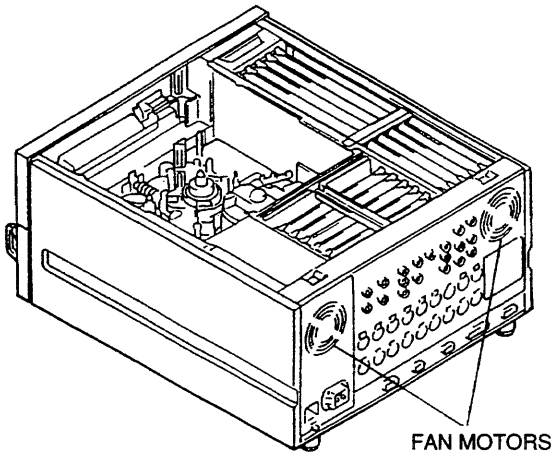
(Note 4) It is recommended to replace the CR spacer (3-182-765-) at the same time.

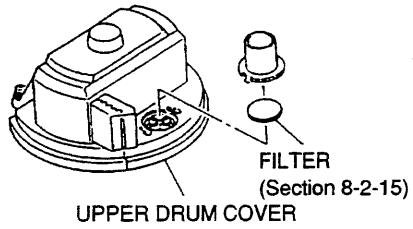
〈**Mechanical Deck Block**〉

	Procedure
	Refer to Section 8-2-1.
	Refer to Section 8-2-2.
	Refer to Section 8-2-3.
	Refer to Section 8-2-4.
	Refer to Section 8-2-4.
	Refer to Section 8-2-5.
	Refer to Section 8-2-7.
	Refer to Section 8-2-8.
	Refer to Section 8-2-9. Not Replacement
	Refer to Section 8-2-10.
	Refer to Section 8-2-11.
	Refer to Section 8-2-12.
	Refer to Section 8-2-13.
	Refer to Section 8-2-14.
	Refer to Section 8-2-15.



〈**Unit**〉





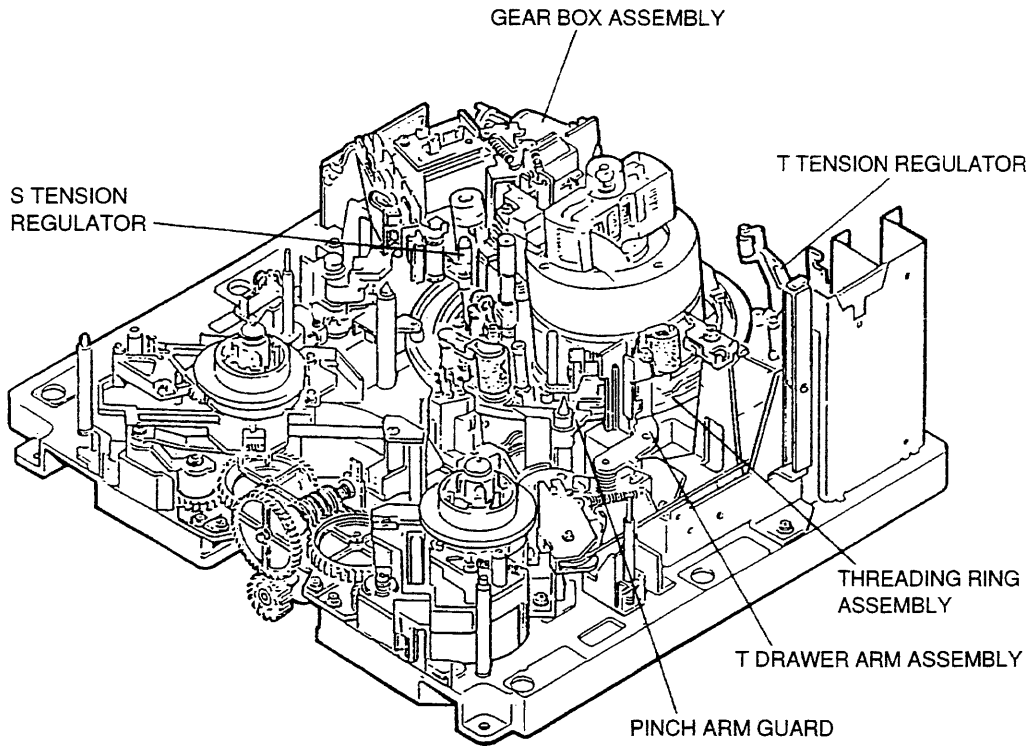
Note: Replace the parts shown in the table below periodically when the threading/ unthreading operation is repeated frequently.

No.	Item	Menu No.	Inspection Time	Replacement Parts		
				Part Name	Part No.	Q'ty
16	Brake Solenoid	H04	Replace when used 200,000 times	PLUNGER SOLENOID	1-454-417-31	2
17	S Tension Regulator Assembly			REGULATOR ASSY, TENSION	A-8267-795-	1
18	T Tension Regulator Assembly			T-TEN ASSY	A-8267-423-	1
19	T Drawer Arm Assembly			DRAWER ASSY, T	A-8267-381-	1
20	Gear Box Assembly			BOX ASSY, GEAR	A-8267-424-	1
21	Threading Ring Assembly			RING ASSY, THREADING	A-8267-395-	1
22	Ring Roller			ROLLER, RING ROLLER, RING B	3-180-677- 3-180-679-	2 1
23	Pinch Arm Guard			GUARD, PINCH ARM	3-180-853-	1
24	CL Guide Rail			RAIL, CL GUIDE	3-180-874-	1
25	Cassette Compartment Assembly			CASSETTE COMPARTMENT ASSY	A-8310-045-	1

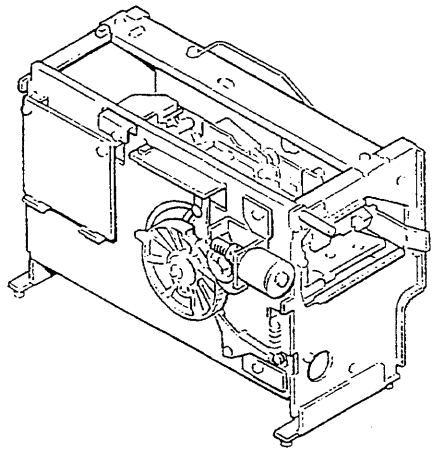
(Note 5) Maintenance Manual Part 2 is distributed separately. If you wish to obtain one, please consult with Sony's service organization.

	Procedure
	Refer to Volume 1 of MAINTENANCE MANUAL Part 2 (Note 5)
	Refer to Section 9-2-2. (Exploded view)
	Refer to Section 9-2-2. (Exploded view)
	Refer to Section 1-2-2.

〈 **Mechanical Deck Block** 〉



〈 **Cassette Compartment** 〉



CASSETTE COMPARTMENT ASSEMBLY

SECTION 9
SPARE PARTS

9-1. NOTES ON SPARE PARTS

1. Safety Related Components Warning

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts list has the present standardized repair parts.

3. Stock of Parts

Parts marked with "o" at SP(Supply Code) column of the spare parts list may be not stocked. Therefore, the delivery date will be delayed.

4. Tension Spring

(xxT) after a tension spring is shown on the parts list in order to indicate the number of spring turns required for the use.

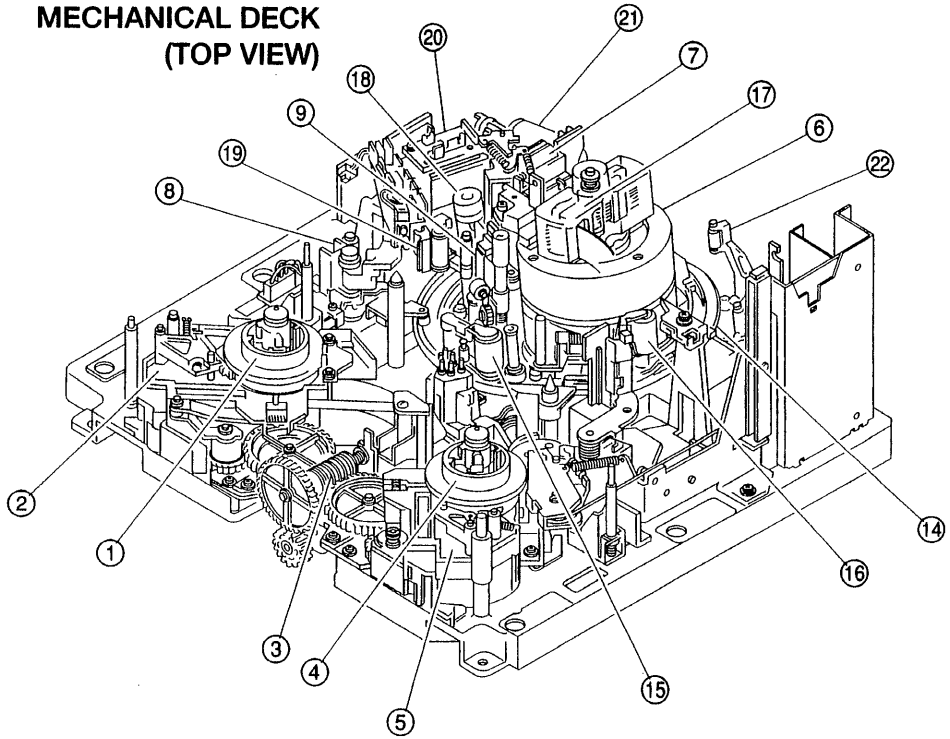
(Example) TENSION, SPRING (20T):
This spring must be cut at its 20th turn for actual use.

9-2. SPARE PARTS LIST – VTR –
9-2. 補修部品リスト – 本体 –

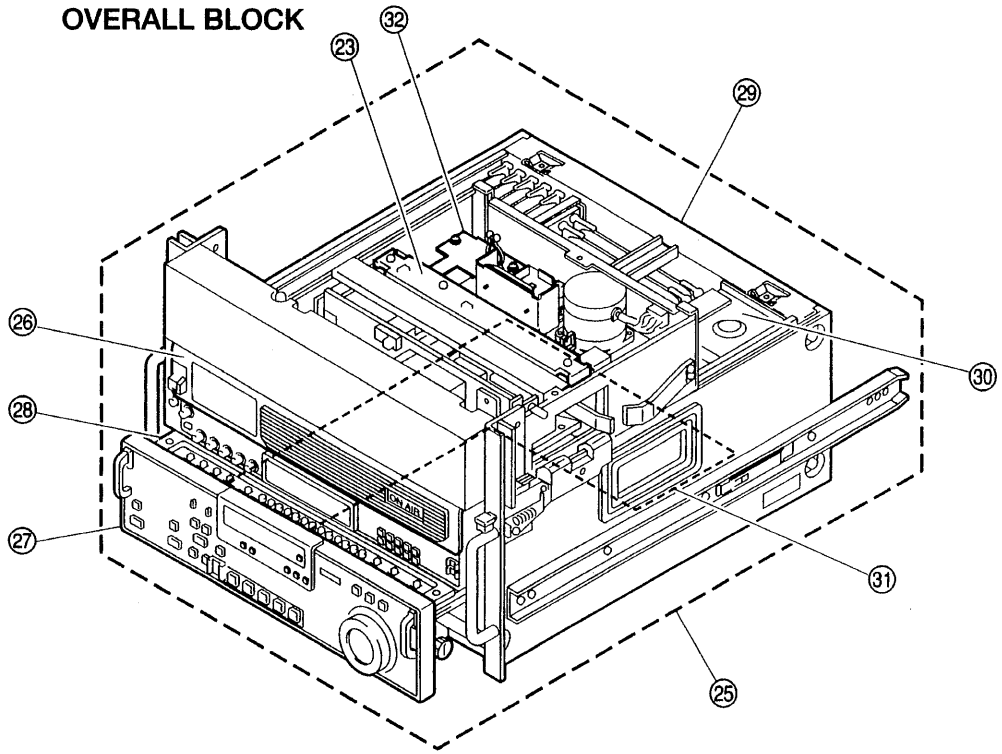
9-2-1. Index
9-2-1. インデックス

Mark	Item	Title	Page
①	S Reel Table	REEL CHASSIS (S SIDE) BLOCK	9-4
②	RS Table (S)		
③	Reel Shift		
④	T Reel Table	REEL CHASSIS (T SIDE) BLOCK	9-6
⑤	RS Table (T)		
⑥	Head Drum	DRUM AND ROTARY HEAD CLEANER BLOCK	9-8
⑦	Rotary Head Cleaner		
⑧	Tension Regulator	S TENSION REGULATOR BLOCK	9-10
⑨	CTL Head	CTL AND FE HEAD BLOCK	9-12
⑭	Threading Ring	THREADING RING AND PINCH ROLLER BLOCK	9-14
⑮	Pinch Roller		
⑯	AT Head Cleaner		
⑰	AT Head	AT HEAD AND CAPSTAN MOTOR BLOCK	9-16
⑱	Capstan Motor		
⑲	Tape Cleaner		
⑳	Pinch Press	PINCH PRESS AND GEAR BOX BLOCK	9-18
㉑	Gear Box Motor		
㉒	T Tension Regulator	T TENSION REGULATOR BLOCK	9-20
㉓	Cassette Compartment	CASSETTE COMPARTMENT BLOCK	9-22
㉔	Printed Circuit Board	PRINTED CIRCUIT BOARD (BOTTOM SIDE) BLOCK	9-24
㉕	Upper Lid	ORNAMENTAL PANEL BLOCK	9-26
	Bottom Panel		
	Cabinet (right)		
	Cabinet (left)		
㉖	Upper Control Panel	UPPER CONTROL PANEL BLOCK	9-28
㉗	Lower Control Panel	LOWER CONTROL PANEL BLOCK	9-30
㉘	Sub Control Panel	SUB CONTROL PANEL BLOCK	9-32
㉙	Connector Panel	CONNECTOR PANEL BLOCK	9-34
㉚	Power Block		
㉛	Mother Board	CHASSIS BLOCK	9-36
㉜	Ejector	EJECTOR BLOCK	9-38
㉝	Mounted Circuit Board	MOUNTED CIRCUIT BOARD BLOCK	9-40

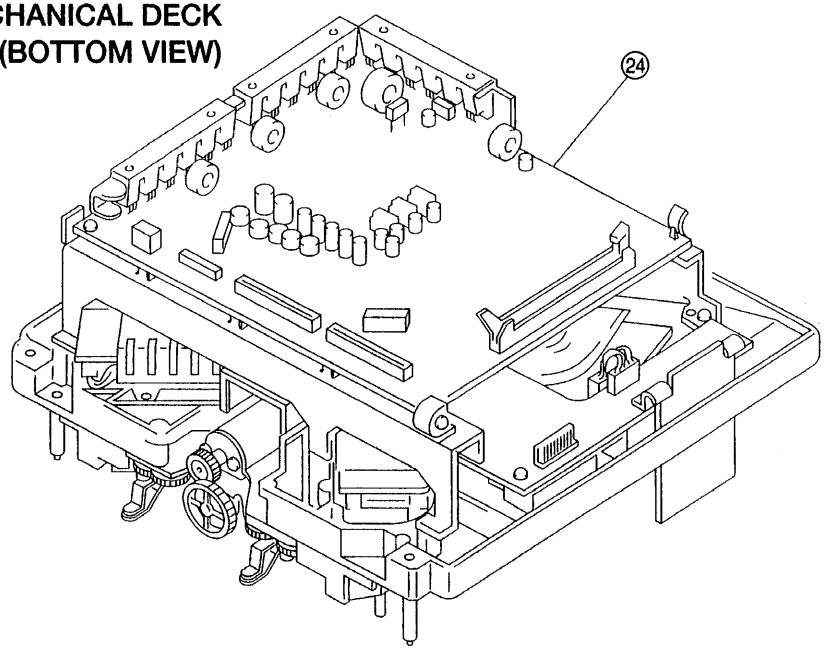
MECHANICAL DECK (TOP VIEW)

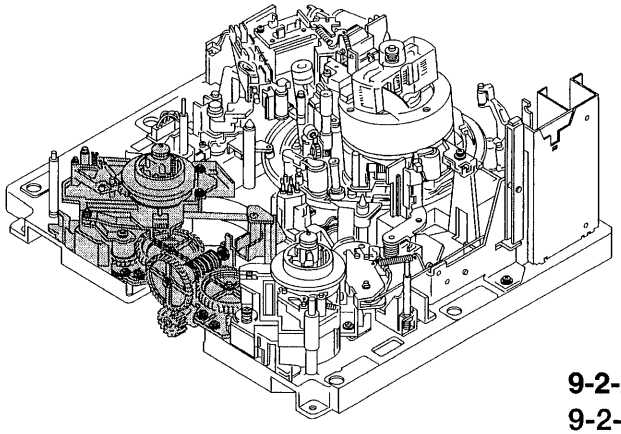


OVERALL BLOCK



MECHANICAL DECK (BOTTOM VIEW)



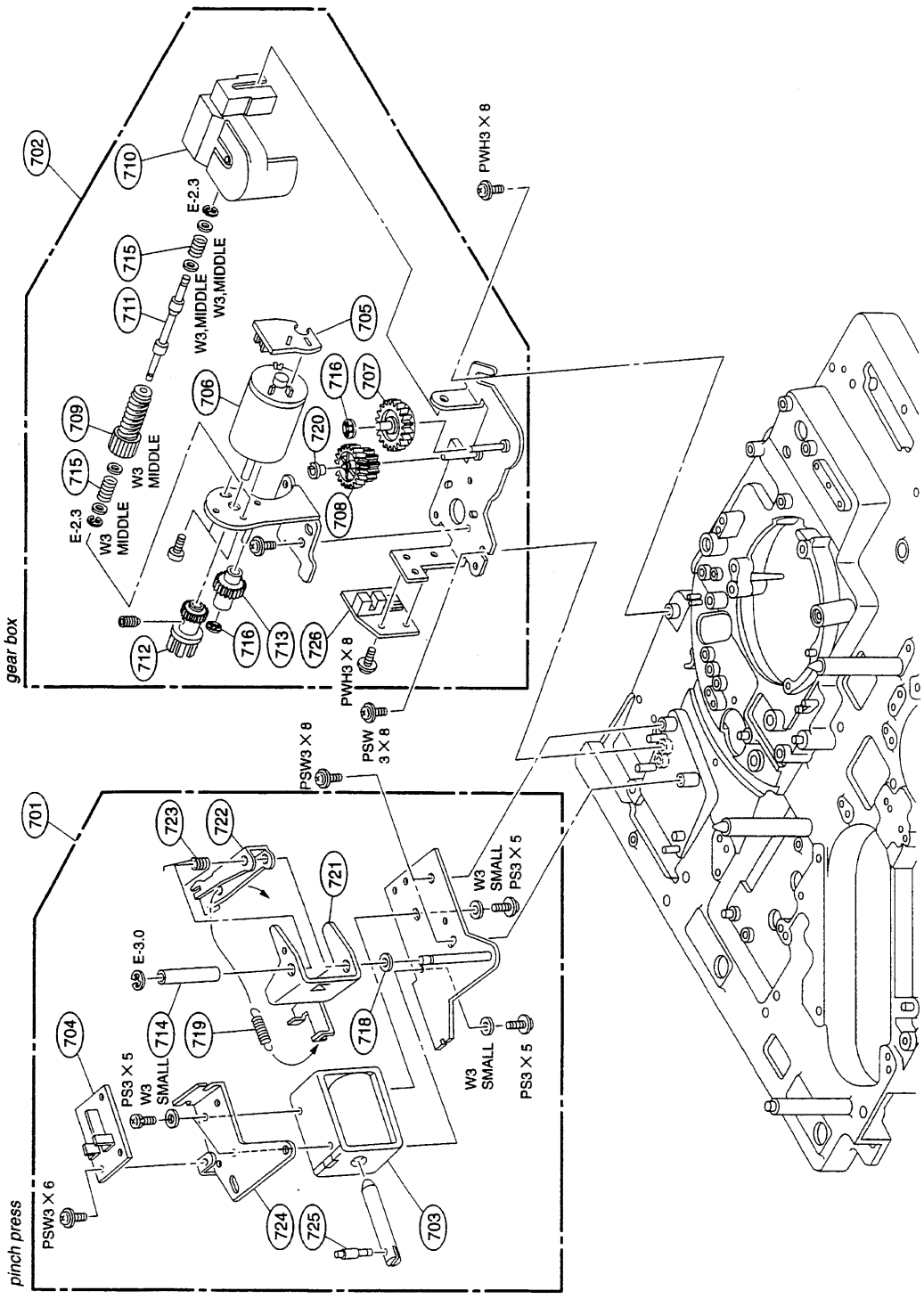


9-2-2. Exploded Views and Mechanical Parts List
9-2-2. 分解図および機構部品リスト

No.	Part No.	SP	Description
1	A-8267-774-E	s	RM ASSY
2	A-6741-066-B	o	BRAKE ASSY
*A 3	A-8267-701-C	s	FG ASSY, REEL
*B	A-8278-310-A	s	FG ASSY, REEL
4	A-8267-703-J	s	TABLE (S) BLOCK ASSY, RS
5	A-8276-619-A	o	MOUNTED CIRCUIT BOARD, PTC-71
6	X-3166-024-1	o	ARM (A) ASSY, CRANK
7	X-3166-025-3	s	TABLE ASSY, REEL
8	X-3166-060-1	o	ARM (B) ASSY, CRANK
*A 9	X-3167-047-1	o	BASE ASSY, REEL SHIFT
10	X-3717-205-1	s	LINING ASSY
11	1-454-417-31	s	SOLENOID, PLUNGER
12	1-648-570-11	o	PRINTED CIRCUIT BOARD, CCM-15
13	1-698-152-11	s	MOTOR (SVD-1449), DC
14	1-807-683-11	s	RESISTOR ELEMENT
*A15	2-279-715-01	s	RIVET, NYLON
16	2-280-622-51	o	SUPPORT (M3), HEXAGON
17	3-171-430-01	o	GEAR, CRANK
18	3-171-316-01	s	GEAR, M
*A19	3-171-318-01	o	BEARING, WORM
*A20	3-171-319-01	o	SHAFT, WORM
*A21	3-171-320-01	o	GEAR, DRIVE
*B	3-603-393-01	o	GEAR, SHIFT
22	3-171-397-02	o	HOLDER (S), SHAFT
23	3-171-429-01	o	GEAR, LS
24	3-171-431-01	s	SHAFT, SLIDE
25	3-180-687-01	o	HOLDER (A), SHAFT
26	3-180-866-01	o	BASE, LS SENSOR
27	3-307-381-00	s	SPRING, TENSION
28	3-491-247-00	s	SPRING, COMPRESSION
29	3-535-532-01	s	SPRING, TENSION
30	3-648-217-00	o	SPRING, TENSION
31	3-659-324-00	s	SPRING, COMPRESSION
32	3-669-596-01	s	WASHER (2.3), STOPPER
33	3-701-441-01	s	WASHER, POLY 4mm DIA., 0.13T
34	3-701-441-11	s	WASHER, POLY 4mm DIA., 0.25T
35	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
36	3-701-506-01	s	SET SCREW, DOUBLE POINT 3x4
37	3-701-507-00	s	SET SCREW, DOUBLE POINT M3x5
*A 38	3-717-210-01	s	WORM
*A 39	3-717-212-01	o	WASHER (B), WORM
*A 40	3-717-213-01	o	WASHER (A), WORM
41	3-717-224-01	s	WASHER (B), WORM
42	3-717-230-01	o	BRACKET, LIMITER
43	3-717-231-01	o	HOLDER, LIMITER
44	3-717-266-01	o	CAP (S), CG SHAFT
45	3-717-398-01	o	TABLE, SLIDE
46	3-717-399-01	s	WHEEL, W
47	3-717-450-02	o	ARM, BRAKE RELEASE
48	3-717-625-01	s	SPACER
*A 49	3-729-013-01	s	SCREW (P1.4x1.6), WASHER-HEAD
50	8-719-939-05	s	PHOTO INTERRUPTER GP1S54
52	3-188-108-01	s	WASHER, POLY 4mm DIA., 0.05T

*A for S/N 10001 thru. 12089: DVW-A510P(EK)
for S/N 10001 thru. 10555: DVW-510P(EK)

*B for S/N 12090 and higher: DVW-A510P(EK)
for S/N 10556 and higher: DVW-510P(EK)


gear box
pinch press
PWH3 × 8
PSW 3 × 8
PSW3 × 8
PSW3 × 6
PS3 × 5
W3 SMALL
E-2.3
E-3.0
W3 MIDDLE
W3,MIDDLE
701
702
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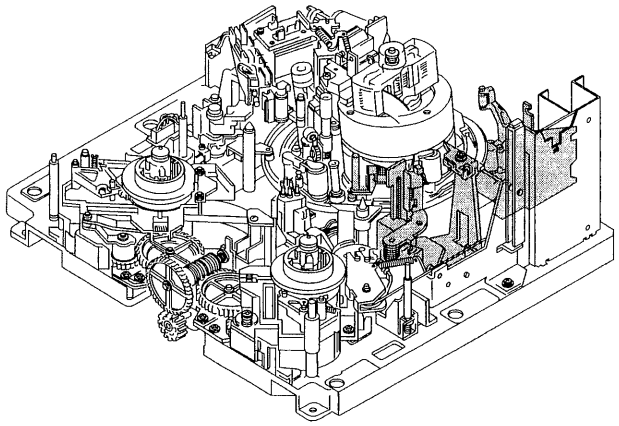
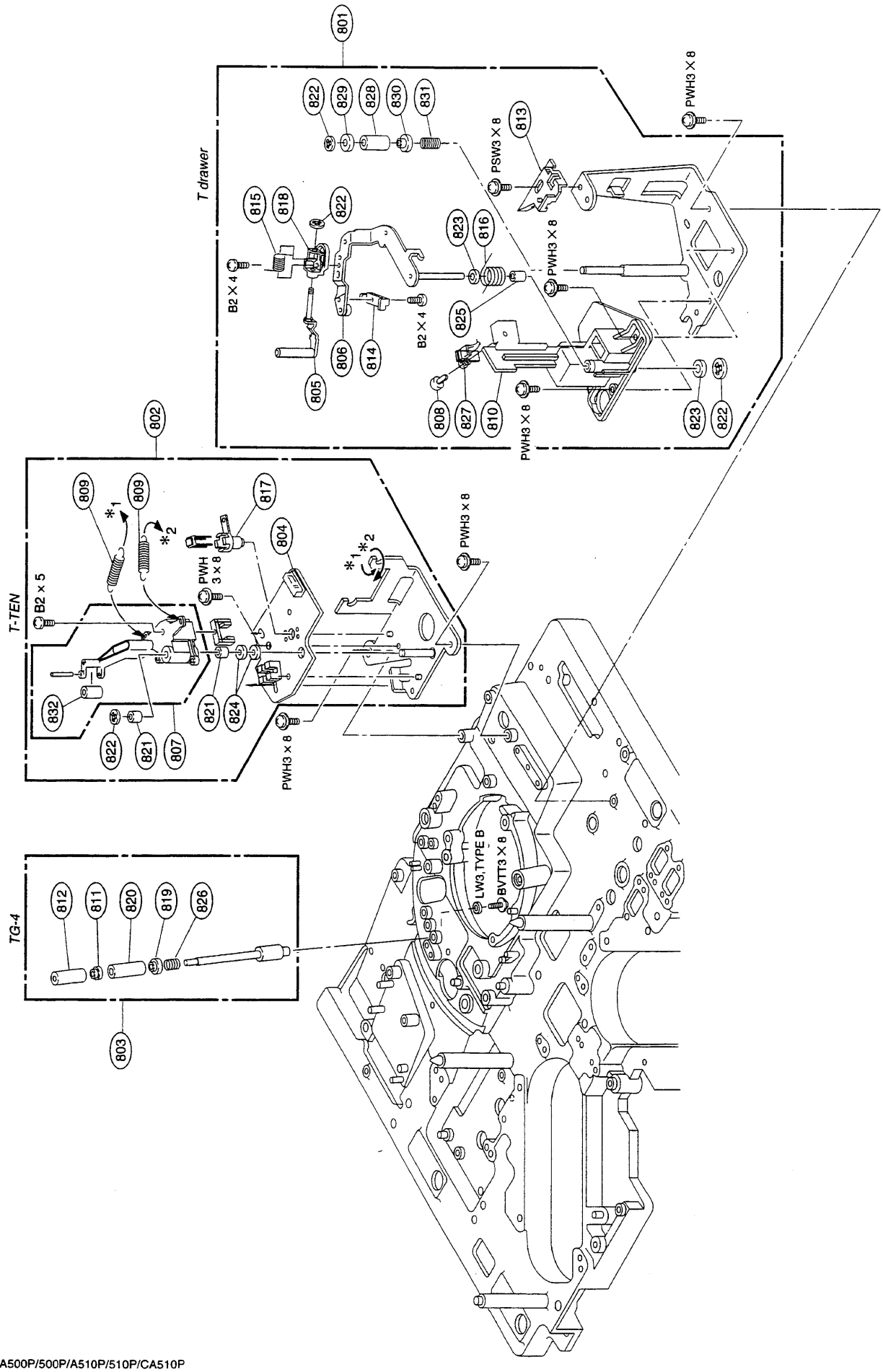


No.	Part No.	SP	Description
801	A-8274-876-C	s	DRAWER ASSY, T
802	A-8267-423-C	s	T-TEN ASSY
803	A-8267-555-D	s	TG-4 ASSY
804	A-8276-628-A	o	MOUNTED CIRCUIT BOARD, TR-79
805	X-3678-288-2	s	GUIDE ASSY, SLANT
806	X-3167-063-4	s	ARM ASSY, DRAWING, T
807	X-3167-064-5	s	ARM ASSY, T TEN
808	2-279-715-01	s	RIVET, NYLON
809	3-180-262-01	s	SPRING, TENSION
810	3-180-404-02	o	BASE, DRAWING, T
811	3-180-669-02	s	FLANGE, FIXED GUIDE USE
812	3-180-670-01	o	NUT, FIXED GUIDE ADJUSTMENT
813	3-180-708-01	s	PLATE, SLANT GUIDE ADJUSTMENT
814	3-180-710-03	s	GUARD, DRAWER
815	3-180-715-01	s	SPRING, (A) TORSION COIL
816	3-180-716-02	s	SPRING, (B) TORSION COIL
817	3-180-861-01	o	HOLDER, DME
818	3-180-863-03	s	BASE, SLANT GUIDE
819	3-190-819-01	s	FLANGE, DIA. 8
820	3-181-490-01	o	SLEEVE, DIA. 7

No.	Part No.	SP	Description
821	3-645-028-00	s	BEARING, BALL
822	3-669-596-01	s	WASHER (2.3), STOPPER
823	3-701-439-01	s	WASHER, POLY 3mm DIA., 0.13T
	3-701-439-11	s	WASHER, POLY 3mm DIA., 0.25T
	3-701-439-21	s	WASHER, POLY 3mm DIA., 0.50T
824	3-701-439-21	s	WASHER, POLY 3mm DIA., 0.50T
825	3-717-253-01	s	ROLLER
826	3-738-730-01	s	SPRING, COMPRESSION
827	1-543-316-31	s	HEAD, SENSING (SMALL TYPE)
828	X-3167-347-2	s	ROLLER ASSY, GUIDE
829	3-183-460-02	s	FLANGE (B), UPPER
830	3-183-462-02	s	FLANGE, LOWER
831	4-879-563-00	s	SPRING, COMPRESSION
832	X-3167-052-2	s	ROLLER ASSY, ONEBARE


T drawer
T-TEN
TG-4
B2 × 4
B2 × 4
B2 × 5
PWH3 × 8
PSW3 × 8
PWH3 × 8
PWH3 × 8
PWH3 × 8
PWH 3 × 8
LW3,TYPE B
BVTT3 × 8
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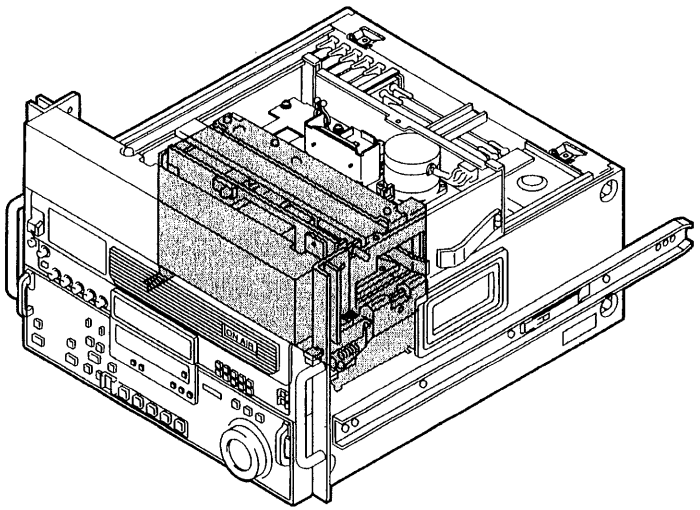
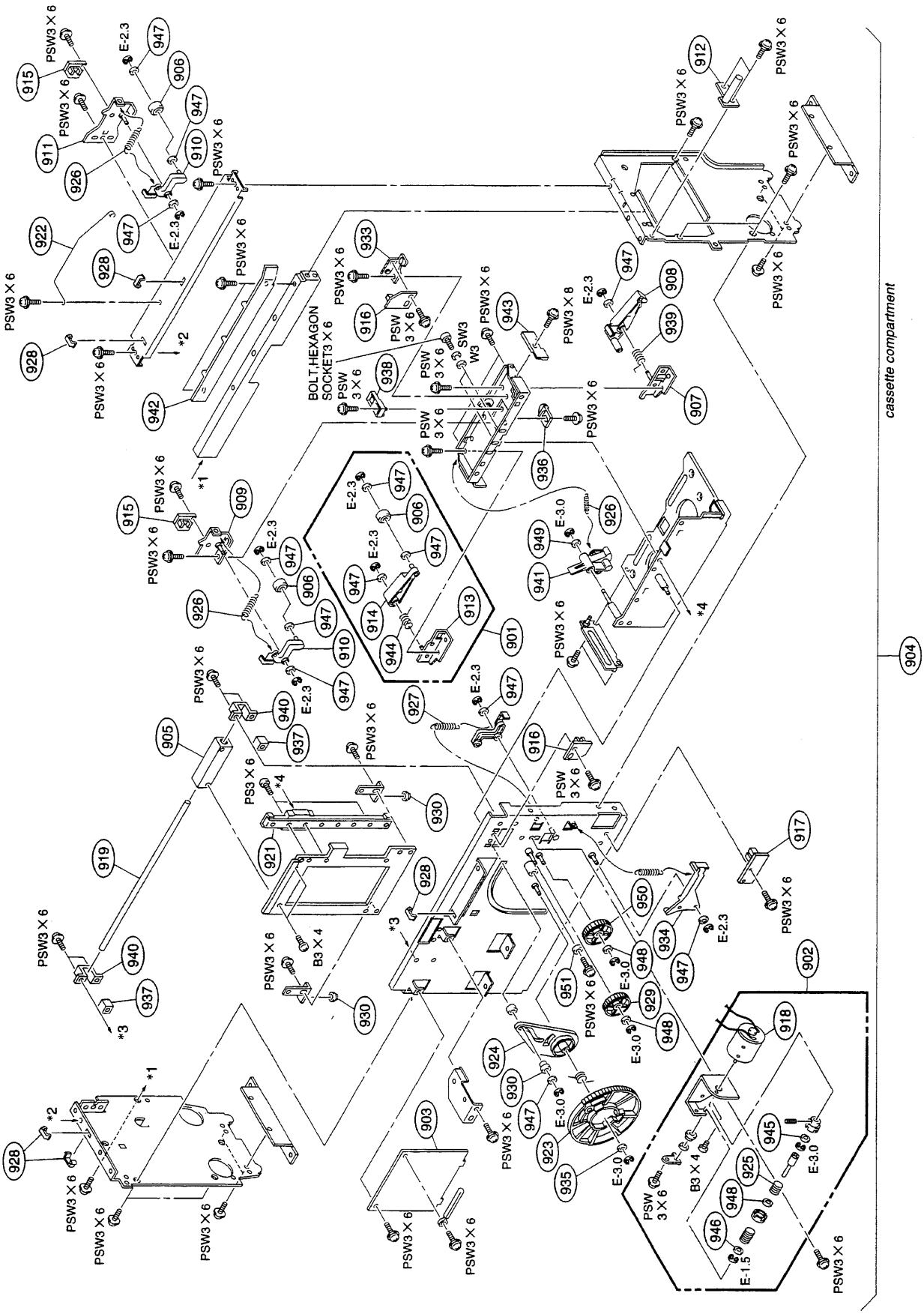
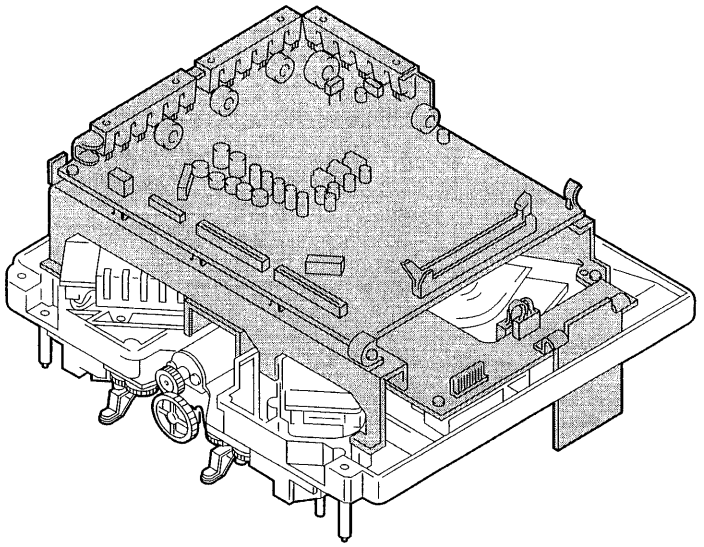
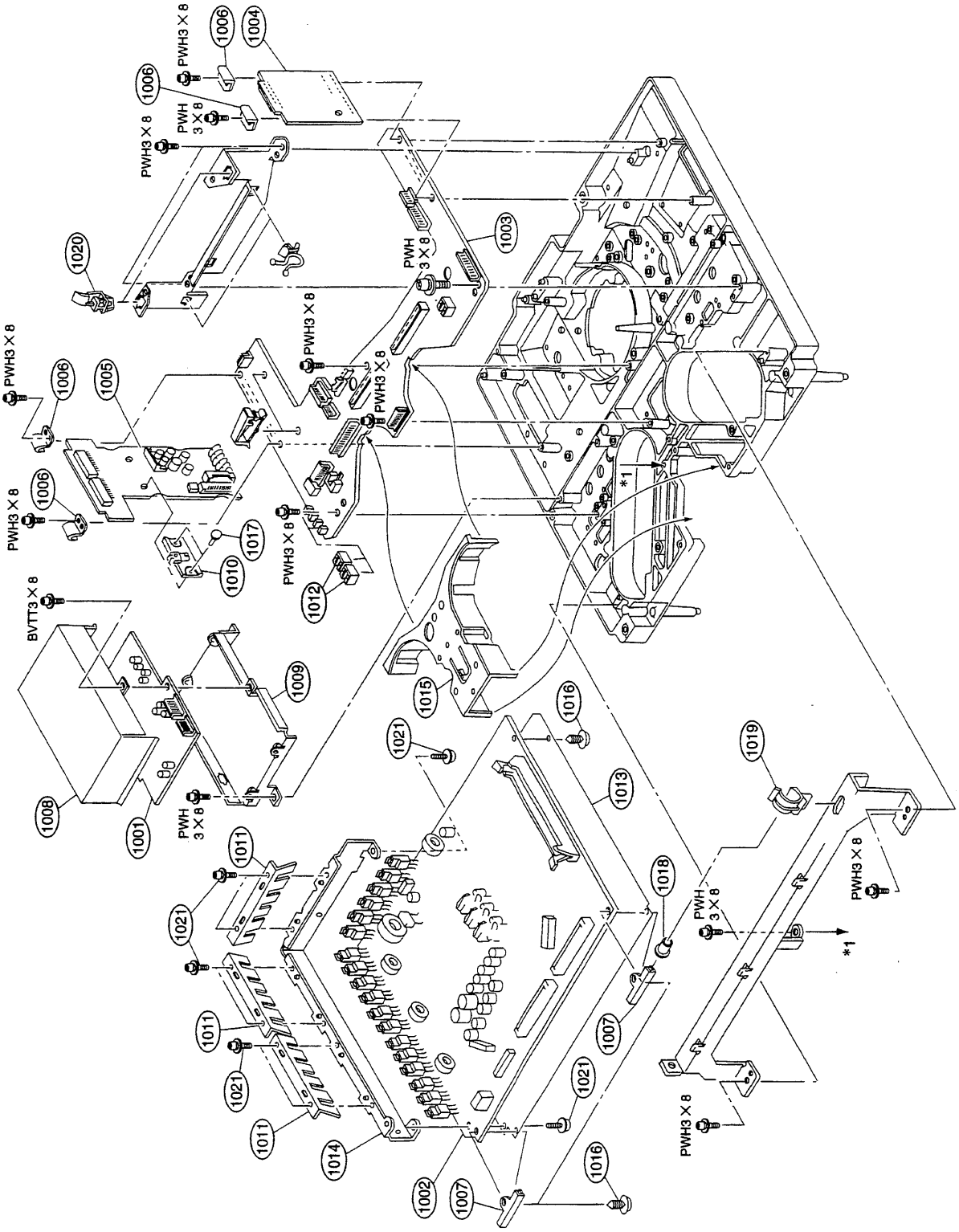


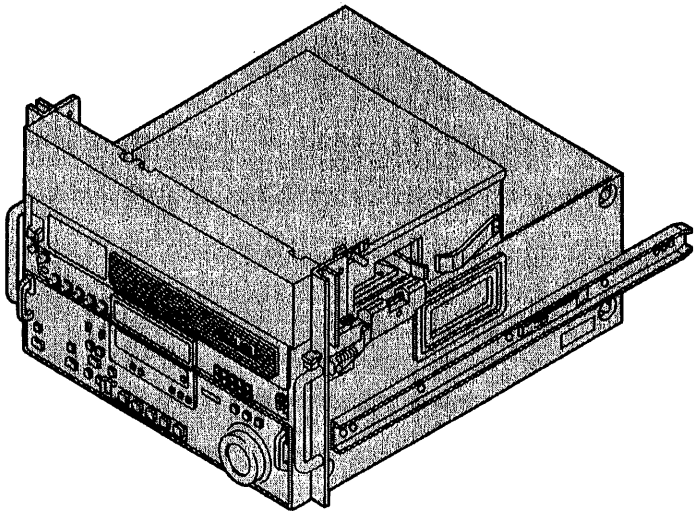
No.	Part No.	SP	Description
901	A-6751-278-A	o	RETAINER (LEFT) ASSY, C
902	A-8267-900-A	s	MOTOR ASSY
903	A-8276-813-A	o	MOUNTED CIRCUIT BOARD, CL-28
904	A-8310-045-A	s	CASSETTE COMPARTMENT ASSY
905	X-3167-319-1	s	HOLDER ASSY, LB
906	X-3687-608-1	s	ROLLER (A) ASSY
907	X-3688-001-1	o	SUPPORT ASSY, C RETAINER
908	X-3688-002-3	s	RETAINER (R) ASSY, CASSETTE
909	X-3688-003-1	o	SUPPORT (1) ASSY, C SENSOR
910	X-3688-004-1	o	ARM ASSY, C SENSOR
911	X-3688-008-1	o	SUPPORT (2) ASSY, C SENSOR
912	X-3688-011-2	o	HOLDER ASSY, PIN
913	X-3688-040-1	o	SUPPORT (LEFT) ASSY, RETAINER
914	X-3688-041-1	o	RETAINER (LEFT) ASSY, C
915	1-654-100-11	o	PRINTED CIRCUIT BOARD, SE-237
916	1-650-567-11	o	PRINTED CIRCUIT BOARD, SE-225
917	1-650-568-11	o	PRINTED CIRCUIT BOARD, SE-226
918	1-698-152-11	s	MOTOR, DC SVD-1449
919	3-183-295-01	o	SHAFT, LINEAR
920	3-183-297-01	s	SPRING LC LIMITER
921	3-183-310-01	o	SLIDER, LINEAR
922	3-183-312-01	o	GUIDE, HARNESS
923	3-183-315-03	o	LC, DRIVING GEAR
924	3-183-322-03	s	DRIVING ARM C
925	3-480-044-00	o	SPRING, COMPRESSION
926	3-530-248-XX	o	SPRING, TENSION (58T)
927	3-530-249-XX	s	SPRING, TENSION (97T)
928	3-677-153-00	o	HOLDER
929	3-677-165-03	s	GEAR, MIDWAY
930	3-677-187-00	s	ROLLER, GUIDE
933	3-688-007-01	o	BRACKET, IN SWITCH
934	3-688-011-02	s	ARM, DOWN (2)
935	3-688-024-01	o	RETAINER, SPRING
936	3-688-036-01	s	RETAINER (M), CASSETTE
937	3-688-043-01	o	SUPPORT (H), SHAFT
938	3-688-044-01	o	GUIDE, LEVER
939	3-688-045-01	s	SPRING (RIGHT), TORSION
940	3-688-047-01	o	RETAINER (H), SHAFT
941	3-688-054-01	s	LEVER, DISCHARGE
942	3-688-058-01	o	GUIDE, CASSETTE
943	3-688-136-01	o	PLATE, GUIDE
944	3-688-183-01	s	SPRING (LEFT), TORSION
945	3-701-437-11	s	WASHER, POLY 2mm DIA., 0.25T
946	3-701-437-21	s	WASHER, POLY 2mm DIA., 0.50T
947	3-701-439-21	s	WASHER, POLY 3mm DIA., 0.50T
948	3-701-441-11	s	WASHER, POLY 4mm DIA., 0.25T
949	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
950	3-723-431-01	o	GEAR, MIDWAY
951	4-890-173-00	s	WASHER


cassette compartment
904
PSW3 X 6
E-2.3
E-3.0
E-1.5
PSW 3 X 6
PS3 X 6
B3 X 4
PSW 3 X 8
BOLT,HEXAGON SOCKET3 X 6
SW3 W3
*1
*2
*3
*4



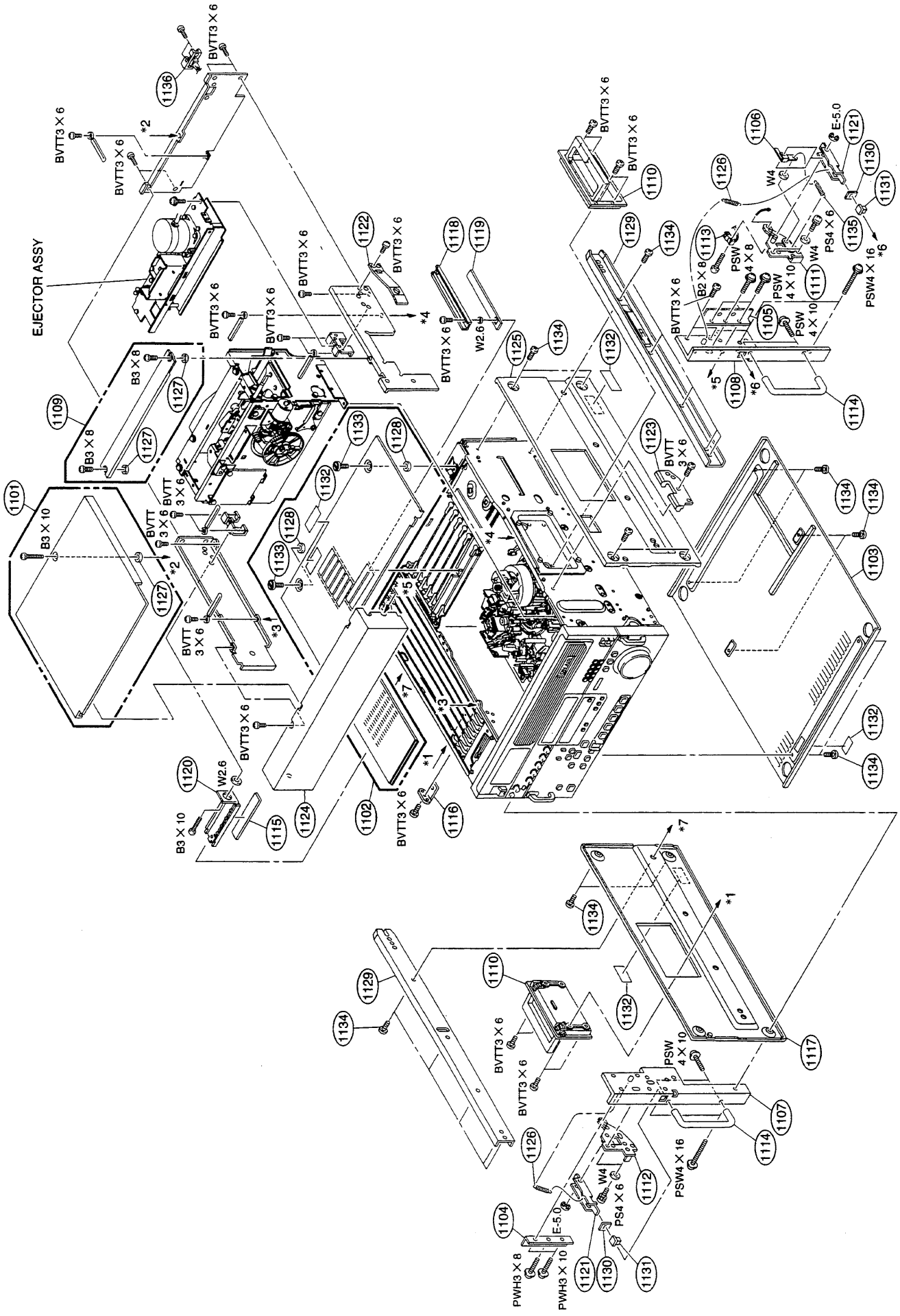
No.	Part No.	SP	Description
1001	A-8275-398-A	o	MOUNTED CIRCUIT BOARD, DT-34BP
1002	A-8313-031-A	o	MOUNTED CIRCUIT BOARD, DR-307 (for S/N 14221 and higher: DVW-A510P(EK)) (for S/N 11355 and higher: DVW-510P(EK)) (for S/N 10076 and higher: DVW-CA510P(EK))
	A-8275-069-B	o	MOUNTED CIRCUIT BOARD, DR-200P (for S/N 10001 thru. 14220: DVW-A510P(EK)) (for S/N 10001 thru. 11354: DVW-510P(EK)) (for S/N 10001 thru. 10075: DVW-CA510P(EK))
1003	A-8276-781-B	o	MOUNTED CIRCUIT BOARD, HN-181B
1004	A-8276-621-A	o	MOUNTED CIRCUIT BOARD, HN-184
1005	A-8276-623-B	o	MOUNTED CIRCUIT BOARD, HN-185
1006	3-180-680-01	o	BRACKET, HANDLE (B), HN
1007	3-180-760-01	o	SUPPORT, DR
1008	3-180-762-02	o	COVER (A), DT SHIELD
1009	3-180-763-02	o	COVER (B), DT SHIELD
1010	3-180-819-02	o	BRACKET, DEW SENSOR
1011	3-180-852-01	o	BRACKET, TRANSISTOR
1013	3-180-873-05	o	SHEET, INSULATING (DR)
1014	3-180-886-02	o	HEAT SINK (DR)
1015	3-181-651-01	o	COVER (RS), HARNESS
1016	3-531-576-11	s	RIVET
1017	3-531-576-21	s	RIVET
1018	3-646-084-00	o	CAP, REINFORCEMENT
1019	3-646-086-00	o	HOLDER, ROD
1020	3-703-141-00	o	HOLDER, PRINTED CIRCUIT BOARD
1021	3-703-249-01	s	SCREW, PTTWH 3x6


PWH3 X 8
PWH 3 X 8
BVTT3 X 8
*1



No.	Part No.	SP	Description
1101	A-8267-904-A	o	LID, UPPER (SMALL) ASSY
1102	A-8267-905-A	o	LID, UPPER ASSY
1103	X-3167-285-1	o	PLATE, BOTTOM ASSY
1104	X-3167-324-1	o	RETAINER (L) ASSY, GUIDE
1105	X-3167-325-1	o	RETAINER (R) ASSY, GUIDE
1106	X-3167-326-1	o	LEVER ASSY, SW
1107	X-3167-327-1	o	FLANGE (L) ASSY
1108	X-3167-328-1	o	FLANGE (R) ASSY
1109	X-3167-331-1	s	BRACKET ASSY
1110	X-3642-018-3	o	HANDLE ASSY
1111	X-3688-023-1	o	CHASSIS (RIGHT) ASSY, LEVER
1112	X-3688-025-1	o	CHASSIS (LEFT) ASSY, LEVER
1113	1-553-661-00	s	SWITCH, MICRO
1114	2-284-009-00	o	HANDLE, (2)
1115	3-171-410-01	o	RETAINER (S), PC BOARD
1116	3-171-489-01	o	BRACKET, PLATE, BOTTOM
1117	3-171-534-04	o	CABINET (LEFT)
1118	3-180-642-01	o	PLATE (S), PC BOARD RETAINER
1119	3-180-643-01	o	CUSHION, PC BOARD RETAINER
1120	3-183-293-02	o	RETAINER (L), PC BOARD

No.	Part No.	SP	Description
1121	3-183-294-01	o	LEVER, LOCK
1122	3-183-303-01	o	STOPPER, VTR
1123	3-183-316-02	s	COVER, G
1124	3-183-324-01	o	PANEL, FRONT SUB
1125	3-183-325-01	o	CABINET (RIGHT)
1126	3-558-378-00	s	SPRING, TENSION
1127	3-668-413-00	o	WASHER (M3), STOP
1128	3-688-102-01	o	SPACER, M4
1129	3-688-104-01	o	MEMBER, INNER
1130	3-688-122-01	o	BLIND
1131	3-688-140-01	o	CUSHION
1132	3-703-079-21	o	LABEL (BACK), SUB CAUTION (for DVW-CA510P)
	3-703-848-01	o	LABEL (N), SUB CAUTION (for DVW-CA510)
1133	3-717-392-01	o	SCREW, LID
1134	3-733-690-01	s	+B 4X6 (CU,NI)
1135	4-858-760-00	s	SPRING, TENSION
1136	1-560-132-21	s	HOUSING, 20P
	1-508-958-21	o	CONTACT, MALE


EJECTOR ASSY
BVTT3 X 6
B3 X 8
B3 X 10
BVTT 3 X 6
W2.6
PSW 4 X 8
PSW 4 X 10
PS4 X 6
PSW4 X 16
B2 X 8
W4
E-5.0
PWH3 X 8
PWH3 X 10
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
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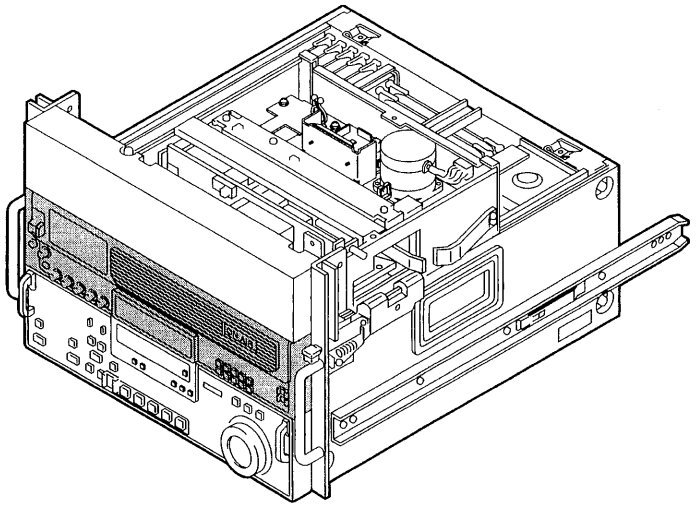
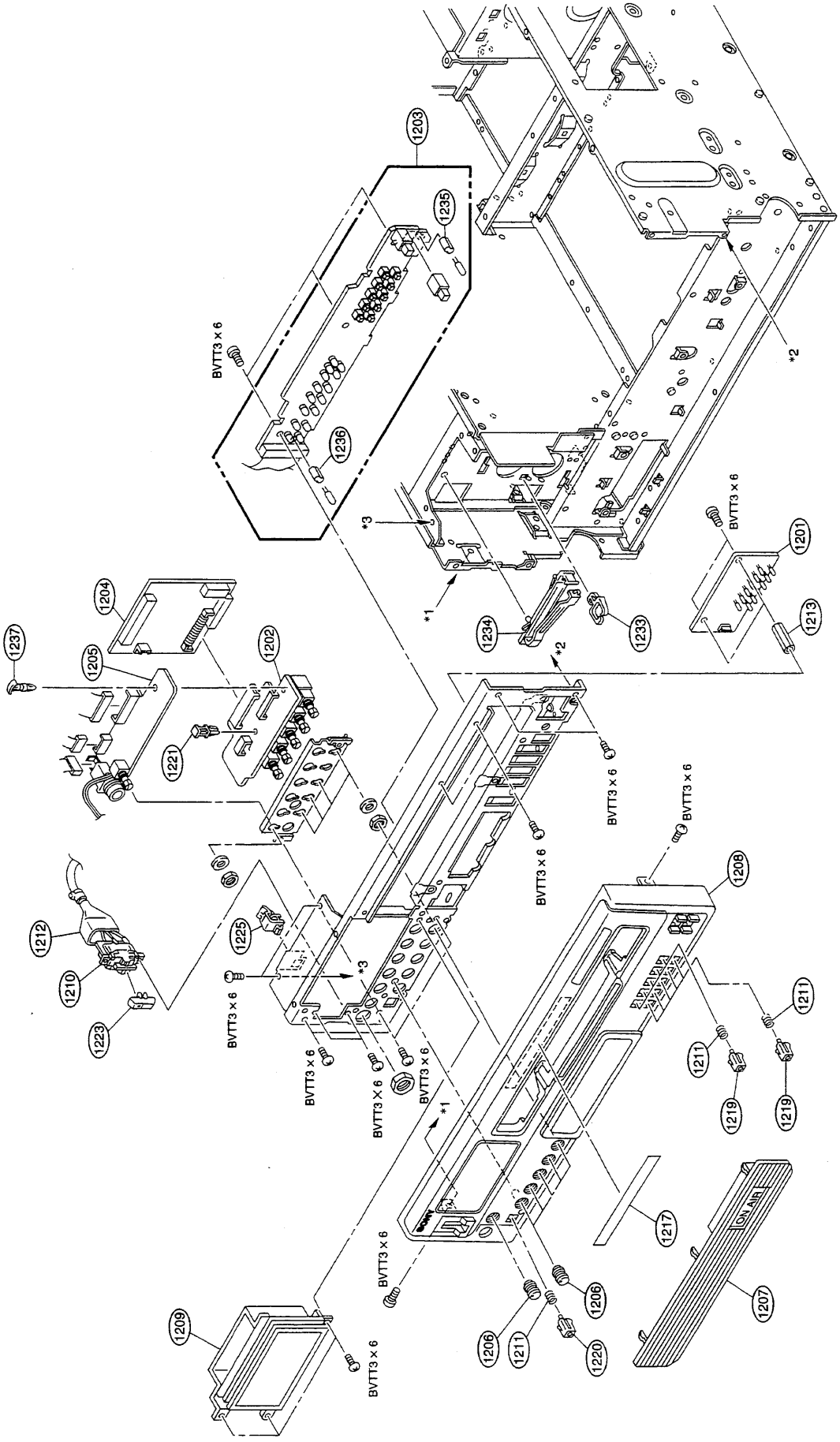


No.	Part No.	SP	Description
1201	A-8276-814-A	o	MOUNTED CIRCUIT BOARD, LED-200
1202	A-8275-075-A	o	MOUNTED CIRCUIT BOARD, VR-153
1203	A-8275-210-A	o	MOUNTED CIRCUIT BOARD, SWC-17B
1204	A-8275-077-B	o	MOUNTED CIRCUIT BOARD, FP-58
1205	A-8275-213-A	o	MOUNTED CIRCUIT BOARD, VR-152B
1206	X-3165-983-3	o	KNOB ASSY (WHITE), VOL
1207	X-3167-330-1	o	PANEL ASSY, ON AIR
1208	X-3167-167-5	o	SUB ASSY, FRONT PANEL
1209	1-517-185-21	s	INDICATOR MODULE, FLUORESCENT
1210 ⚠	1-762-953-11	s	SWITCH, POWER
1211	3-611-769-01	s	SPRING, COMPRESSION
1212	2-269-962-00	o	COVER, SWITCH
1213	2-280-622-51	o	SUPPORT (M3), HEXAGON
1217	3-183-301-01	o	LABEL (for DVW-CA510P)
	3-183-302-01	o	LABEL (for DVW-CA510)
1219	3-180-822-05	s	KEY TOP 6X6
1220	3-181-398-12	s	KEY TOP 6X6
1221	3-682-057-21	s	SPACER (SMALL)
1223	3-688-814-01	s	CAP, SWITCH
1225	3-703-141-00	o	HOLDER, PRINTED CIRCUIT BOARD
1233	4-314-320-00	o	HOLDER, WIRE
1234	4-874-187-01	o	CLIP, CABLE
1235	4-937-336-11	s	HOLDER, LED
1236	4-937-336-51	o	HOLDER, LED
1237	3-704-198-01	o	SUPPORT, PC


1203
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BVTT3 x 6
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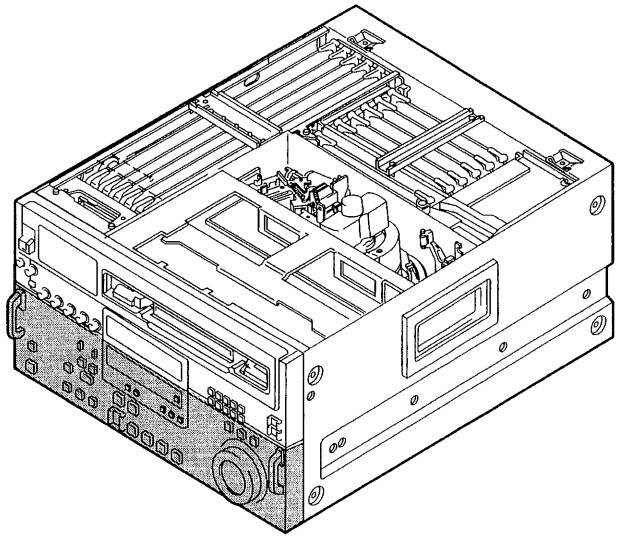
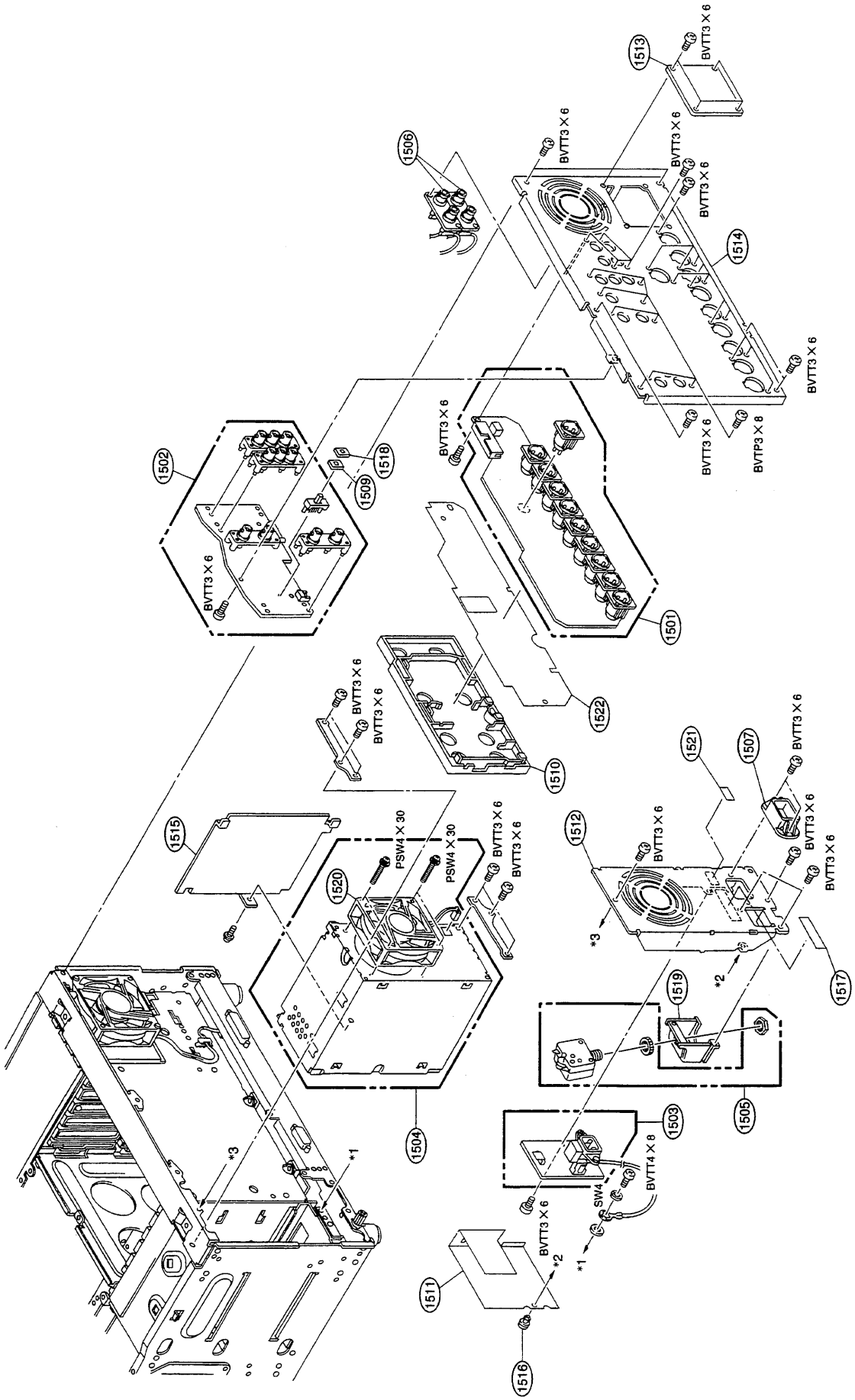
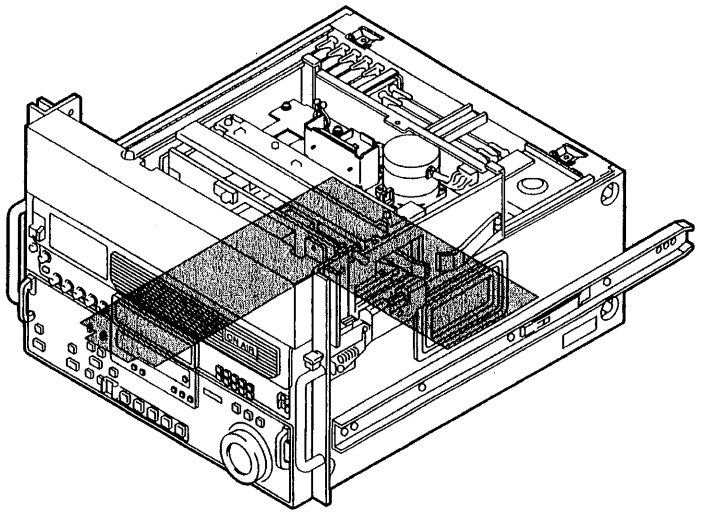
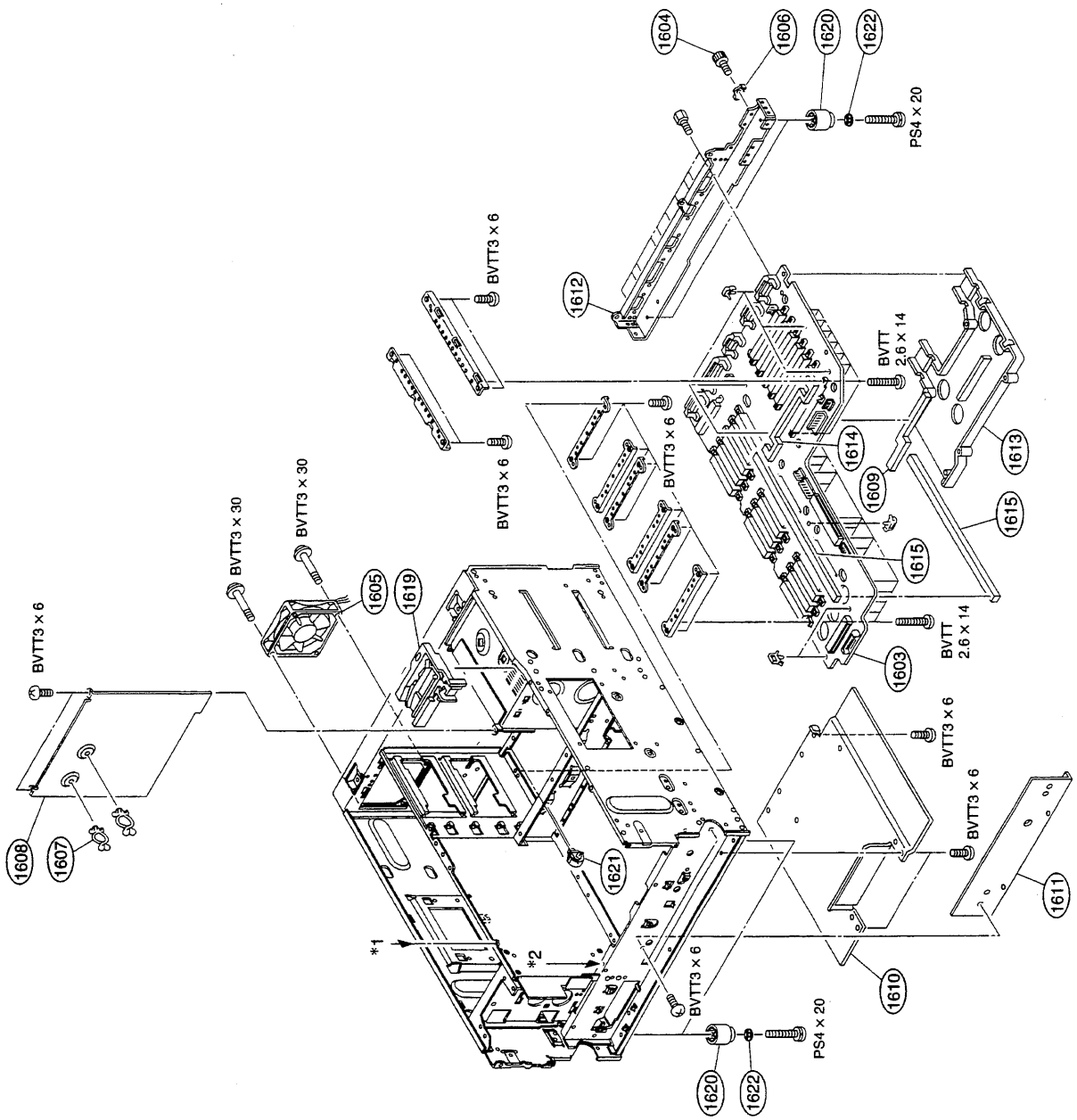


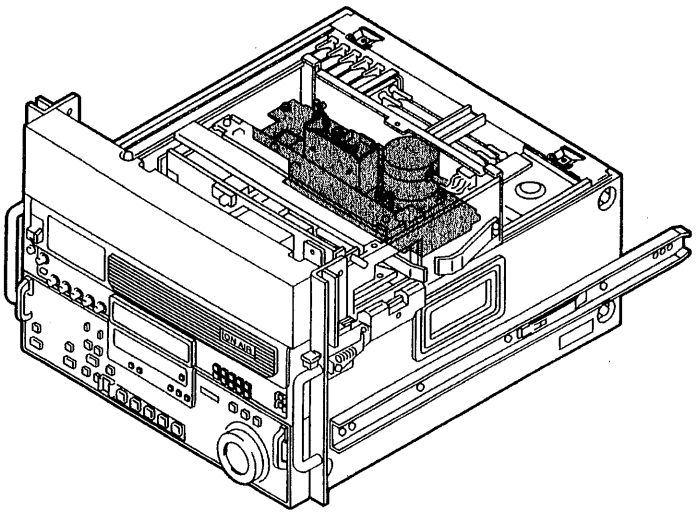
No.	Part No.	SP	Description
1301	A-8267-410-F	s	DIAL ASSY, SEARCH
1302	A-8267-577-B	o	PANEL ASSY, KEY
1303	A-8274-058-A	o	MOUNTED CIRCUIT BOARD, DP-176
1304	A-8275-209-A	o	MOUNTED CIRCUIT BOARD, KY-231B
1305	A-8276-585-B	o	MOUNTED CIRCUIT BOARD, PTC-69
1306	1-454-606-11	s	SOLENOID, PLUNGER
1307	2-124-691-01	s	ROLLER
1308	2-124-693-02	s	PLATE
1309	2-124-695-01	o	PLATE, CUSHION
1310	2-143-603-01	o	ARM, RETURN
1311	2-143-613-01	s	SPRING, TORSION
1312	2-217-533-00	s	SPRING, COMPRESSION
1313	3-180-632-01	o	KNOB, DIAL
1314	3-180-633-03	s	RUBBER, DIAL KNOB
1315	3-180-638-01	o	ARM, JOINT GEAR
1316	3-180-639-01	o	PLATE, MODE SELECTION
1317	3-180-640-02	o	GEAR, JOINT
1318	3-180-644-02	o	PROTECTOR, KY
1319	3-180-648-01	o	PROTECTOR, PTC
1320	3-180-649-02	o	LINK, SOLENOID
1321	3-180-650-03	s	FG-RING
1322	3-180-651-04	o	CAM, SD
1323	3-180-816-03	s	KEY TOP, 5x9
1324	3-180-817-03	s	KEY TOP, 9x16
1325	3-180-858-01	o	HANDLE
1326	3-180-859-02	o	HOLDER, SENSOR
1327	3-181-398-02	s	KEY TOP 6x6 (WHITE)
1328	3-181-398-12	s	KEY TOP 6x6 (GRAY)
1329	3-181-765-01	s	KEY TOP 3x5
1330	3-181-766-01	s	PIN, KEY TOP
1331	3-181-833-02	o	SPACER
1332	3-181-956-01	o	SPRING, COMPRESSION
1333	3-618-225-03	s	NUT, PLATE
1334	3-645-189-11	s	SPRING, TENSION
1335	3-668-124-00	o	HOLDER, LED
1336	3-701-441-21	s	WASHER, POLY 4mm DIA., 0.50T
1337	3-704-198-11	o	SUPPORT, PC
1338	3-686-086-01	s	CUSHION, BUTTON
1339	3-701-443-21	s	WASHER, POLY 5mm DIA., 0.50T
1341	4-937-336-51	o	HOLDER, LED
1342	3-703-249-01	s	SCREW, PTTWH 3x6
1343	3-180-904-03	o	CHASSIS, KEY PANEL


1513
BVTT3 X 6
1506
BVTT3 X 6
BVTT3 X 6
BVTT3 X 6
1514
BVTT3 X 6
BVTT3 X 6
BVTP3 X 8
1502
1518
1509
BVTT3 X 6
BVTT3 X 6
1501
BVTT3 X 6
BVTT3 X 6
1522
1510
1521
1507
BVTT3 X 6
1515
PSW4 X 30
PSW4 X 30
BVTT3 X 6
BVTT3 X 6
1520
1512
BVTT3 X 6
BVTT3 X 6
BVTT3 X 6
*3
*2
1517
1519
1505
1504
1503
BVTT4 X 8
SW4
BVTT3 X 6
*2
*1
1511
1516
*3
*1

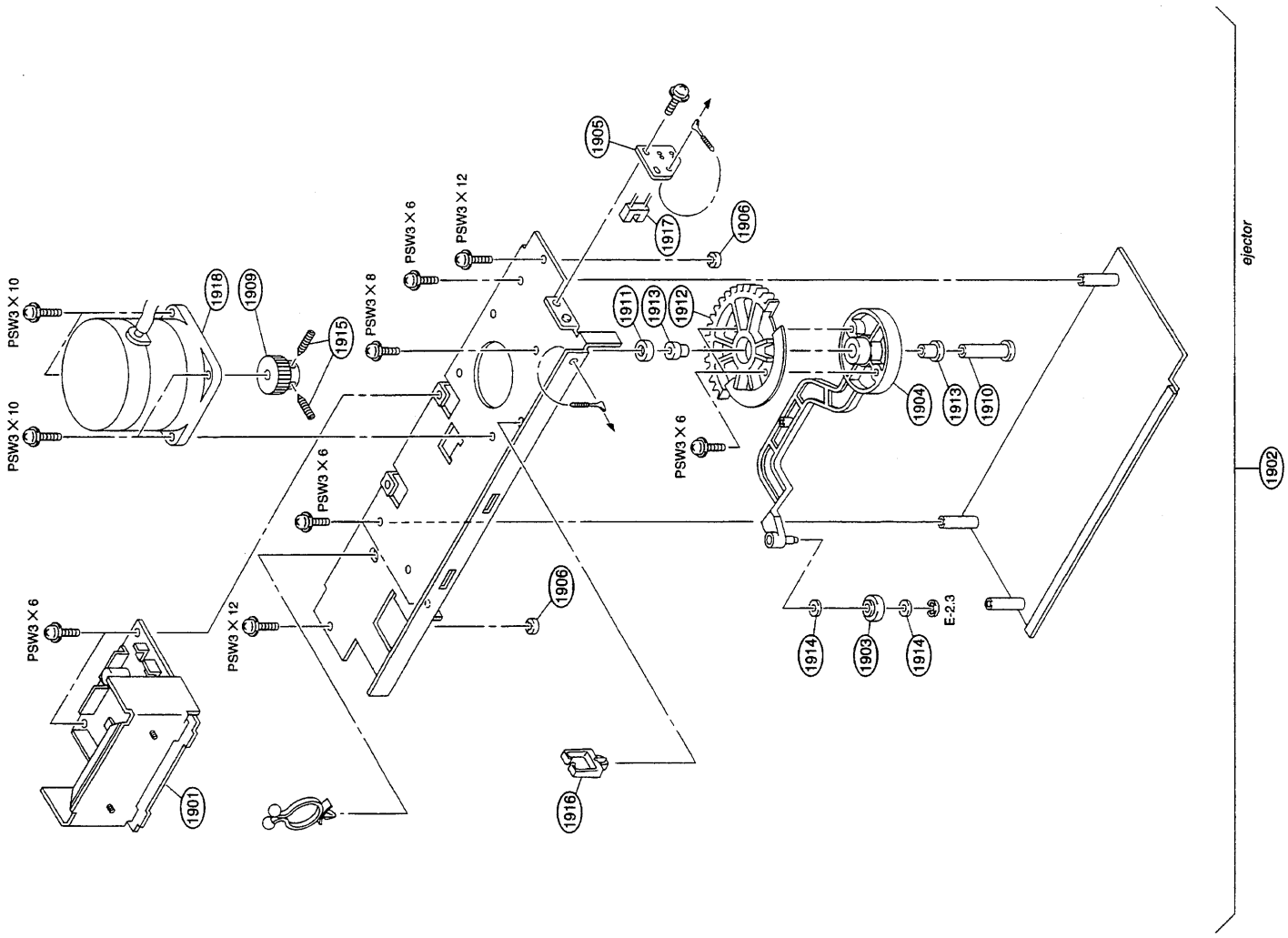


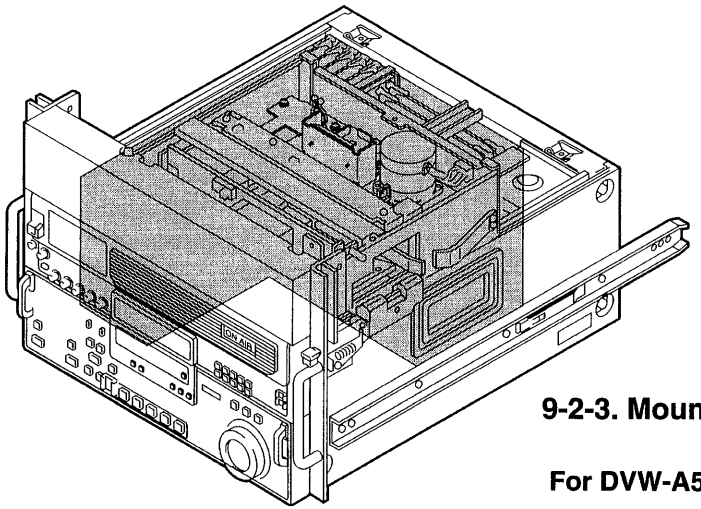
No.	Part No.	SP	Description
1603	A-8276-622-A	o	MOUNTED CIRCUIT BOARD, MB-441A
1604	X-2068-004-1	s	TERMINAL ASSY
1605	1-541-431-41	s	FAN, DC
1606	2-068-008-00	s	WASHER
1607	2-132-434-01	s	CLIP, WIRE
1608	3-180-479-03	o	PLATE, MR
1609	3-180-634-01	o	GUARD (MB1), AIR
1610	3-180-635-04	o	PLATE, BT
1611	3-180-636-02	o	PLATE, FT
1612	3-180-654-02	o	PANEL, D-SUB
1613	3-180-655-01	o	HARNESS (A), COVER
1614	3-180-656-01	o	GUARD (MB3), AIR
1615	3-180-657-01	o	GUARD (MB2), AIR
1619	3-181-652-03	o	HOLDER, HARNESS
1620	3-642-656-01	s	FOOT
1621	3-697-707-01	o	CLAMP (A), HARNESS
1622	3-650-537-00	o	WASHER


1604
1606
1620
1622
PS4 × 20
BVTT3 × 6
1612
BVTT
2.6 × 14
1613
1614
1609
1615
1615
BVTT3 × 6
BVTT3 × 6
BVTT3 × 30
BVTT3 × 30
1605
1619
1603
BVTT
2.6 × 14
BVTT3 × 6
BVTT3 × 6
BVTT3 × 6
1608
1607
1621
1611
*1
*2
1610
BVTT3 × 6
PS4 × 20
1620
1622



No.	Part No.	SP	Description
1901	A-6729-088-A	o	MOUNTED CIRCUIT BOARD, IF-36
1902	A-8267-901-A	s	EJECTOR ASSY
1903	X-3721-001-2	s	ROLLER (AU) ASSY
1904	X-3688-013-1	o	ARM ASSY, EJ
1905	1-654-100-11	o	PRINTED CIRCUIT BOARD, SE-237
1906	3-668-413-00	o	WASHER (M3), STOP
1909	3-687-644-01	s	GEAR, MOTOR
1910	3-688-018-01	o	SHAFT, ARM
1911	3-688-019-02	o	SPACER, SHAFT, ARM
1912	3-688-025-01	o	GEAR, ARM
1913	3-688-108-01	s	BEARING (FLANGE), BALL
1914	3-701-439-21	s	WASHER, POLY 3mm DIA., 0.50T
1915	3-701-510-00	s	SET SCREW, DOUBLE POINT 4X4
1916	4-314-320-00	o	HOLDER, WIRE
1917	8-719-918-74	s	PHOTO INTERRUPTER GP-1S04
1918	8-838-087-01	s	MOTOR, DC KNS-1600A


PSW3 X 10
PSW3 X 10
PSW3 X 6
PSW3 X 6
PSW3 X 12
PSW3 X 8
PSW3 X 6
PSW3 X 12
PSW3 X 6
1918
1909
1915
1905
1917
1906
1911
1913
1912
1904
1913
1910
1906
1914
1903
1914
E-2.3
1901
1916
ejector
1902



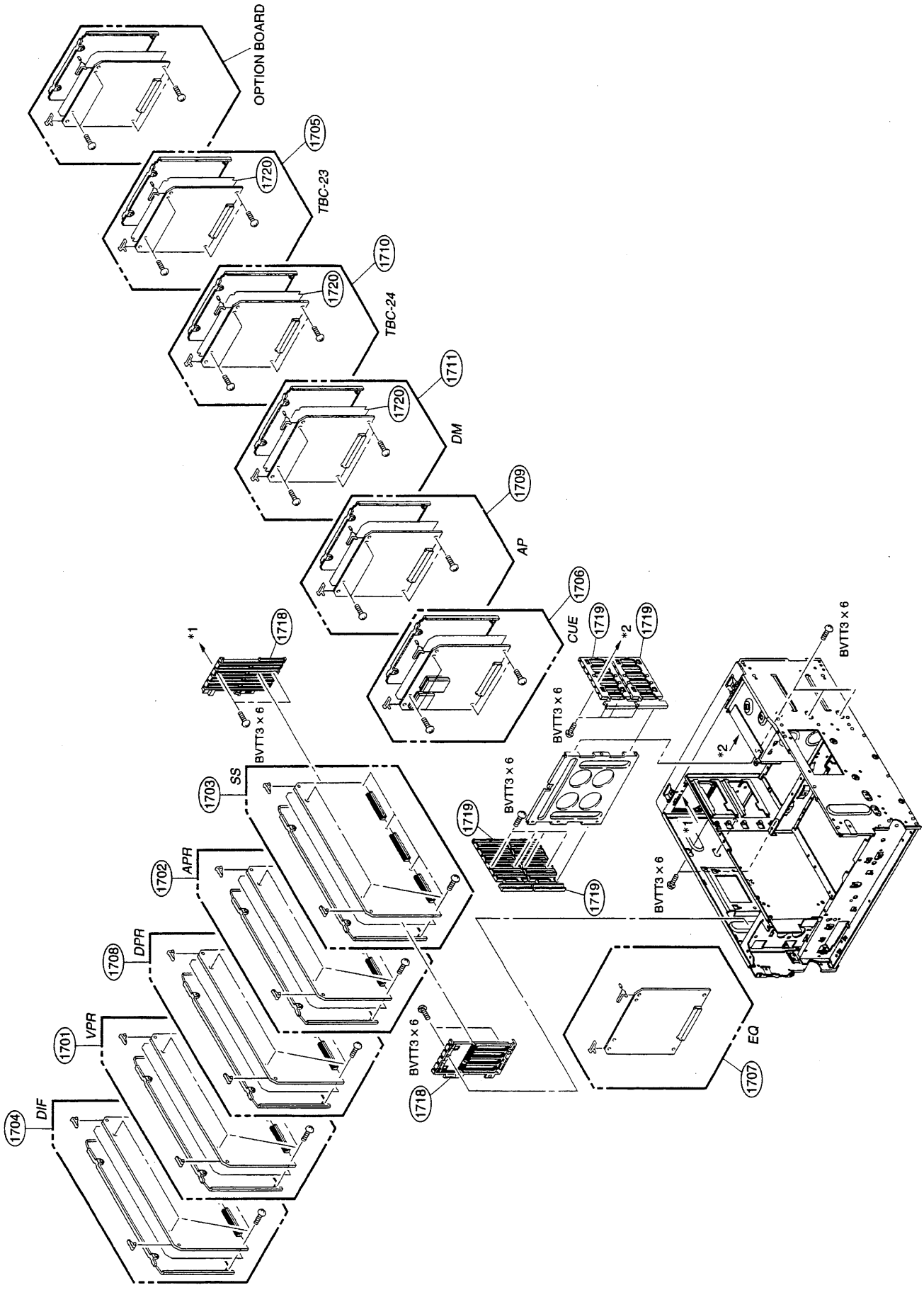
9-2-3. Mounted Circuit Board List

For DVW-A510P/CA510P

No.	Part No.	SP	Description
1701	A-8275-337-C	o	MOUNTED CIRCUIT BOARD, VPR-1BAP
1702	A-8275-393-B	o	MOUNTED CIRCUIT BOARD, APR-1BA (for S/N 14076 and higher: DVW-A510P(EK)) (for S/N 10076 and higher: DVW-CA510P(EK))
	A-8275-392-A	o	MOUNTED CIRCUIT BOARD, APR-1BAP (for S/N 10001 thru. 14075: DVW-A510P(EK)) (for S/N 10001 thru. 10075: DVW-CA510P(EK))
1703	A-8275-344-A	o	MOUNTED CIRCUIT BOARD, SS-52BAP
1704	A-8275-349-B	o	MOUNTED CIRCUIT BOARD, DIF-16B
1705	A-8275-079-B	o	MOUNTED CIRCUIT BOARD, TBC-23P
1706	A-8275-353-A	o	MOUNTED CIRCUIT BOARD, CUE-1BAP
1707	A-8275-359-B	o	MOUNTED CIRCUIT BOARD, EQ-45BA (for S/N 14301 and higher: DVW-A510P(EK)) (for S/N 10076 and higher: DVW-CA510P(EK))
	A-8275-357-A	o	MOUNTED CIRCUIT BOARD, EQ-45BAP (for S/N 10001 thru. 14300: DVW-A510P(EK)) (for S/N 10001 thru. 10075: DVW-CA510P(EK))
1708	A-8275-208-B	o	MOUNTED CIRCUIT BOARD, DPR-36H
1709	A-8275-086-A	o	MOUNTED CIRCUIT BOARD, AP-28P
1710	A-8275-087-A	o	MOUNTED CIRCUIT BOARD, TBC-24P
1711	A-8275-088-B	o	MOUNTED CIRCUIT BOARD, DM-89P
1718	3-180-646-02	o	GUIDE (L), PRINTED CIRCUIT BOARD
1719	3-180-674-01	o	GUIDE (S), PRINTED CIRCUIT BOARD
1720	3-696-787-03	o	SHEET (S), CARD
1721	3-696-891-03	o	PLATE, CARD-S

For DVW-510P

No.	Part No.	SP	Description
1701	A-8275-337-C	o	MOUNTED CIRCUIT BOARD, VPR-1BAP
1702	A-8275-343-B	o	MOUNTED CIRCUIT BOARD, APR-1B (for S/N 11300 and higher: DVW-510P(EK))
	A-8275-342-A	o	MOUNTED CIRCUIT BOARD, APR-1BP (for S/N 10001 thru. 11299: DVW-510P(EK))
1703	A-8275-345-A	o	MOUNTED CIRCUIT BOARD, SS-52BP
1704	A-8275-349-B	o	MOUNTED CIRCUIT BOARD, DIF-16B
1706	A-8275-354-A	o	MOUNTED CIRCUIT BOARD, CUE-1BP
1707	A-8275-359-B	o	MOUNTED CIRCUIT BOARD, EQ-45BA (for S/N 11385 and higher: DVW-510P(EK))
	A-8275-358-A	o	MOUNTED CIRCUIT BOARD, EQ-45BP (for S/N 10001 thru. 11384: DVW-510P(EK))
1708	A-8275-208-B	o	MOUNTED CIRCUIT BOARD, DPR-36H
1718	3-180-646-02	o	GUIDE (L), PRINTED CIRCUIT BOARD
1719	3-180-674-01	o	GUIDE (S), PRINTED CIRCUIT BOARD


OPTION BOARD
1705
1720
TBC-23
1710
1720
TBC-24
1711
1720
DM
1709
AP
1706
CUE
1719
*2
1719
BVTT3 x 6
BVTT3 x 6
*1
1718
BVTT3 x 6
1703
SS
1719
BVTT3 x 6
1719
1719
*2
BVTT3 x 6
*1
BVTT3 x 6
1702
APR
1708
DPR
1701
VPR
1704
DIF
BVTT3 x 6
1718
EQ
1707

9-2-4. Packing Materials and Supplied Accessories List

For DVW-A510P

Ref. No. or Q'ty		Part No.	SP	Description
1pc	⚠	1-782-929-11	s	CORD, POWER (BS 3P)
1pc		3-613-640-01	o	HOLDER (C), PLUG
1pc		3-181-533-02	o	CUSHION (LOWER)
1pc		3-181-534-02	o	CUSHION (UPPER)
1pc		3-181-535-01	o	SPACER (A)
1pc		3-181-536-01	o	SPACER (B)
1pc		3-183-117-03	o	INDIVIDUAL CARTON
1pc		3-701-616-01	o	BAG, POLYETHYLENE
1pc		3-701-634-00	o	BAG, POLYETHYLENE
4pcs		7-682-965-01	s	SCREW +PSW 4X16

For DVW-510P

Ref. No. or Q'ty		Part No.	SP	Description
1pc	⚠	1-782-929-11	s	CORD, POWER (BS 3P)
1pc		3-613-640-01	o	HOLDER (C), PLUG
1pc		3-181-533-02	o	CUSHION (LOWER)
1pc		3-181-534-02	o	CUSHION (UPPER)
1pc		3-181-535-01	o	SPACER (A)
1pc		3-181-536-01	o	SPACER (B)
1pc		3-183-477-02	o	INDIVIDUAL CARTON
1pc		3-701-616-01	o	BAG, POLYETHYLENE
1pc		3-701-634-00	o	BAG, POLYETHYLENE
4pcs		7-682-965-01	s	SCREW +PSW 4X16

For DVW-CA510P

Ref. No. or Q'ty		Part No.	SP	Description
1pc	⚠	1-782-929-11	s	CORD, POWER (BS 3P)
1pc		3-613-640-01	o	HOLDER (C), PLUG
1pc		3-183-868-01	o	PLATE, TOP
1pc		3-183-870-01	o	INDIVIDUAL CARTON
1pc		3-183-871-01	o	CUSHION (UPPER)
1pc		3-183-872-01	o	CUSHION (LOWER)
1pc		3-701-634-00	o	BAG, POLYETHYLENE
1pc		3-704-318-01	o	BAG, PROTECTION

9-3. SPARE PARTS LIST – OPTIONAL ACCESSORIES –
9-3. 補修部品リスト – オプション –

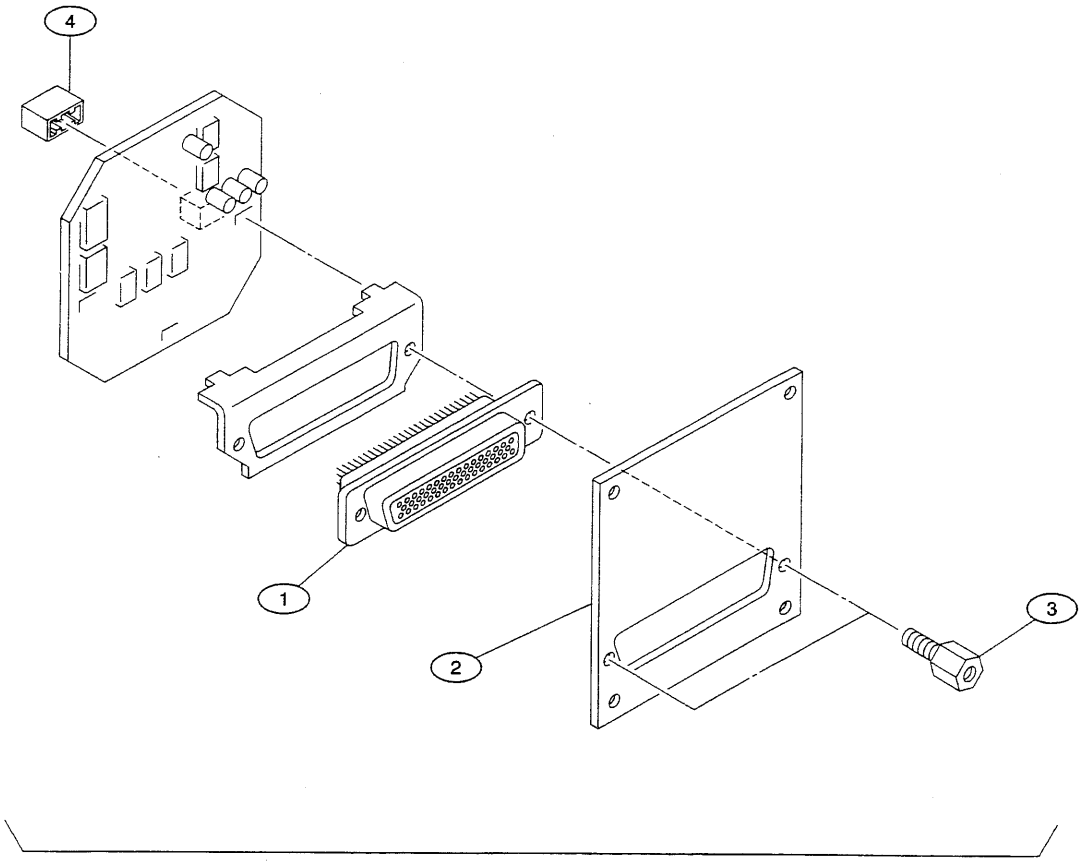
9-3-1. Index
9-3-1. インデックス

Model Name		Page
BKDW-507 (*1)	Audio Program Play Board	—
BKDW-509	Parallel (50P) Interface Kit	9-44
BKDW-510	Control Panel Extension Kit	9-45
BKDW-511	Control Panel Case	9-46

(*1) Please order the standard products.
製品をお求めください。

9-3-2. BKDW-509

Exploded View

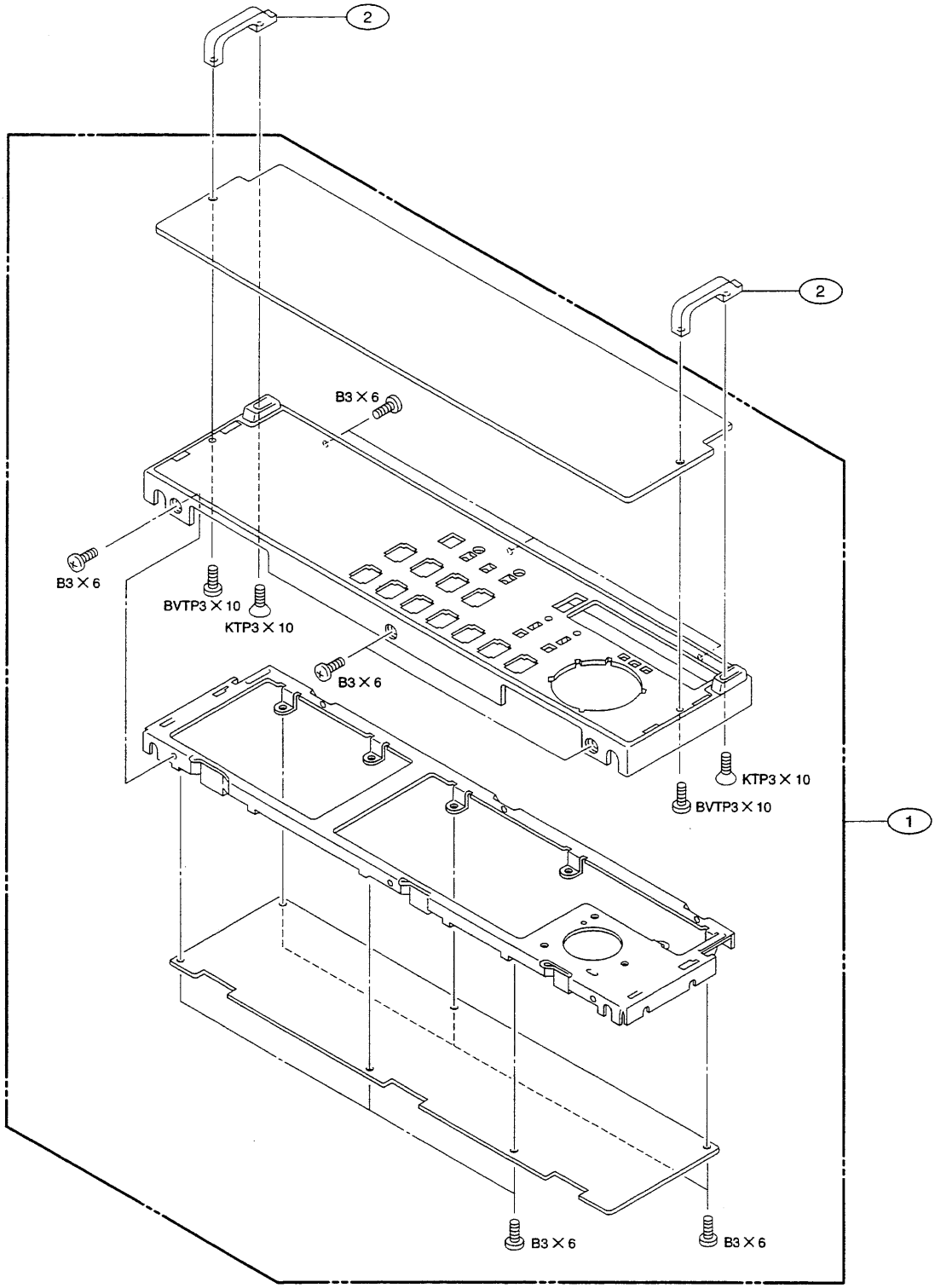


RM-130

No.	Part No.	SP	Description
1	1-563-893-21	s	SOCKET, D-SUB CONNECTOR 50P
2	3-180-788-01	o	PANEL (RM), ORNAMENTAL
3	3-673-910-31	s	SCREW, CONNECTOR
4	3-184-609-01	o	GUIDE, CONNECTOR

9-3-3. BKDW-510

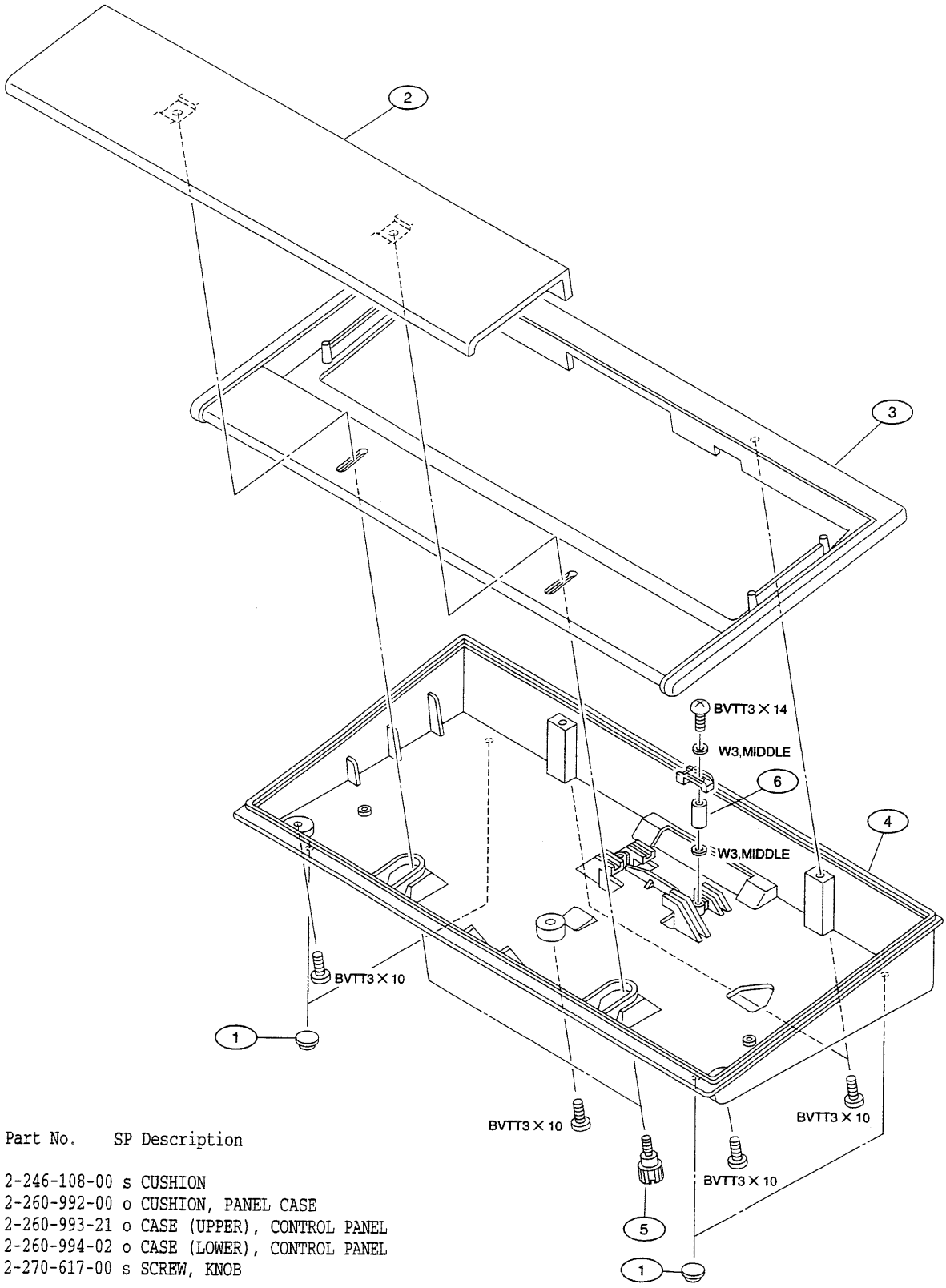
Exploded View



No.	Part No.	SP	Description
1	A-6768-668-B	o	PANEL ASSY, BLANK
2	3-717-425-01	o	HANDLE
1pc	1-751-316-11	o	CABLE ASSY, ENCAPSULATED

9-3-4. BKDW-511

Exploded View



No.	Part No.	SP	Description
1	2-246-108-00	s	CUSHION
2	2-260-992-00	o	CUSHION, PANEL CASE
3	2-260-993-21	o	CASE (UPPER), CONTROL PANEL
4	2-260-994-02	o	CASE (LOWER), CONTROL PANEL
5	2-270-617-00	s	SCREW, KNOB
6	3-661-588-00	o	SPACER, 3X5

9-4. Spare Parts List

Part No.	SP	Description
7-621-255-15	s	SCREW +P 2X3
7-621-259-25	s	CSREW +PWH 2.6X4
7-621-260-55	s	SCREW +P 2.6X25
7-621-283-10	s	SCREW +P 2X10
7-621-559-20	s	SCREW +K 2.6X4
7-621-721-06	s	SET-SCREW, SLOT 2X2.5 (FLAT)
7-621-733-08	s	SET-SCREW, HEX 2X4 (FLAT)
7-621-734-09	s	SET-SCREW, HEX 2.6X3 (WP)
7-621-740-08	s	SET-SCREW, HEX 2.6X6 (FLAT)
7-621-772-00	s	SCREW +B 2X3
7-621-772-10	s	SCREW +B 2X4
7-621-772-20	s	SCREW +B 2X5
7-621-772-50	s	SCREW +B 2X10
7-621-773-95	s	SCREW +B 2.6X6
7-621-775-20	s	SCREW +B 2.6X5
7-621-775-80	s	SCREW +B 2.6X16
7-622-207-05	s	N 2.6, TYPE 2
7-623-205-22	s	SW 2, TYPE 2
7-623-207-22	s	SW 2.6, TYPE 2
7-623-422-07	s	LW3, TYPE B
7-623-510-01	s	LUG, 4
7-623-923-11	s	WASHER 2.6, NYLON
7-623-924-11	s	WASHER 3.0, NYLON
7-624-105-04	s	STOP RING 2.3 (E TYPE)
7-624-106-04	s	STOP RING 3.0 (E TYPE)
7-624-108-04	s	STOP RING 4.0 (E TYPE)
7-628-253-00	s	SCREW +PS 2X4
7-628-253-15	s	SCREW +PS 2X5
7-628-253-20	s	SCREW +PS 2X6
7-628-253-35	s	SCREW +PS 2X8
7-628-254-30	s	SCREW +PS 2.6X10
7-671-155-01	s	BALL 3, STEEL
7-682-544-04	s	SCREW +B 3X3
7-682-545-09	s	SCREW +B 3X4
7-682-546-09	s	SCREW +B 3X5
7-682-547-09	s	SCREW +B 3X6
7-682-548-09	s	SCREW +B 3X8
7-682-550-09	s	SCREW +B 3X12
7-682-551-09	s	SCREW +B 3X14
7-682-552-09	s	SCREW +B 3X16

Part No.	SP	Description
7-682-646-09	s	SCREW +PS 3X5
7-682-648-09	s	SCREW +PS 3X8
7-682-661-01	s	SCREW +PS 4X8
7-682-661-09	s	SCREW +PSW 4X8
7-682-666-09	s	SCREW +PS 4X20
7-682-668-09	s	SCREW +PSW 4X30
7-682-902-11	s	SCREW +PWH 2.6X5
7-682-903-21	s	SCREW +PWH 3X8
7-682-947-01	s	SCREW +PSW 3X6
7-682-948-01	s	SCREW +PSW 3X8
7-682-949-01	s	SCREW +PSW 3X10
7-682-962-01	s	SCREW +PSW 4X10
7-682-965-01	s	SCREW +PSW 4X16
7-683-174-01	s	SET-SCREW, SLOT 3X4 (FLAT)
7-683-176-01	s	SET-SCREW, SLOT 3X6 (FLAT)
7-683-176-21	s	SET-SCREW, SLOT 3X6 (CONE)
7-684-023-04	s	N 3, TYPE 2
7-685-103-19	s	SCREW +P 2X5 TYPE2 NON-SLIT
7-685-105-19	s	SCREW +PTP 2X8 TYPE2 NON-SLIT
7-685-134-19	s	SCREW +P 2.6X8 TYPE2 NON-SLIT
7-685-247-19	s	SCREW +KTP 3X10 TYPE2 NON-SLIT
7-685-646-79	s	SCREW +BVTP 3X8 TYPE2 IT-3
7-685-865-09	s	SCREW +BVTT 2.6X12 (S)
7-685-866-01	s	SCREW +BVTT 2.6X14 (S)
7-685-871-01	s	SCREW +BVTT 3X6 (S)
7-685-871-09	s	SCREW +BVTT 3X6 (S, BLACK)
7-685-872-09	s	SCREW +BVTT 3X8 (S)
7-685-873-09	s	SCREW +BVTT 3X10 (S)
7-685-875-09	s	SCREW +BVTT 3X14 (S)
7-685-879-01	s	SCREW +BVTT 3X30 (S)
7-685-881-01	s	SCREW +BVTT 4X8 (S)
7-685-902-01	s	SCREW +PTPWH 2.6X5 (TYPE2)
7-685-903-11	s	SCREW +PTPWH 3X6 (TYPE2)
7-685-903-21	s	SCREW +PTPWH 3X8 (TYPE2)
7-688-001-01	s	W 2, SMALL
7-688-001-11	s	W 2, MIDDLE
7-688-002-11	s	W 2.6, MIDDLE
7-688-003-01	s	W 3, SMALL
7-688-003-11	s	W 3, MIDDLE
7-688-004-11	o	SW 4, MIDDLE

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DVW-A510P (EK)
DVW-510P (EK)
DVW-CA510P (EK) E
3-183-112-08 (1)

Sony Corporation
Communication System Solutions Network Company

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SONY

DIGITAL VIDEOCASSETTE PLAYER

DVW-A510P
DVW-510P
DVW-CA510P

AUDIO PROGRAM PLAY BOARD
BKDW-507

PARALLEL (50P) INTERFACE KIT
BKDW-509

CONTROL PANEL EXTENSION KIT
BKDW-510

CONTROL PANEL CASE
BKDW-511

Digital BETACAM™

MAINTENANCE MANUAL Part 2

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To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

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Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres. Pour toute réparation faire appel à une personne compétente uniquement.

DVW-A510P (EK)	Serial No. 10001 and Higher
DVW-510P (EK)	Serial No. 10001 and Higher
DVW-CA510P (EK)	Serial No. 10001 and Higher
BKDW-507	Serial No. 10001 and Higher
BKDW-509	Serial No. 10001 and Higher
BKDW-510	
BKDW-511	

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Manual Structure

Purpose of this manual

This manual is maintenance manual of the following products.

Product	
VTR:	DVW-A500P, DVW-500P, DVW-A510P, DVW-510P, DVW-CA510P
Optional equipments:	BKDW-507, BKDW-509, BKDW-510, BKDW-511

This manual describes the information items (adjustment, board layouts, schematic diagrams, detailed parts list, etc.) that premise the service based on the component parts.

Contents

The following is a summary of all the sections for understanding the contents of this manual.

Maintenance Manual Part 2, Volume 5

Section 1 Schematic Diagrams for Player
Describes the schematic diagrams of the player.
(DVW-A510P/510P/CA510P)

Section 2 Schematic Diagram for Optional Boards
Describes the schematic diagrams of the optional boards for player.
(BKDW-507/509)

(continue)

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Maintenance Manual Part 2, Volume 1	**Section 1**	**Service Overview**
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	Section 3	**Tape Path Alignment**
	Section 4	**Electrical Alignment Overview**
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	Section 3	**Semiconductor Pin Assignments**
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	Section 2	**Recording Format, Head Configuration, and Signal Processing**
	Section 3	**Block Diagrams and Circuit Descriptions**
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	Section 5	**Maintenance Mode**
	Section 6	**Replacement of Power Block and Circuit Boards**
	Section 7	**Periodic Maintenance and Inspection**
	Section 8	**Replacement of Periodic Maintenance Parts**
	Section 9	**Spare Parts**

*1: There are two types manual for Maintenance Manual Part 1: Recorder (DVW-A500P/500P) and player (DVW-A510P/510P/CA510P).

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Schematic Diagrams for Player

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-DUS-XXX BOARD-

The DUS-XXX board is added to supplement the function of main board.

DUS-679	(TBC-23;	1-648-543-11, 12)
DUS-710	(DM-89;	1-648-541-11, 12)
	(VPR-1B;	1-648-532-22)
DUS-727	(DM-89;	1-648-541-12)
DUS-741	(DR-200;	1-648-559-12)
DUS-744	(VPR-1B;	1-648-532-21)
DUS-769	(VPR-1B;	1-648-532-21)

Note

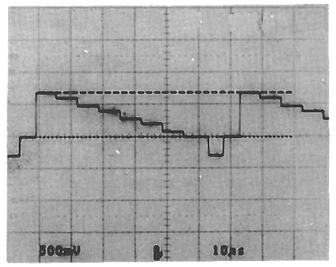
The ⚠-marked components are critical to safety.
Replace only with same components as specified.

Circuit Function of Printed Circuit Board

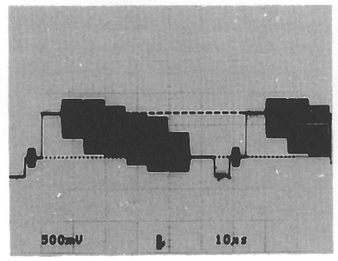
System configuration	Board name	Circuit Function
Digital process	VPR-1B	Video signal processor, D/A, Reference clock generator, Composite encoder
	APR-1BA/B	Audio signal processor, D/A, AES/EBU interface
	DIF-16B	4:2:2 component serial digital output interface with Embedded audio
	DPR-36H	Digital data processor (Decode, Error correction)
RF, Analog process	EQ-45BA (DVW-A510P/CA510P)	RF equalizer (PB EQ), Betacam PB buffer
	EQ-45B (DVW-510P)	RF equalizer (PB EQ)
	CUE-1BA (DVW-A510P/CA510P)	CUE PB, LTC PB, and LAU PB circuits
	CUE-1B (DVW-510P)	CUE PB and LTC PB circuits
Betacam playback (DVW-A510P/CA510P)	DM-89	RF demodulator
	TBC-24	TBC (A/D conversion & Write clock generate blocks)
	TBC-23	TBC (Sequence & Reference blocks)
	AP-28	AFM demodulator & LAU noise reduction
System/servo control	SS-52B	System, Servo, Analog/Digital DT control
	DT-34B	DT driver
	DR-307/200	Motors driver (Drum, Capstan, T/S reels, Threading, Reel shift, Cassette up/down), Solenoids driver (Pinch, T/S brake, Cleaning), Degaussing head driver
Mech.deck driver/sensor	CCM-15	Threading motor/Reel shift motor
	PD-35	Pinch solenoid connection
	PTC-54	Threading FG
	PTC-59	Cassette’s tabs sensor
	PTC-71	Reel position sensor
	RM-82	T/S reel motor
	RM-141	T reel motor
	SE-228	T/S reel FG
	TR-78	S tension sensor
	TR-79	T tension sensor, Thread/unthread end sensor
Cassette compartment (DVW-A510P/510P)	CL-29	Cassette up/down motor, Cassette down sensor
	LP-81	Lamp of cassette comparatment
	PC-70	Cassette-in sensor, Cassette size sensor

System configuration	Board name	Circuit Function
Cassette compartment, Ejector (DVW-CA510P)	CL-28	Cassette compartment
	DU-91 or SE-237	Cassette OUT sensor/Cassette sensor/Ejector arm sensor
	IF-36	Betacart interface
	LED-200	ON AIR lamp
	SE-225	Cassette down sensor (1) or Cassette IN sensor
	SE-226	Cassette down sensor (2)
Front panel function	FP-58B	Sub control panel and Upper panel function (SWs, LEDs) control, CAV control level conversion
	VR-152B	Phone level RV, Phone connector
	VR-153B	Audio PB level RVs
	SWC-17B	Upper panel function (SWs, LEDs)
	SWC-18B	Sub control panel function
	SWC-19B	System set-up panel function control
	KY-231B	Lower panel function control
	DP-176B	Time counter display
	PTC-69	Search dial sensor, Dial solenoid connection
Rear panel function	CP-218B	Rear connector board (Analog video)
	CP-220B	Rear connector board (Analog/Digital audio, TC)
	MB-441	Remote control connectors (CONTROL PANEL, REMOTE 1 IN/OUT, RS232C, VIDEO CONTROL)
Power	AC-139B	AC connector board with breaker
SOPS-1042 or SOPS-1042 (A)	SOPS-1019C	Switching regulator
	SOPS-1042A	Switching regulator (inc. SOPS-1019C/1042S boards)
	SOPS-1042B or SOPS-1042D	Switching regulator (AC-DC)
	SOPS-1042S	Switching regulator
Other	MB-441	Mother board
	HN-181	Connection board (Drum/Capstan/Reel-shift motors, CTL head, DT-34B/HN-184/HN-185/PTC-59/PTC-71 boards)
	HN-184	Connection board (Threading motor, Tape end sensor, PD-35/PTC-54/TR-78 boards)
	HN-185	Connection board with dew sensor (Tape top sensor, Cassette compartment, TR-79 board, Slip ring)

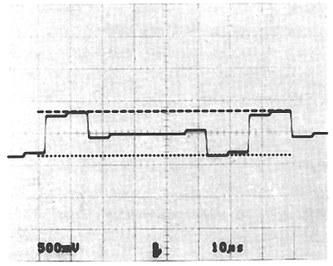
①TP601(R-1) PB mode



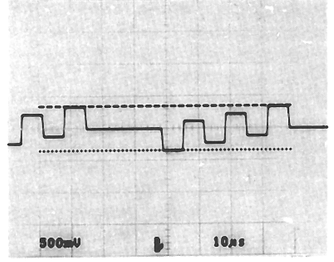
④TP603(R-3) PB mode



②TP600(R-2) PB mode



③TP602(R-2) PB mode



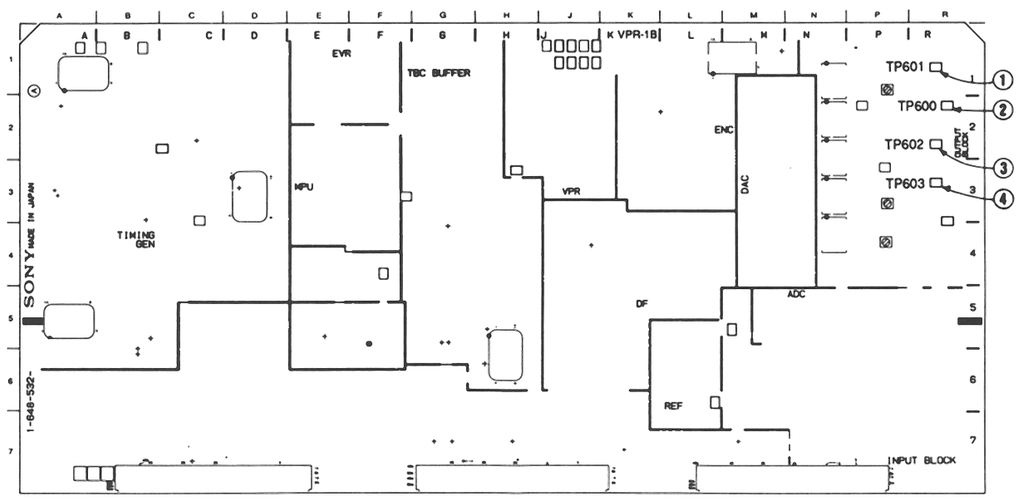
For DVW-A510P/510P/CA510P

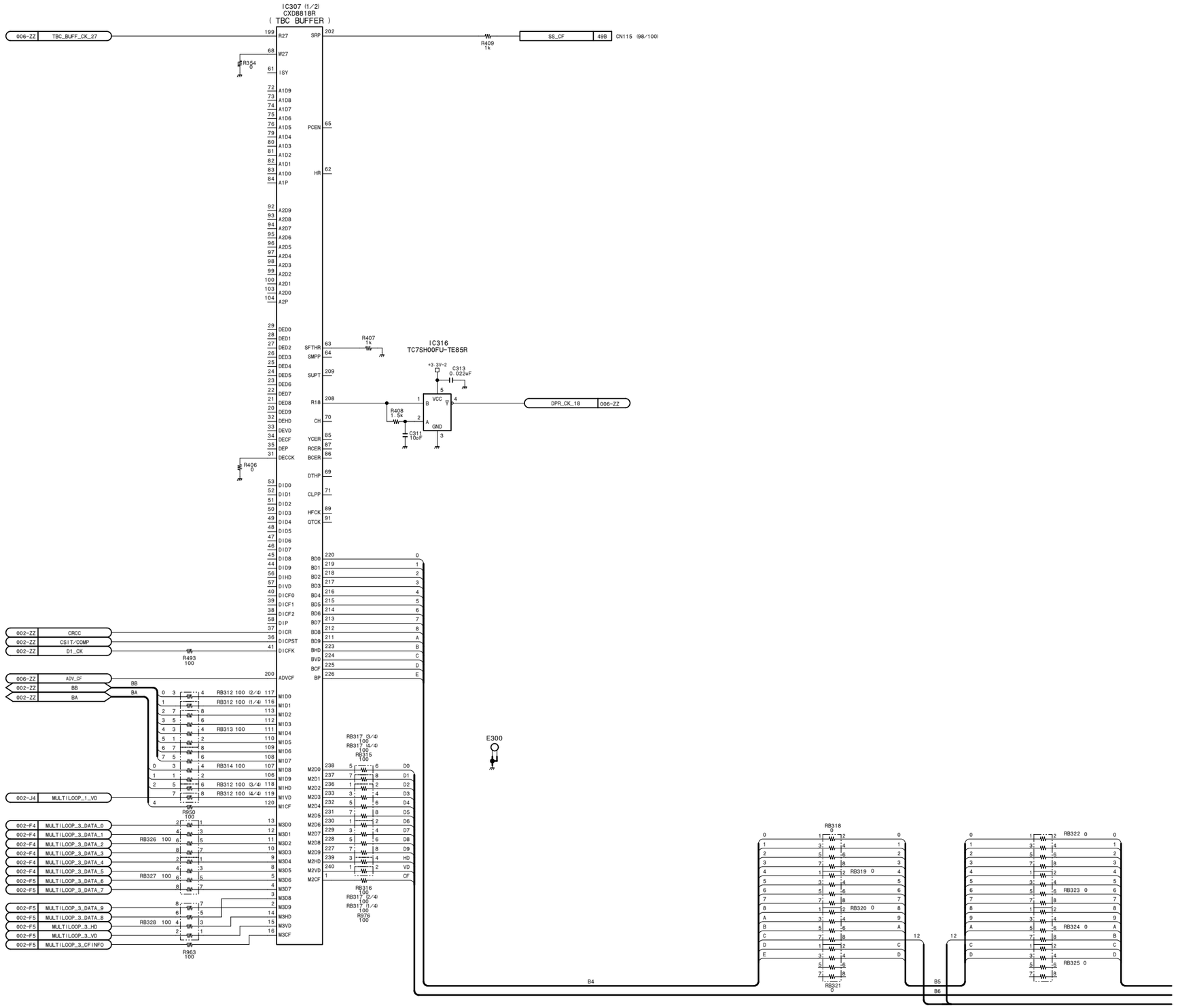
Measurement Condition
MODE : PB mode
TAPE : ZR5-1P

For DVW-A510/510/CA510

Measurement Condition
MODE : PB mode
SETUP MENU 709 : D-1
(CAV LEVEL FORMAT)
TAPE : ZR5-1

VPR-1B Board -A Side-

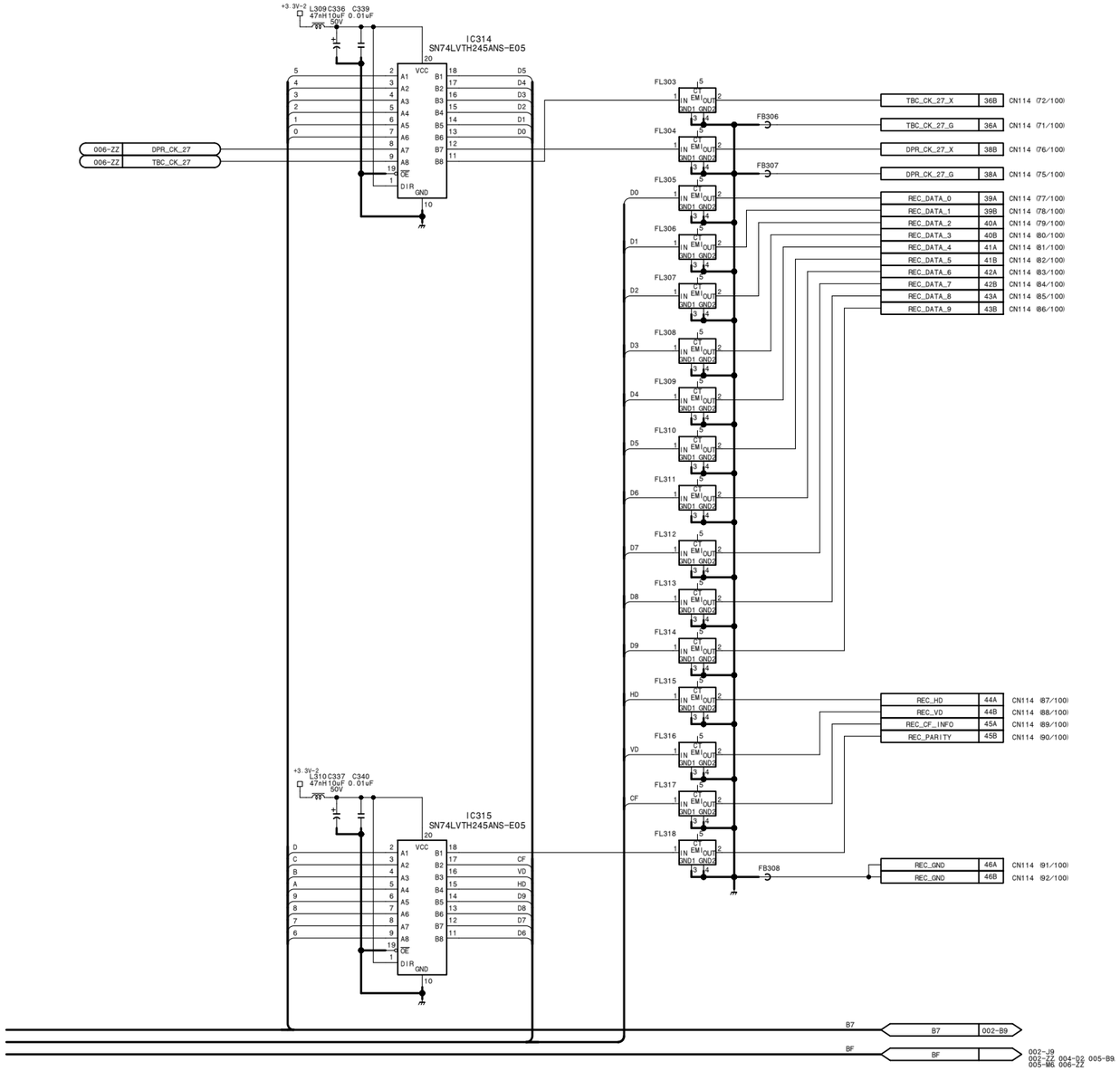




1-6 (c) 1-6 (c)

DVW-A510P/510P/CA510P

VPR-1B (1/6)

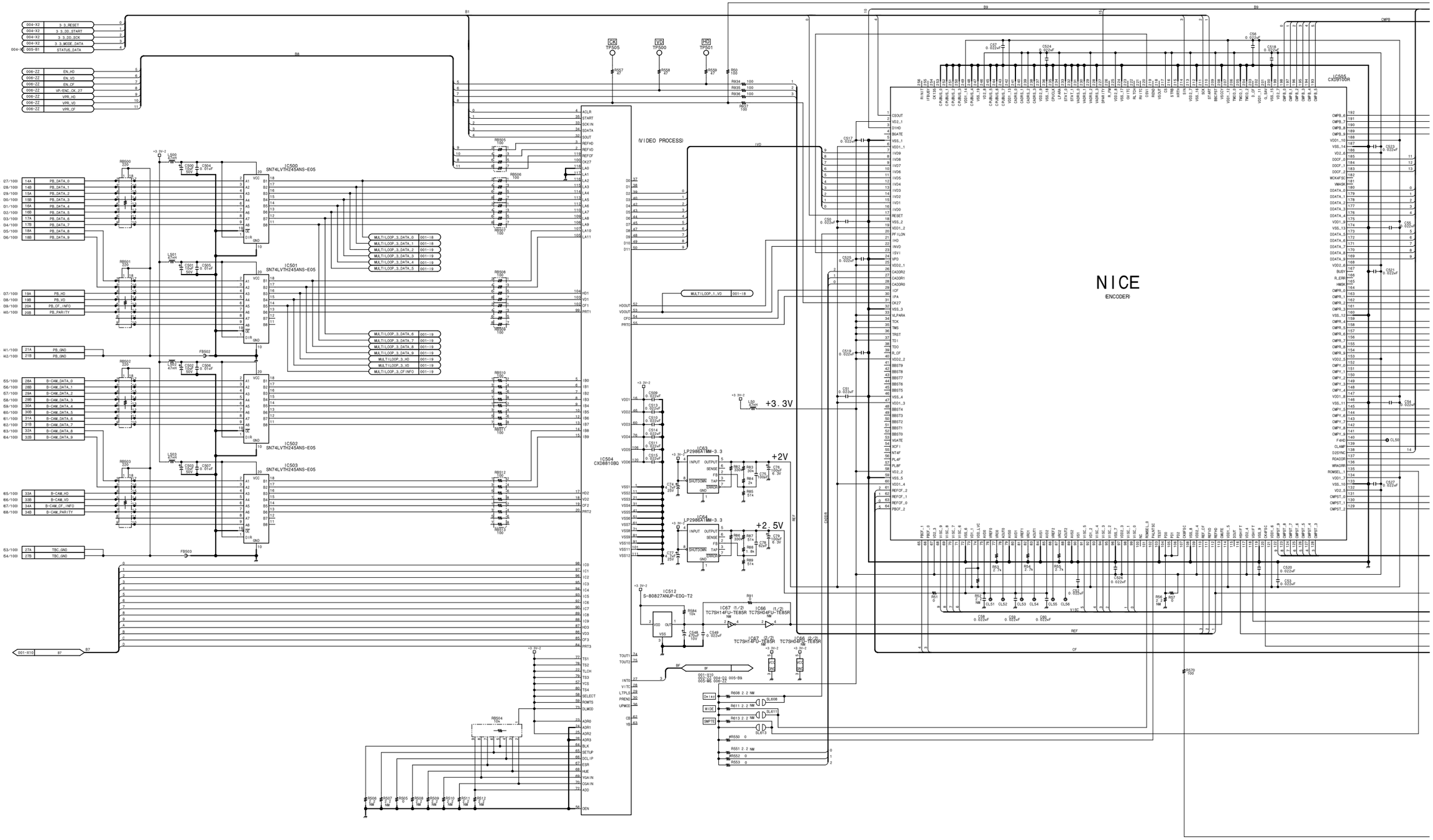


TBC Buffer

VPR-1B BOARD (1/6)

BOARD NO. 1-648-532-18
BOARD'S LOT NO. 909-
DVW-A510 (J, UC) : VPR-1BA MCB
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510 (J, UC) : VPR-1BA MCB
DVW-510P (EK) : VPR-1BAP MCB
DVW-CA510 (J, UC) : VPR-1BA MCB
DVW-CA510P (EK) : VPR-1BAP MCB
DVW-A500_VPR-1B_002_1

1-7 (c)

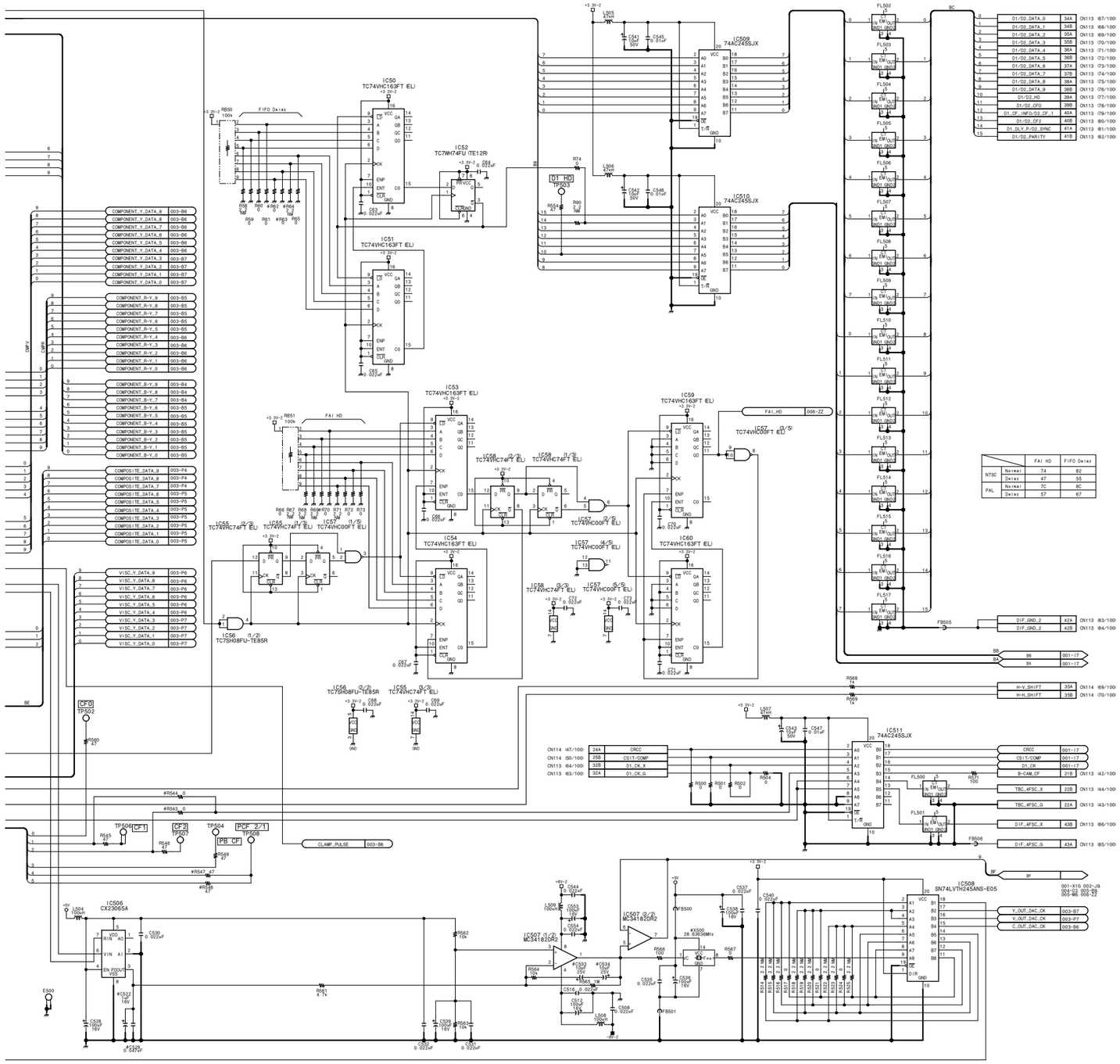


1-8 (c) 1-8 (c)

DVW-A510P/510P/CA510P

A B C D E F G H

VPR-1B (2/6)



		FA1 HD	FIFO Delay
NTSC	Normal	74	82
	Delay	47	55
PAL	Normal	7C	8C
	Delay	57	67

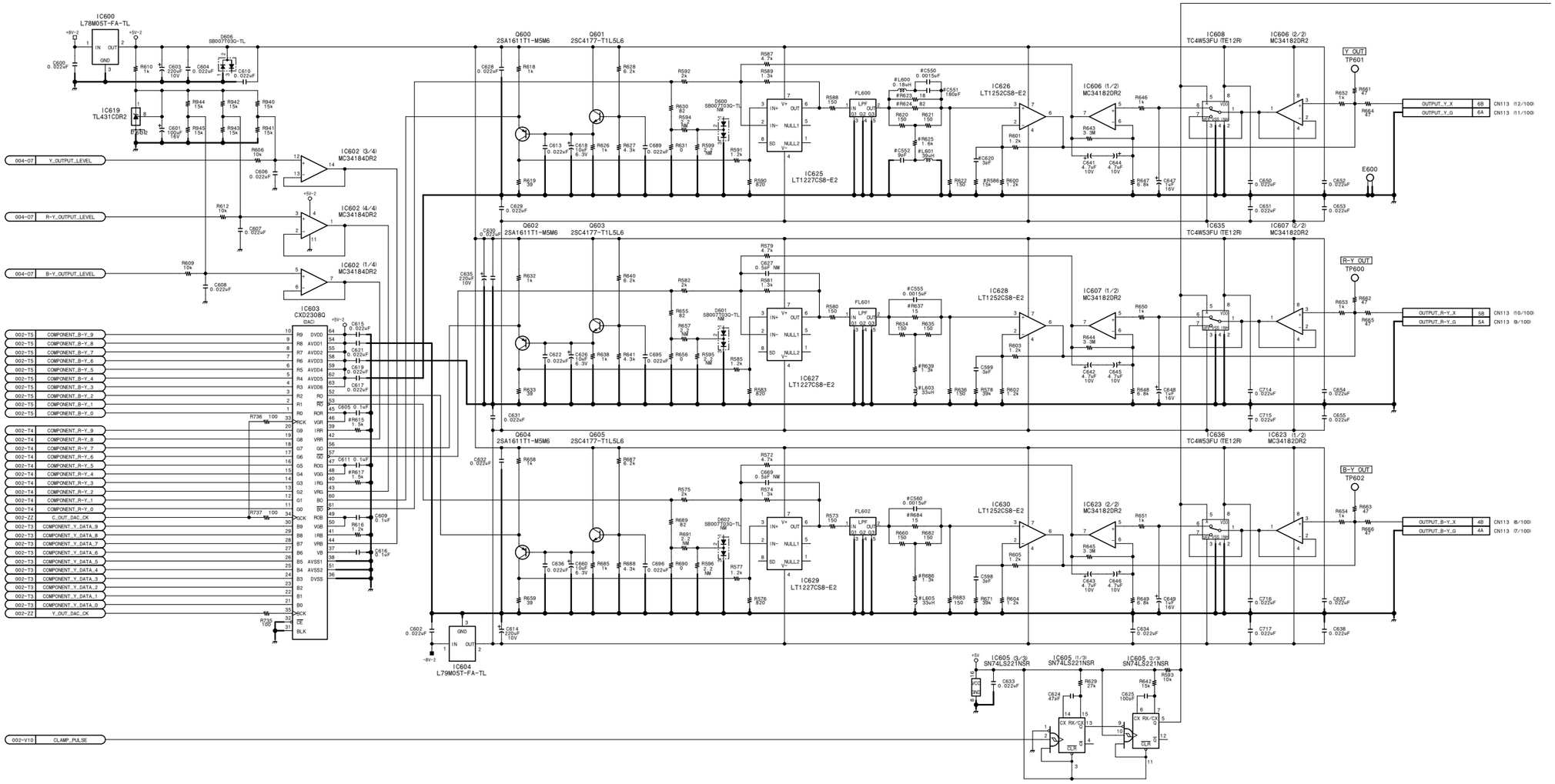
#	NTSC	PAL
C522	1uF 16V 20%	NM
C529	NM	0.047uF 25V 0
C533	10uF 25V 20%	68uF 6.3V 20%
C534	10uF 25V 20%	68uF 6.3V 20%
R62	0	NM
R63	0	NM
R64	NM	0
R70	0	NM
R543	NM	0
R544	0	NM
R547	47 1/10W 5%	NM
R548	NM	47 1/10W 5%
R550	NM	0
R552	0	NM
X500	28.63636MH	35.46895MH

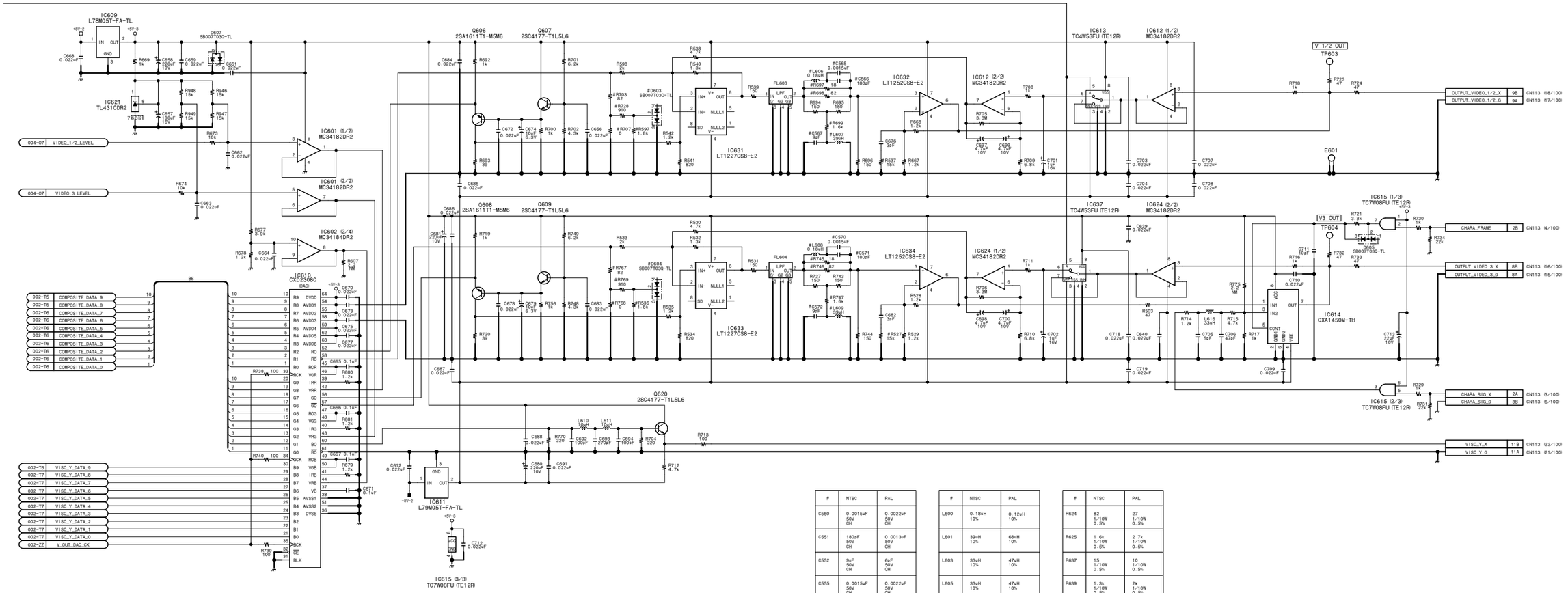
Digital Video Data Encoder

VPR-1B BOARD (2/6)

BOARD NO. 1-648-532-18
BOARD'S LOT NO. 909-
DVW-A510 (J, UC) : VPR-1BA MCB
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510 (J, UC) : VPR-1BA MCB
DVW-510P (EK) : VPR-1BAP MCB
DVW-CA510 (J, UC) : VPR-1BA MCB
DVW-CA510P (EK) : VPR-1BAP MCB
DVW-A500_VPR-1B_002_2

VPR-1B (3/6)


IC600 L78M05T-FA-TL
IC619 TL431CDR2
IC602 (3/4) MC34184DR2
IC602 (4/4) MC34184DR2
IC602 (1/4) MC34184DR2
IC603 CXD2308Q (DAC)
IC604 L79M05T-FA-TL
Q600 2SA1611T1-M5M6
Q601 2SC4177-T1L5L6
Q602 2SA1611T1-M5M6
Q603 2SC4177-T1L5L6
Q604 2SA1611T1-M5M6
Q605 2SC4177-T1L5L6
IC625 LT1227CS8-E2
IC627 LT1227CS8-E2
IC629 LT1227CS8-E2
IC626 LT1252CS8-E2
IC628 LT1252CS8-E2
IC630 LT1252CS8-E2
IC606 (1/2) MC34182DR2
IC607 (1/2) MC34182DR2
IC623 (1/2) MC34182DR2
IC608 TC4W53FU (TE12R)
IC635 TC4W53FU (TE12R)
IC636 TC4W53FU (TE12R)
IC606 (2/2) MC34182DR2
IC607 (2/2) MC34182DR2
IC623 (2/2) MC34182DR2
IC605 (3/3) SN74LS221NSR
IC605 (1/3) SN74LS221NSR
IC605 (2/3) SN74LS221NSR
Y_OUT TP601
R-Y_OUT TP600
B-Y_OUT TP602
E600
004-O7 Y_OUTPUT_LEVEL
004-O7 R-Y_OUTPUT_LEVEL
004-O7 B-Y_OUTPUT_LEVEL
002-T5 COMPONENT_B-Y_9
002-T5 COMPONENT_B-Y_8
002-T5 COMPONENT_B-Y_7
002-T5 COMPONENT_B-Y_6
002-T5 COMPONENT_B-Y_5
002-T5 COMPONENT_B-Y_4
002-T5 COMPONENT_B-Y_3
002-T5 COMPONENT_B-Y_2
002-T5 COMPONENT_B-Y_1
002-T5 COMPONENT_B-Y_0
002-T4 COMPONENT_R-Y_9
002-T4 COMPONENT_R-Y_8
002-T4 COMPONENT_R-Y_7
002-T4 COMPONENT_R-Y_6
002-T4 COMPONENT_R-Y_5
002-T4 COMPONENT_R-Y_4
002-T4 COMPONENT_R-Y_3
002-T4 COMPONENT_R-Y_2
002-T4 COMPONENT_R-Y_1
002-T4 COMPONENT_R-Y_0
002-ZZ C_OUT_DAC_CK
002-T3 COMPONENT_Y_DATA_9
002-T3 COMPONENT_Y_DATA_8
002-T3 COMPONENT_Y_DATA_7
002-T3 COMPONENT_Y_DATA_6
002-T3 COMPONENT_Y_DATA_5
002-T3 COMPONENT_Y_DATA_4
002-T3 COMPONENT_Y_DATA_3
002-T3 COMPONENT_Y_DATA_2
002-T3 COMPONENT_Y_DATA_1
002-T3 COMPONENT_Y_DATA_0
002-ZZ Y_OUT_DAC_CK
002-V10 CLAMP_PULSE
OUTPUT_Y_X 6B CN113 (12/100)
OUTPUT_Y_G 6A CN113 (11/100)
OUTPUT_R-Y_X 5B CN113 (10/100)
OUTPUT_R-Y_G 5A CN113 (9/100)
OUTPUT_B-Y_X 4B CN113 (8/100)
OUTPUT_B-Y_G 4A CN113 (7/100)



#	NTSC	PAL
C550	0.0015uF 50V CH	0.0022uF 50V CH
C551	180pF 50V CH	0.0013uF 50V CH
C552	9pF 50V CH	6pF 50V CH
C555	0.0015uF 50V CH	0.0022uF 50V CH
C560	0.0015uF 50V CH	0.0022uF 50V CH
C565	0.0015uF 50V CH	0.0022uF 50V CH
C566	180pF 50V CH	0.0013uF 50V CH
C567	9pF 50V CH	6pF 50V CH
C570	0.0015uF 50V CH	0.0022uF 50V CH
C571	180pF 50V CH	0.0013uF 50V CH
C572	9pF 50V CH	6pF 50V CH
C620	3pF 50V CJ	4pF 50V CH
D603	NM	SB007T03G-
D604	NM	SB007T03G-

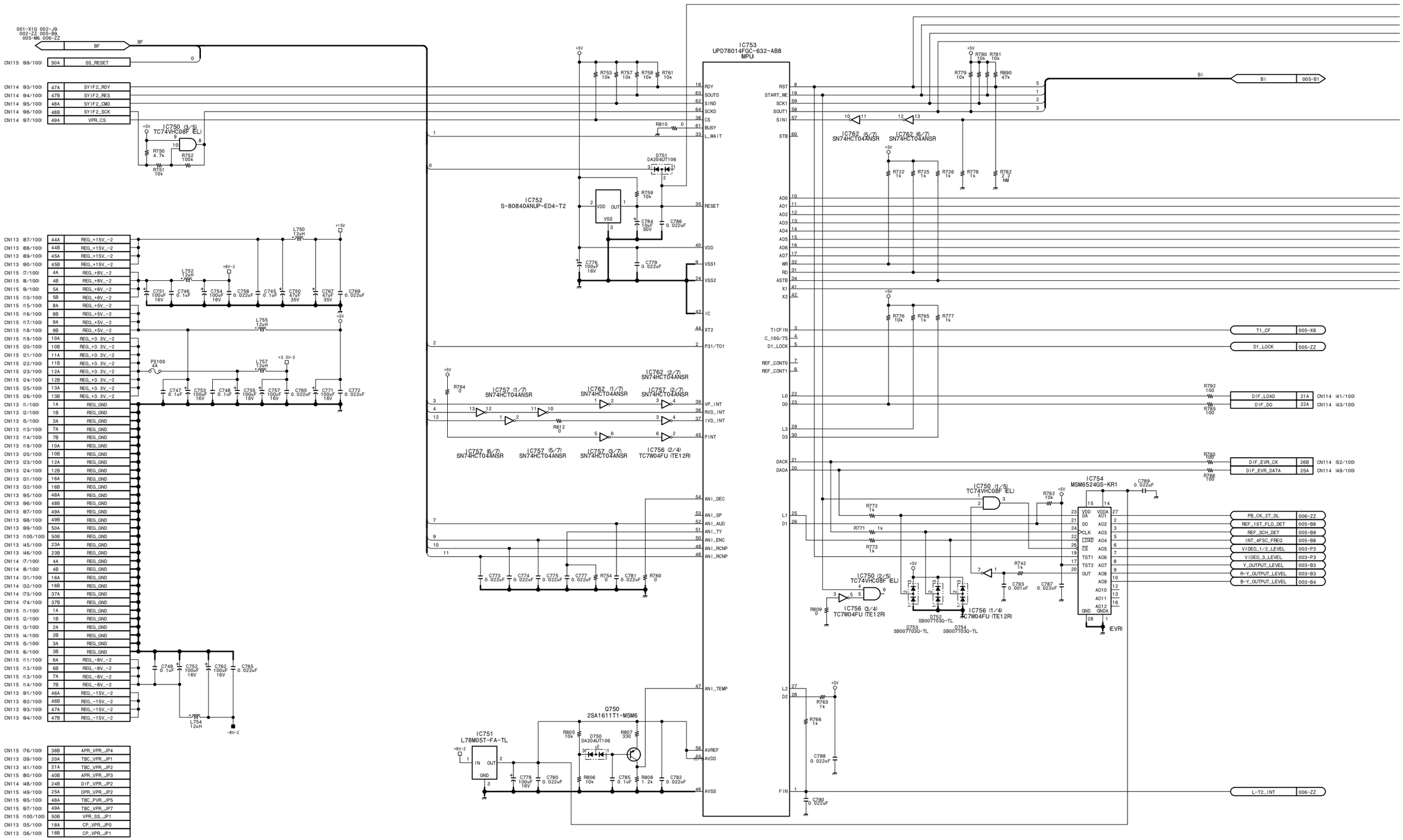
#	NTSC	PAL
L600	0.18uH 10%	0.12uH 10%
L601	39uH 10%	68uH 10%
L603	33uH 10%	47uH 10%
L605	33uH 10%	47uH 10%
L606	0.18uH 10%	0.12uH 10%
L607	39uH 10%	68uH 10%
L608	0.18uH 10%	0.12uH 10%
L609	39uH 10%	68uH 10%
R527	15k 1/10W 0.5%	39k 1/10W 0.5%
R536	NM	1.8k 1/10W 0.5%
R537	15k 1/10W 0.5%	39k 1/10W 0.5%
R586	15k 1/10W 0.5%	30k 1/10W 0.5%
R597	NM	1.8k 1/10W 0.5%
R615	1.5k 1/10W 0.5%	1.8k 1/10W 0.5%
R617	1.5k 1/10W 0.5%	1.8k 1/10W 0.5%
R623	18 1/10W 0.5%	10 1/10W 0.5%

#	NTSC	PAL
R624	82 1/10W 0.5%	27 1/10W 0.5%
R625	1.6k 1/10W 0.5%	2.7k 1/10W 0.5%
R637	15 1/10W 0.5%	10 1/10W 0.5%
R639	1.3k 1/10W 0.5%	2k 1/10W 0.5%
R684	15 1/10W 0.5%	10 1/10W 0.5%
R686	1.3k 1/10W 0.5%	2k 1/10W 0.5%
R697	18 1/10W 0.5%	10 1/10W 0.5%
R698	82 1/10W 0.5%	27 1/10W 0.5%
R699	1.6k 1/10W 0.5%	2.7k 1/10W 0.5%
R703	82 1/10W 0.5%	47 1/10W 0.5%
R707	0 — —	36 1/10W 0.5%
R728	NM	910 1/10W 0.5%
R745	18 1/10W 0.5%	10 1/10W 0.5%
R746	82 1/10W 0.5%	27 1/10W 0.5%
R747	1.6k 1/10W 0.5%	2.7k 1/10W 0.5%
R767	82 1/10W 0.5%	47 1/10W 0.5%
R768	0 — —	36 1/10W 0.5%
R769	NM	910 1/10W 0.5%

Output Video Signal D/A Converter

VPR-1B BOARD (3/6)

BOARD NO. 1-648-532-18
BOARD'S LOT NO. 909-
DVW-A510 (J, UC) :VPR-1BA MCB
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510 (J, UC) :VPR-1BA MCB
DVW-510P (EK) :VPR-1BAP MCB
DVW-CA510 (J, UC) :VPR-1BA MCB
DVW-CA510P (EK) :VPR-1BAP MCB
DVW-A500_VPR-1B_002_3


001-X10, 002-J9, 002-ZZ, 005-B9, 005-M6, 006-ZZ
CN115 (99/100)
CN114 (93/100)
CN114 (94/100)
CN114 (95/100)
CN114 (96/100)
CN114 (97/100)
CN113 (87/100)
CN113 (88/100)
CN113 (89/100)
CN113 (90/100)
CN115 (7/100)
CN115 (8/100)
CN115 (9/100)
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CN115 (1/100)
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CN115 (4/100)
CN115 (5/100)
CN115 (6/100)
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CN115 (12/100)
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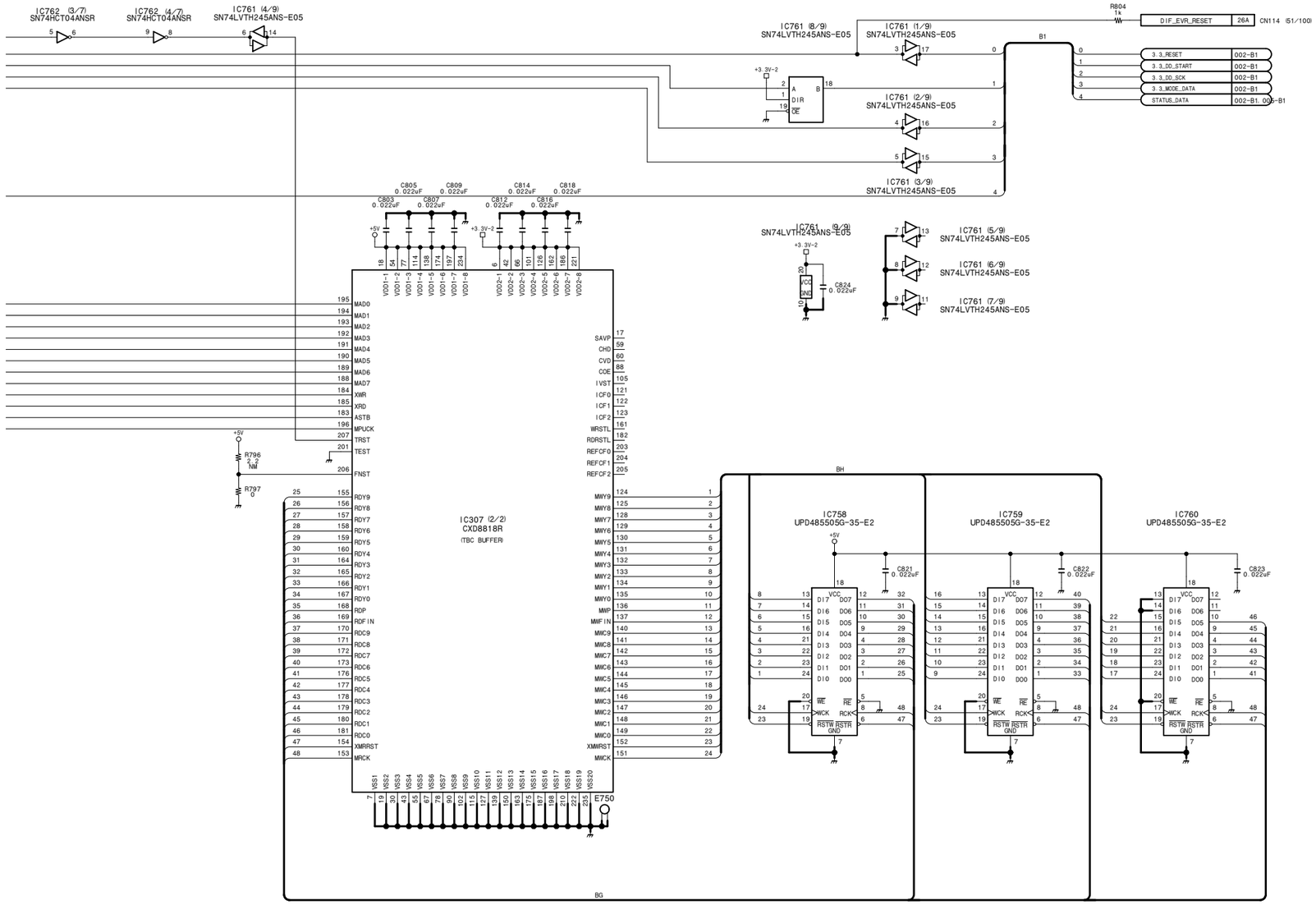
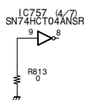
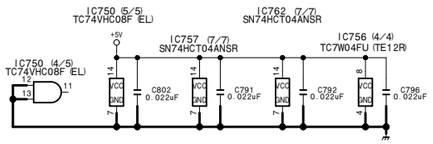
CN115 (14/100)
CN113 (91/100)
CN113 (92/100)
CN113 (93/100)
CN113 (94/100)
CN115 (76/100)
CN113 (39/100)
CN113 (41/100)
CN115 (80/100)
CN114 (48/100)
CN115 (49/100)
CN115 (95/100)
CN115 (97/100)
CN115 (100/100)
CN113 (35/100)
CN113 (36/100)
IC750 (3/5) TC74VHC08F (EL)
IC752 S-80840ANUP-ED4-T2
IC753 UPD78014FGC-632-AB8 (MPU)
IC757 (1/7) SN74HCT04ANSR
IC757 (2/7) SN74HCT04ANSR
IC757 (6/7) SN74HCT04ANSR
IC757 (5/7) SN74HCT04ANSR
IC757 (3/7) SN74HCT04ANSR
IC756 (2/4) TC7W04FU (TE12R)
IC762 (1/7) SN74HCT04ANSR
IC762 (2/7) SN74HCT04ANSR
IC762 (5/7) SN74HCT04ANSR
IC762 (6/7) SN74HCT04ANSR
IC750 (1/5) TC74VHC08F (EL)
IC750 (2/5) TC74VHC08F (EL)
IC756 (3/4) TC7W04FU (TE12R)
IC756 (1/4) TC7W04FU (TE12R)
IC754 MSM6524GS-KR1
IC751 L78M05T-FA-TL
Q750 2SA1611T1-M5M6
D750 DA204UT106
D751 DA204UT106
D752 SB007103Q-TL
D753 SB007103Q-TL
D754 SB007103Q-TL
REG_+15V_-2
REG_+8V_-2
REG_+5V_-2
REG_+3.3V_-2
REG_GND
REG_-8V_-2
REG_-15V_-2
APR_VPR_JP4
TBC_VPR_JP1
TBC_VPR_JP2
APR_VPR_JP3
DIF_VPR_JP2
DPR_VPR_JP2
TBC_PVR_JP5
TBC_VPR_JP7
VPR_SS_JP1
CP_VPR_JP0
CP_VPR_JP1
SYIF2_RDY
SYIF2_RES
SYIF2_CMD
SYIF2_SCK
VPR_CS
SS_RESET
BF
BI
T1_CF
D1_LOCK
DIF_LOAD
DIF_DO
DIF_EVR_CK
DIF_EVR_DATA
L-T2_INT
PB_CK_27_DL
REF_1ST_FLD_DET
REF_SCH_DET
INT_4FSC_FREQ
VIDEO_1/2_LEVEL
VIDEO_3_LEVEL
Y_OUTPUT_LEVEL
R-Y_OUTPUT_LEVEL
B-Y_OUTPUT_LEVEL
(EVR)

1-12 (c) 1-12 (c)



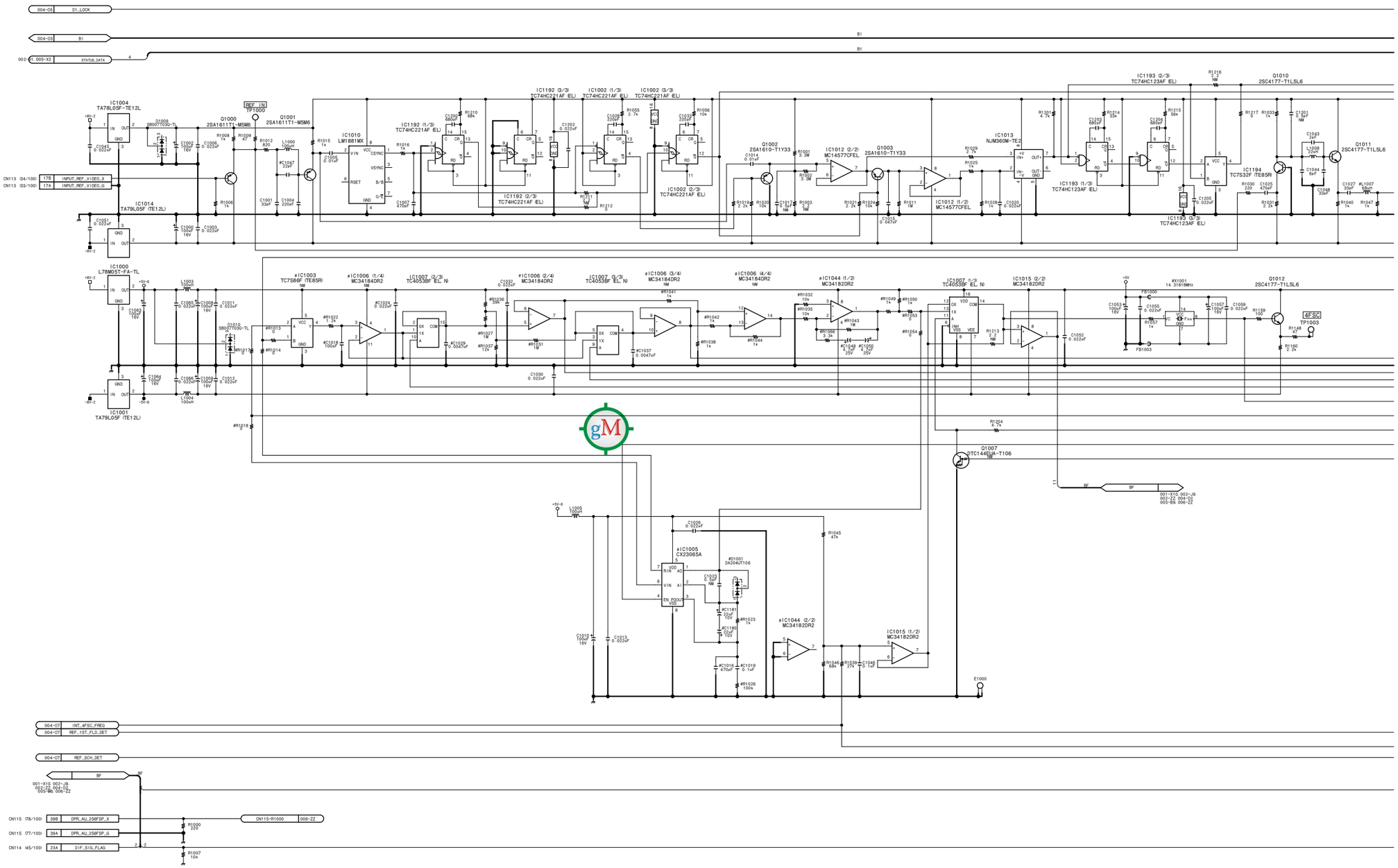


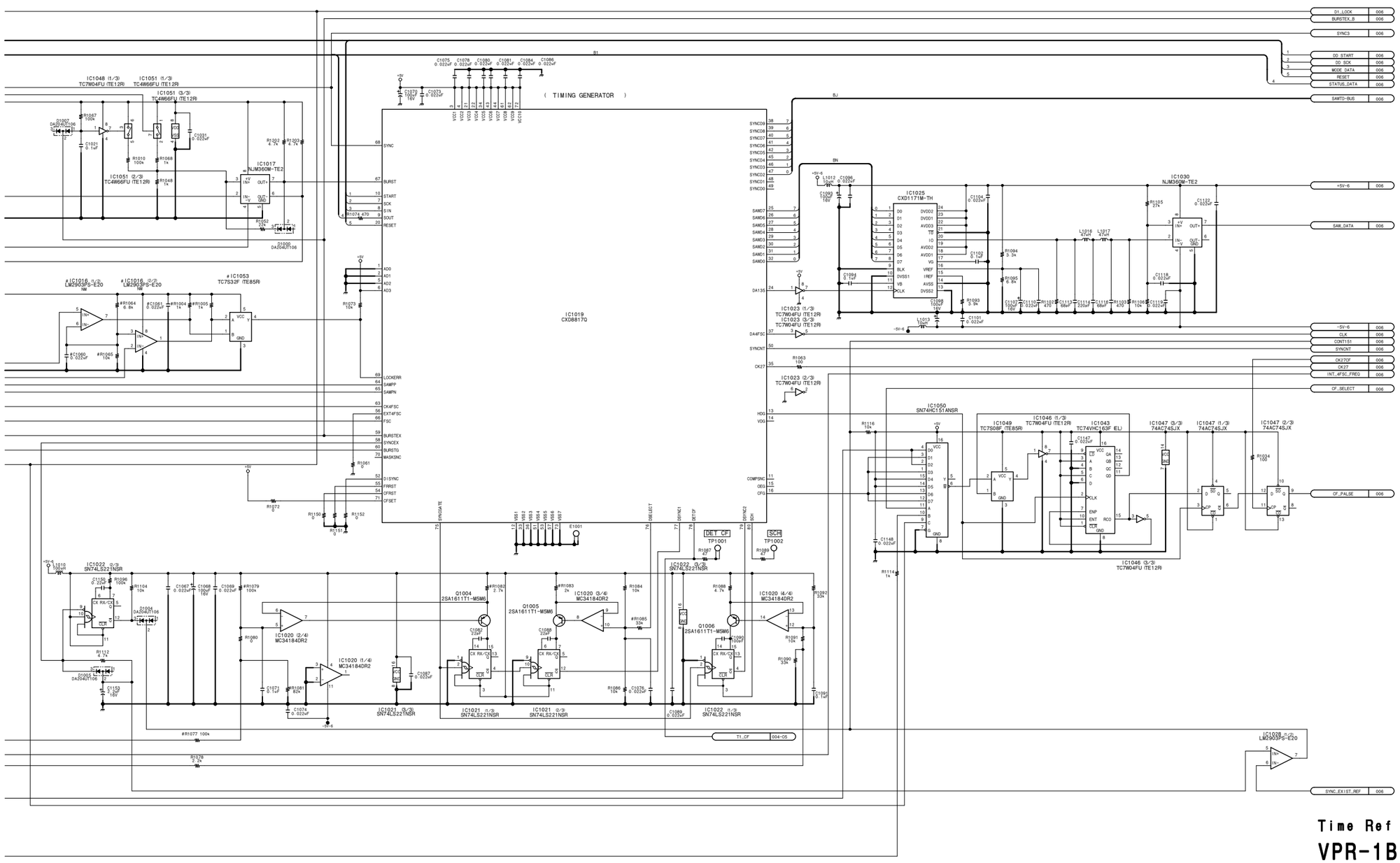


Video Process Control

VPR-1B BOARD (4/6)

BOARD NO. 1-648-532-18
BOARD'S LOT NO. 909-
DVW-A510 (J, UC) :VPR-1BA MCB
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510 (J, UC) :VPR-1BA MCB
DVW-510P (EK) :VPR-1BAP MCB
DVW-CA510 (J, UC) :VPR-1BA MCB
DVW-CA510P (EK) :VPR-1BAP MCB
DVW-A500_VPR-1B_002_4


004-05 D1_LOCK
004-03 B1
002-01 005-X2 STATUS_DATA
IC1004 TA78L05F-TE12L
IC1014 TA79L05F (TE12L)
IC1000 L78M05T-FA-TL
IC1001 TA79L05F (TE12L)
Q1000 2SA1611T1-M5M6
Q1001 2SA1611T1-M5M6
REF_IN TP1000
IC1010 LM1881MX
IC1192 (1/3) TC74HC221AF (EL)
IC1192 (2/3) TC74HC221AF (EL)
IC1192 (3/3) TC74HC221AF (EL)
IC1002 (1/3) TC74HC221AF (EL)
IC1002 (2/3) TC74HC221AF (EL)
IC1002 (3/3) TC74HC221AF (EL)
Q1002 2SA1610-T1Y33
IC1012 (2/2) MC14577CFEL
Q1003 2SA1610-T1Y33
IC1012 (1/2) MC14577CFEL
IC1013 NJM360M-TE2
IC1193 (1/3) TC74HC123AF (EL)
IC1193 (2/3) TC74HC123AF (EL)
IC1193 (3/3) TC74HC123AF (EL)
Q1010 2SC4177-T1L5L6
Q1011 2SC4177-T1L5L6
IC1194 TC7S32F (TE85R)
CN113 (34/100) 17B INPUT_REF_VIDEO_X
CN113 (33/100) 17A INPUT_REF_VIDEO_G
#IC1003 TC7S86F (TE85R)
#IC1006 (1/4) MC34184DR2
#IC1006 (2/4) MC34184DR2
#IC1006 (3/4) MC34184DR2
#IC1006 (4/4) MC34184DR2
IC1007 (2/3) TC4053BF (EL, N)
IC1007 (3/3) TC4053BF (EL, N)
#IC1044 (1/2) MC34182DR2
IC1007 (1/3) TC4053BF (EL, N)
IC1015 (2/2) MC34182DR2
#X1001 14.31818MHz
Q1012 2SC4177-T1L5L6
4FSC TP1003
Q1007 DTC144EUA-T106
#IC1005 CX23065A
#D1001 DA204UT106
#IC1181 22uF 10V
#IC1180 22uF 10V
#IC1016 470nF
#IC1019 0.1uF
#R1023 1k
#R1026 100k
IC1015 (1/2) MC34182DR2
E1000
004-07 INT_4FSC_FREQ
004-07 REF_1ST_FLD_DET
004-07 REF_SCH_DET
001-X1G 002-J9 002-ZZ 004-03 005-W6 006-ZZ
CN115 (78/100) 39B DPR_AU_256FSP_X
CN115 (77/100) 39A DPR_AU_256FSP_G
CN114 (45/100) 23A DIF_SIG_FLAG
CN115-R1000 006-ZZ
001-X1G 002-J9 002-ZZ 004-03 005-B9 006-ZZ



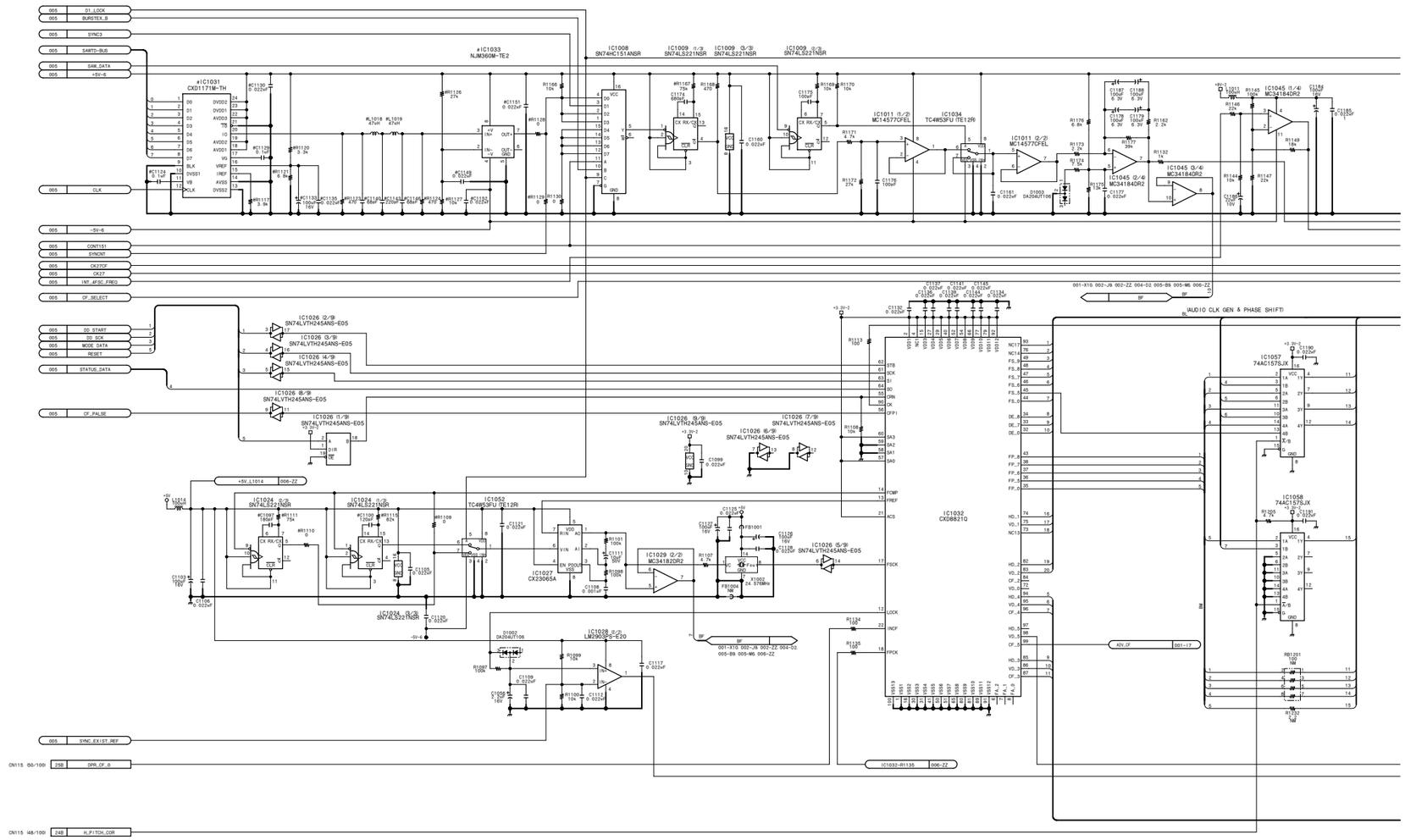
#	NTSC	PAL
C1016	470pF 50V CH	NM
C1018	NM	100uF 50V CH
C1019	0.1uF 25V F	NM
C1024	NM	0.022uF 50V B
C1029	NM	0.0047uF 16V
C1037	NM	0.0047uF 16V
C1047	22uF 50V CH	NM
C1049	NM	4.7uF 25V 20%
C1050	NM	4.7uF 25V 20%
C1060	NM	0.022uF 50V B
C1061	NM	0.022uF 50V B
C1180	22uF 10V 20%	NM
C1181	22uF 10V 20%	NM
D1001	DA204UT106	NM
IC1003	NM	TC7S86F ITE
IC1005	CX23065A	NM
IC1006	NM	MC341840R2
IC1016	NM	LM2903PS-E
IC1044	NM	MC341820R2
IC1053	NM	TC7S32F ITE
L1007	68uH 10%	39uH 10%
R1004	NM	1k 1/10W 5%
R1005	NM	1k 1/10W 5%
R1013	NM	0
R1014	0	NM
R1017	NM	0
R1018	0	NM
R1022	NM	1.2k 1/10W 5%
R1023	1k 1/10W 5%	NM
R1026	100k 1/10W 5%	NM
R1027	NM	1M 1/10W 5%
R1032	NM	10k 1/10W 0.5%
R1035	NM	10k 1/10W 0.5%
R1036	NM	39k 1/10W 0.5%
R1037	NM	12k 1/10W 0.5%
R1038	NM	1k 1/10W 0.5%

#	NTSC	PAL
R1041	NM	1k 1/10W 0.5%
R1042	NM	1k 1/10W 0.5%
R1043	NM	1M 1/10W 5%
R1044	NM	1k 1/10W 0.5%
R1049	NM	1k 1/10W 0.5%
R1050	NM	1k 1/10W 0.5%
R1051	NM	1M 1/10W 5%
R1053	NM	0
R1054	0	NM
R1064	NM	6.8k 1/10W 5%
R1065	NM	10k 1/10W 5%
R1066	NM	3.3k 1/10W 0.5%
R1077	100k 1/10W 5%	22k 1/10W 0.5%
R1079	100k 1/10W 5%	22k 1/10W 0.5%
R1081	NM	82k 1/10W 0.5%
R1082	2.7k 1/10W 0.5%	4.7k 1/10W 0.5%
R1083	2k 1/10W 0.5%	1k 1/10W 0.5%
R1085	33k 1/10W 5%	22k 1/10W 5%
X1001	14.31818MH	17.734475M

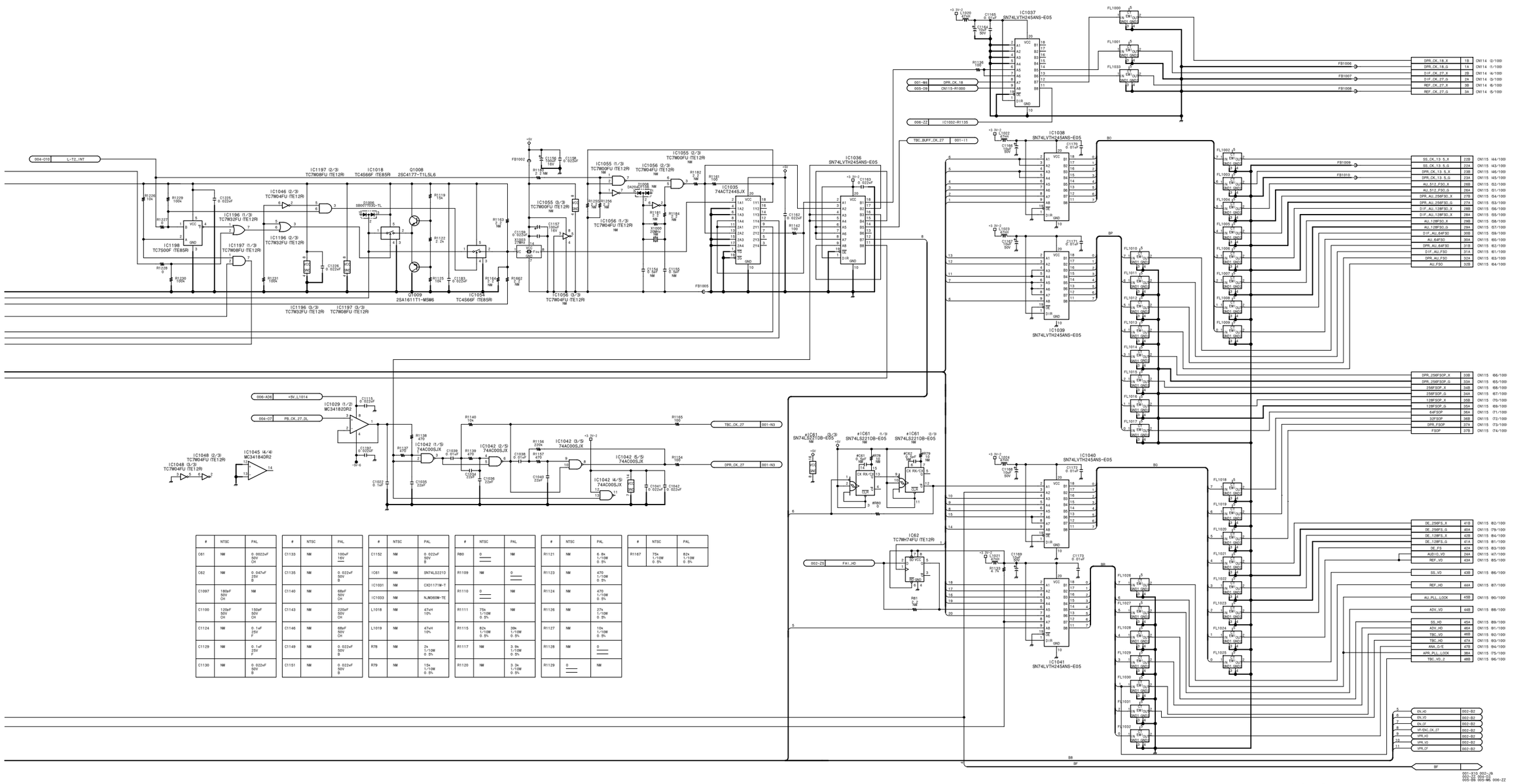
Time Ref Signal (1)

VPR-1B BOARD (5/6)

BOARD NO. 1-648-532-18
BOARD'S LOT NO. 909-
DVW-A510 (J, UC) :VPR-1BA MCB
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510 (J, UC) :VPR-1BA MCB
DVW-510P (EK) :VPR-1BAP MCB
DVW-CA510 (J, UC) :VPR-1BA MCB
DVW-CA510P (EK) :VPR-1BAP MCB
DVW-A500_VPR-1B_002_5


#IC1031
CXD1171M-TH
#IC1033
NJM3604M-TE2
IC1008
SN74HC151ANSR
IC1009 (1/3)
SN74LS221NSR
IC1009 (3/3)
SN74LS221NSR
IC1009 (2/3)
SN74LS221NSR
IC1011 (1/2)
MC14577CFEL
IC1034
TC4W53FU (TE12R)
IC1011 (2/2)
MC14577CFEL
IC1045 (1/4)
MC34184DR2
IC1045 (3/4)
MC34184DR2
IC1045 (2/4)
MC34184DR2
IC1026 (2/9)
SN74LVTH245ANS-E05
IC1026 (3/9)
SN74LVTH245ANS-E05
IC1026 (4/9)
SN74LVTH245ANS-E05
IC1026 (8/9)
SN74LVTH245ANS-E05
IC1026 (1/9)
SN74LVTH245ANS-E05
IC1026 (9/9)
SN74LVTH245ANS-E05
IC1026 (7/9)
SN74LVTH245ANS-E05
IC1026 (6/9)
SN74LVTH245ANS-E05
IC1026 (5/9)
SN74LVTH245ANS-E05
IC1024 (2/3)
SN74LS221NSR
IC1024 (1/3)
SN74LS221NSR
IC1024 (3/3)
SN74LS221NSR
IC1052
TC4W53FU (TE12R)
IC1027
CX23065A
IC1029 (2/2)
MC34182DR2
IC1028 (2/2)
LM2903S-E20
IC1032
CXD8821Q
IC1057
74AC157SJX
IC1058
74AC157SJX
(AUDIO CLK GEN & PHASE SHIFT)
D1_LOCK
BURSTEX_B
SYNC3
SAMTD-BUS
SAM_DATA
+5V-6
CLK
-5V-6
CONT151
SYNCNT
CK27CF
CK27
INT_AFSC_FREQ
CF_SELECT
DD_START
DD_SCK
MODE_DATA
RESET
STATUS_DATA
CF_FALSE
+5V_L1014
SYNC_EX1ST_REF
DPR_CF_0
H_PITCH_COR
ADV_CF
+3.3V-1
+5V-1
-5V-1

VPR-1B (6/6)



#	NTSC	PAL
C61	NM	0.0022uF 50V CH
C62	NM	0.047uF 25V B
C1097	180pF 50V CH	NM
C1100	120pF 50V CH	150pF 50V CH
C1124	NM	0.1uF 25V F
C1129	NM	0.1uF 25V F
C1130	NM	0.022uF 50V B

#	NTSC	PAL
C1133	NM	100uF 16V
C1135	NM	0.022uF 50V B
C1140	NM	68pF 50V CH
C1143	NM	220pF 50V CH
C1146	NM	68pF 50V CH
C1149	NM	0.022uF 50V B
C1151	NM	0.022uF 50V B

#	NTSC	PAL
C1152	NM	0.022uF 50V B
IC61	NM	SN74LS221D
IC1031	NM	CXD1171M-T
IC1033	NM	NJM360M-TE
L1018	NM	47uH 10%
L1019	NM	47uH 10%
R78	NM	2k 1/10W 0.5%
R79	NM	15k 1/10W 0.5%

#	NTSC	PAL
RB0	0	NM
R1109	NM	0
R1110	0	NM
R1111	75k 1/10W 0.5%	NM
R1115	82k 1/10W 0.5%	39k 1/10W 0.5%
R1117	NM	3.9k 1/10W 0.5%
R1120	NM	3.3k 1/10W 0.5%

#	NTSC	PAL
R1121	NM	6.8k 1/10W 0.5%
R1123	NM	47k 1/10W 0.5%
R1124	NM	47k 1/10W 0.5%
R1126	NM	27k 1/10W 0.5%
R1127	NM	10k 1/10W 0.5%
R1128	NM	0
R1129	0	NM

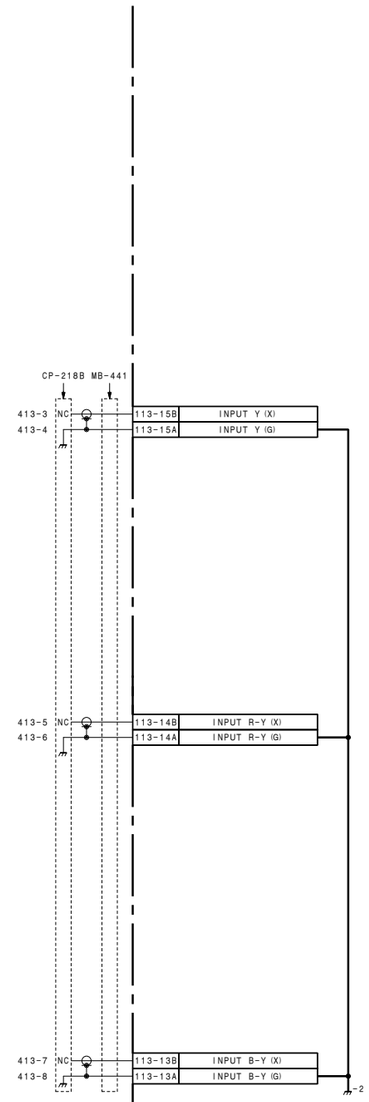
#	NTSC	PAL
R1167	75k 1/10W 0.5%	82k 1/10W 0.5%

Time Ref Signal (2) & Audio Clock Generator

VPR-1B BOARD (6/6)

BOARD NO. 1-648-532-18
BOARD'S LOT NO. 909-
DVW-A510 (J, UC) : VPR-1BA MCB
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510 (J, UC) : VPR-1BA MCB
DVW-510P (EK) : VPR-1BAP MCB
DVW-CA510 (J, UC) : VPR-1BA MCB
DVW-CA510P (EK) : VPR-1BAP MCB

DVW-A500_VPR-1B_002_6

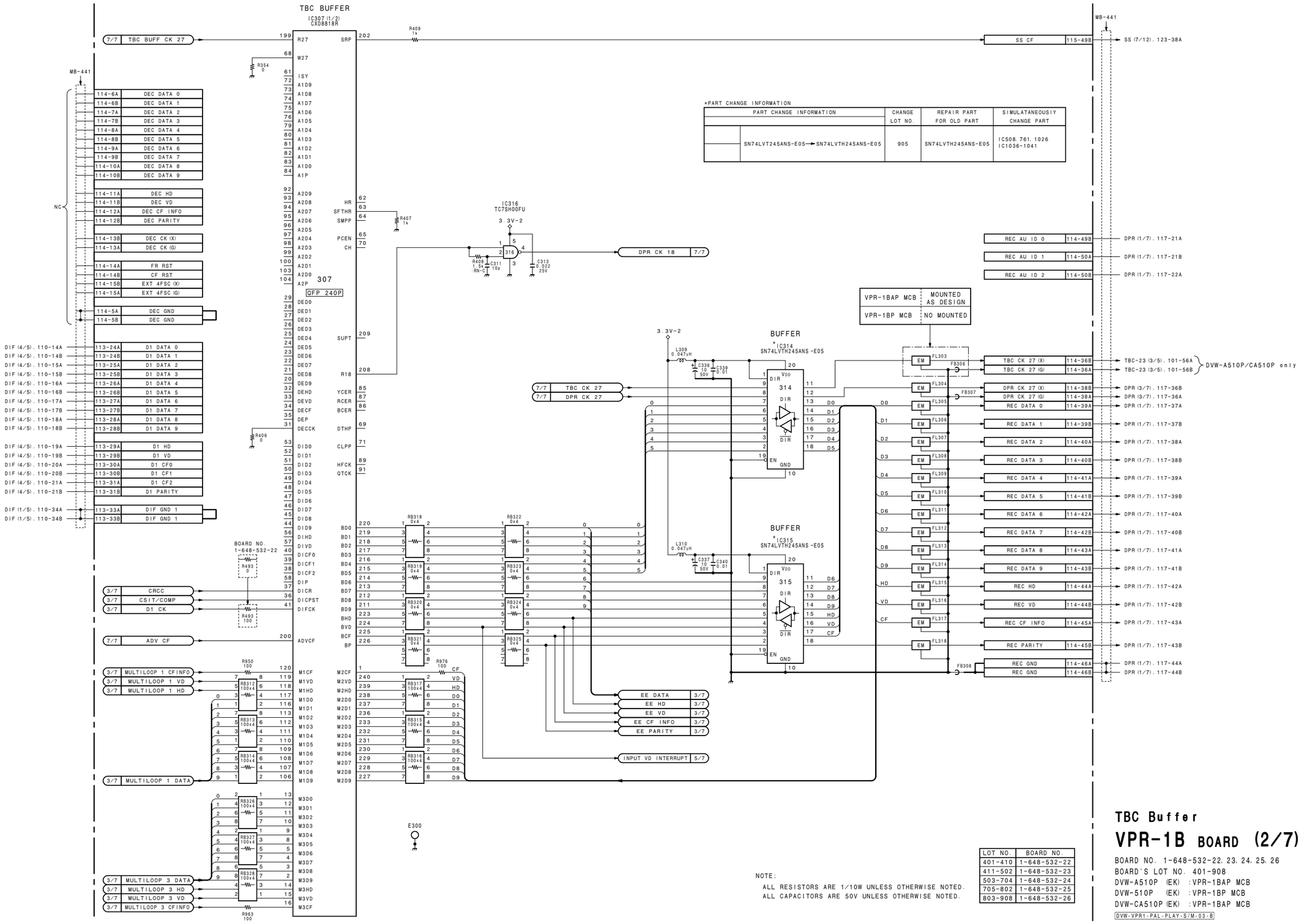


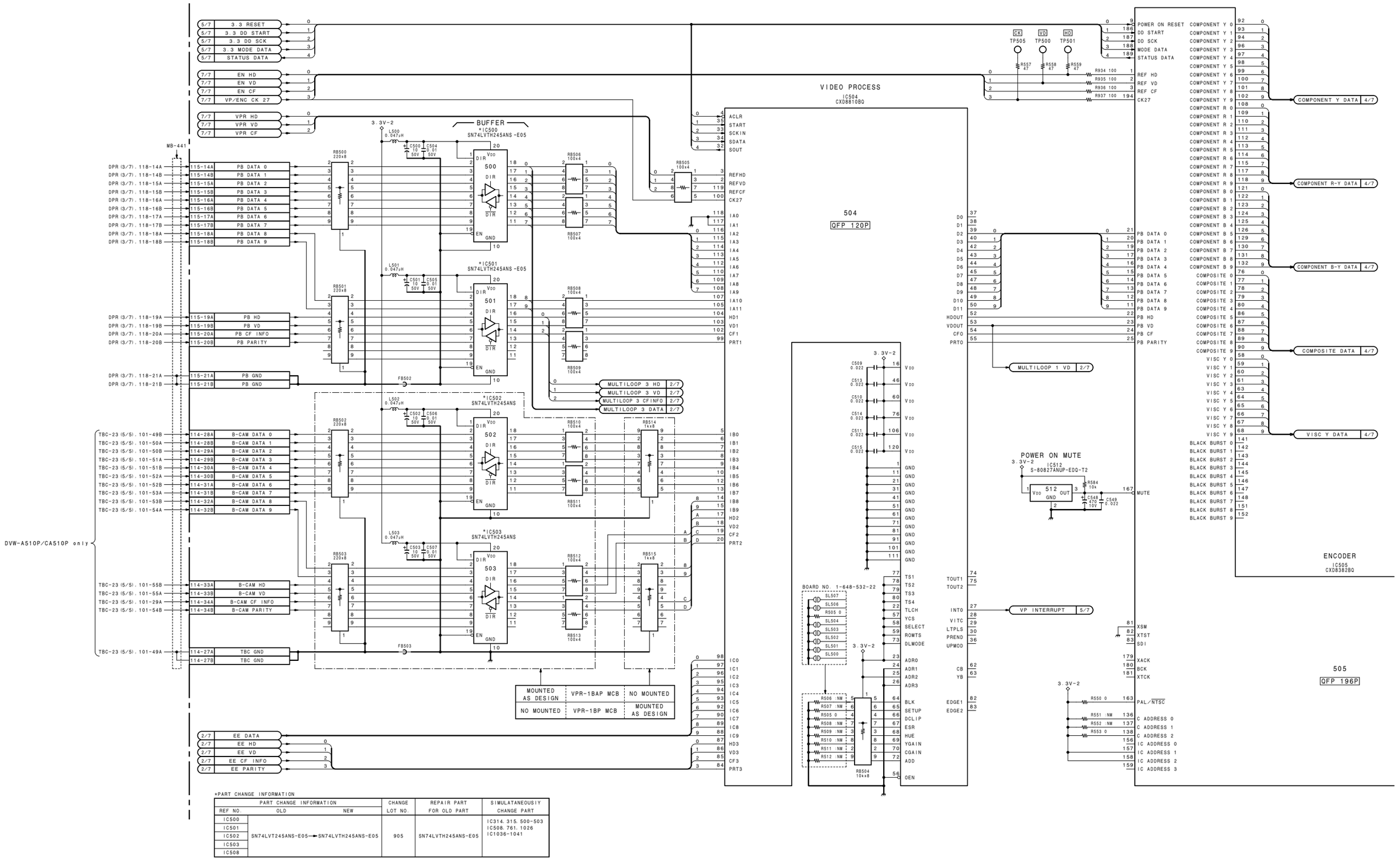
LOT NO.	BOARD NO.
401-410	1-648-532-22
411-502	1-648-532-23
503-704	1-648-532-24
705-802	1-648-532-25
803-908	1-648-532-26

VPR-1B BOARD (1/7)

BOARD NO. 1-648-532-22, 23, 24, 25, 26
BOARD'S LOT NO. 401-908
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510P (EK) : VPR-1BP MCB
DVW-CA510P (EK) : VPR-1BAP MCB
DVW-VPR1-PAL-PLAY-S/M-03-B

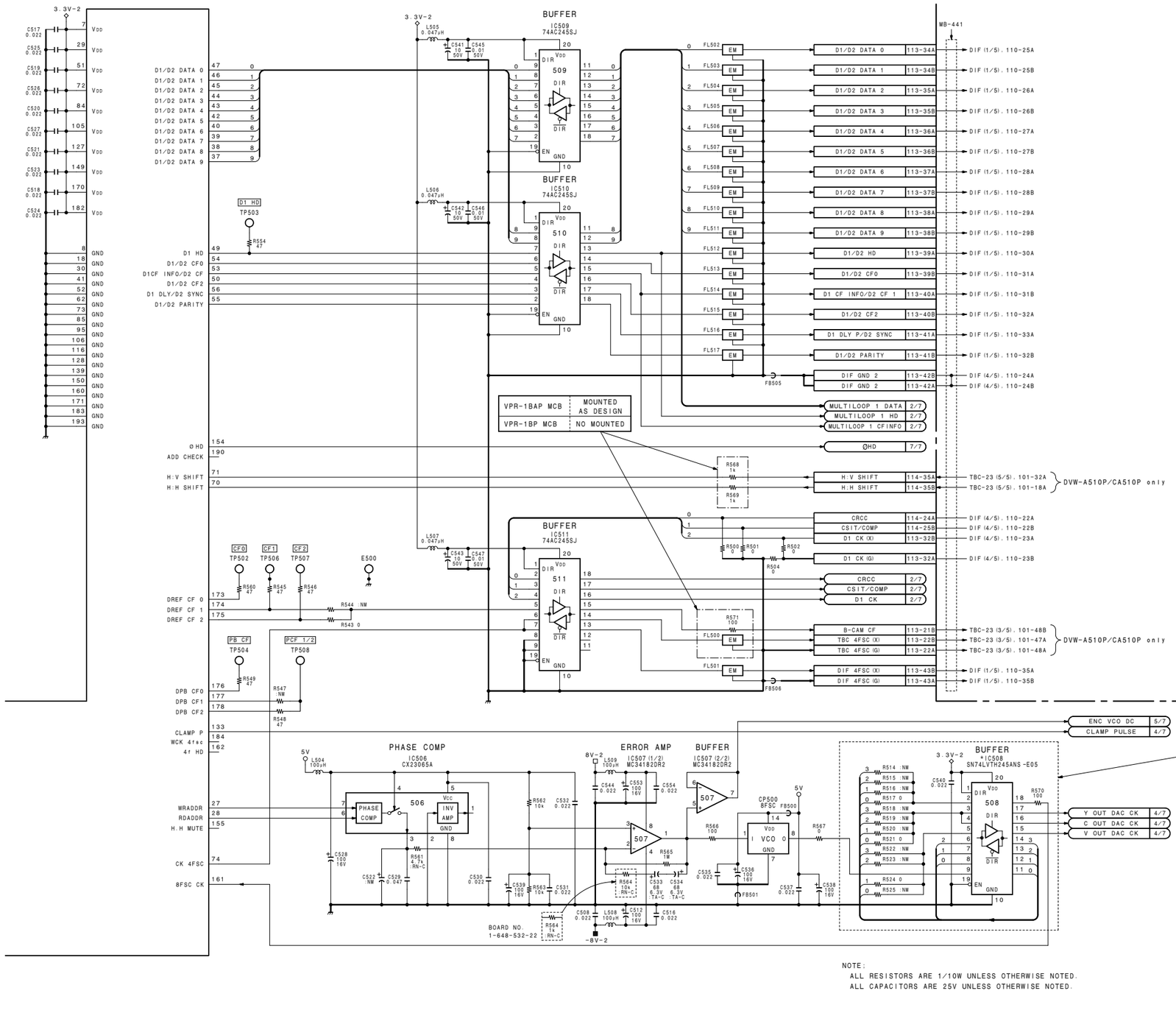
VPR-1B (2/7)


TBC BUFFER
IC307 (1/2)
CXD8818R
307
QFP 240P
7/7 TBC BUFF CK 27
R409 1k
SS CF 115-49B
MB-441
SS (7/12), 123-38A
R354 0
R407 1k
IC316
TC7SH00FU
3.3V-2
R408 1.5k RN-C
C311 10p
C313 0.022 25V
DPR CK 18 7/7
R406 0
BOARD NO. 1-648-532-22
R493 0
R493 100
3/7 CRCC
3/7 CSIT/COMP
3/7 D1 CK
7/7 ADV CF
R950 100
R976 100
R963 100
3/7 MULTILOOP 1 CFINFO
3/7 MULTILOOP 1 VD
3/7 MULTILOOP 1 HD
3/7 MULTILOOP 1 DATA
3/7 MULTILOOP 3 DATA
3/7 MULTILOOP 3 HD
3/7 MULTILOOP 3 VD
3/7 MULTILOOP 3 CFINFO
RB312 100x4
RB313 100x4
RB314 100x4
RB326 100x4
RB327 100x4
RB328 100x4
RB317 100x4
RB315 100x4
RB316 100x4
RB318 0x4
RB319 0x4
RB320 0x4
RB321 0x4
RB322 0x4
RB323 0x4
RB324 0x4
RB325 0x4
E300
NC
114-6A DEC DATA 0
114-6B DEC DATA 1
114-7A DEC DATA 2
114-7B DEC DATA 3
114-8A DEC DATA 4
114-8B DEC DATA 5
114-9A DEC DATA 6
114-9B DEC DATA 7
114-10A DEC DATA 8
114-10B DEC DATA 9
114-11A DEC HD
114-11B DEC VD
114-12A DEC CF INFO
114-12B DEC PARITY
114-13B DEC CK (X)
114-13A DEC CK (G)
114-14A FR RST
114-14B CF RST
114-15B EXT 4FSC (X)
114-15A EXT 4FSC (G)
114-5A DEC GND
114-5B DEC GND
DIF (4/5), 110-14A 113-24A D1 DATA 0
DIF (4/5), 110-14B 113-24B D1 DATA 1
DIF (4/5), 110-15A 113-25A D1 DATA 2
DIF (4/5), 110-15B 113-25B D1 DATA 3
DIF (4/5), 110-16A 113-26A D1 DATA 4
DIF (4/5), 110-16B 113-26B D1 DATA 5
DIF (4/5), 110-17A 113-27A D1 DATA 6
DIF (4/5), 110-17B 113-27B D1 DATA 7
DIF (4/5), 110-18A 113-28A D1 DATA 8
DIF (4/5), 110-18B 113-28B D1 DATA 9
DIF (4/5), 110-19A 113-29A D1 HD
DIF (4/5), 110-19B 113-29B D1 VD
DIF (4/5), 110-20A 113-30A D1 CF0
DIF (4/5), 110-20B 113-30B D1 CF1
DIF (4/5), 110-21A 113-31A D1 CF2
DIF (4/5), 110-21B 113-31B D1 PARITY
DIF (1/5), 110-34A 113-33A DIF GND 1
DIF (1/5), 110-34B 113-33B DIF GND 1
R27 SRP
W27
ISY
A1D9 A1D8 A1D7 A1D6 A1D5 A1D4 A1D3 A1D2 A1D1 A1D0 A1P
A2D9 A2D8 A2D7 A2D6 A2D5 A2D4 A2D3 A2D2 A2D1 A2D0 A2P
HR SFTHR SMPP PCEN CH
DED0 DED1 DED2 DED3 DED4 DED5 DED6 DED7 DED8 DED9 DEHD DEVD DECF DEP DECCK
SUPT R18 YCER RCER BCER DTHP
DID0 DID1 DID2 DID3 DID4 DID5 DID6 DID7 DID8 DID9 DIHD DIVD DICF0 DICF1 DICF2 DIP DICR DICPST DIFCK
CLPP HFCK QTCK
ADVCF
BD0 BD1 BD2 BD3 BD4 BD5 BD6 BD7 BD8 BD9 BHD BVD BCF BP
M1CF M1VD M1HD M1D0 M1D1 M1D2 M1D3 M1D4 M1D5 M1D6 M1D7 M1D8 M1D9
M2CF M2VD M2HD M2D0 M2D1 M2D2 M2D3 M2D4 M2D5 M2D6 M2D7 M2D8 M2D9
M3D0 M3D1 M3D2 M3D3 M3D4 M3D5 M3D6 M3D7 M3D8 M3D9 M3HD M3VD M3CF
*PART CHANGE INFORMATION
PART CHANGE INFORMATION | CHANGE LOT NO. | REPAIR PART FOR OLD PART | SIMULATANEOUSLY CHANGE PART
SN74LVT245ANS-E05→SN74LVTH245ANS-E05 | 905 | SN74LVTH245ANS-E05 | IC508, 761, 1026 IC1036-1041
VPR-1BAP MCB MOUNTED AS DESIGN
VPR-1BP MCB NO MOUNTED
BUFFER
*IC314
SN74LVTH245ANS-E05
314
L309 0.047µH
C336 10 50V
C339 0.01
7/7 TBC CK 27
7/7 DPR CK 27
BUFFER
*IC315
SN74LVTH245ANS-E05
315
L310 0.047µH
C337 10 50V
C340 0.01
EE DATA 3/7
EE HD 3/7
EE VD 3/7
EE CF INFO 3/7
EE PARITY 3/7
INPUT VD INTERRUPT 5/7
FL303 FB306 TBC CK 27 (X) 114-36B → TBC-23 (3/5), 101-56A
TBC CK 27 (G) 114-36A → TBC-23 (3/5), 101-56B
DVW-A510P/CA510P only
FL304 FB307 DPR CK 27 (X) 114-38B → DPR (3/7), 117-36B
DPR CK 27 (G) 114-38A → DPR (3/7), 117-36A
FL305 REC DATA 0 114-39A → DPR (1/7), 117-37A
FL306 REC DATA 1 114-39B → DPR (1/7), 117-37B
FL307 REC DATA 2 114-40A → DPR (1/7), 117-38A
FL308 REC DATA 3 114-40B → DPR (1/7), 117-38B
FL309 REC DATA 4 114-41A → DPR (1/7), 117-39A
FL310 REC DATA 5 114-41B → DPR (1/7), 117-39B
FL311 REC DATA 6 114-42A → DPR (1/7), 117-40A
FL312 REC DATA 7 114-42B → DPR (1/7), 117-40B
FL313 REC DATA 8 114-43A → DPR (1/7), 117-41A
FL314 REC DATA 9 114-43B → DPR (1/7), 117-41B
FL315 REC HD 114-44A → DPR (1/7), 117-42A
FL316 REC VD 114-44B → DPR (1/7), 117-42B
FL317 REC CF INFO 114-45A → DPR (1/7), 117-43A
FL318 REC PARITY 114-45B → DPR (1/7), 117-43B
FB308 REC GND 114-46A → DPR (1/7), 117-44A
REC GND 114-46B → DPR (1/7), 117-44B
REC AU ID 0 114-49B → DPR (1/7), 117-21A
REC AU ID 1 114-50A → DPR (1/7), 117-21B
REC AU ID 2 114-50B → DPR (1/7), 117-22A
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.
LOT NO. | BOARD NO.
401-410 | 1-648-532-22
411-502 | 1-648-532-23
503-704 | 1-648-532-24
705-802 | 1-648-532-25
803-908 | 1-648-532-26
TBC Buffer
VPR-1B BOARD (2/7)
BOARD NO. 1-648-532-22, 23, 24, 25, 26
BOARD'S LOT NO. 401-908
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510P (EK) : VPR-1BP MCB
DVW-CA510P (EK) : VPR-1BAP MCB
DVW-VPR1-PAL-PLAY-S/M-03-B



*PART CHANGE INFORMATION

PART CHANGE INFORMATION			CHANGE	REPAIR PART	SIMULATANEOUSLY
REF NO.	OLD	NEW	LOT NO.	FOR OLD PART	CHANGE PART
IC500	SN74LVT245ANS-E05	SN74LVTH245ANS-E05	905	SN74LVTH245ANS-E05	IC314. 315. 500-503 IC508. 761. 1026 IC1036-1041
IC501					
IC502					
IC503					
IC508					

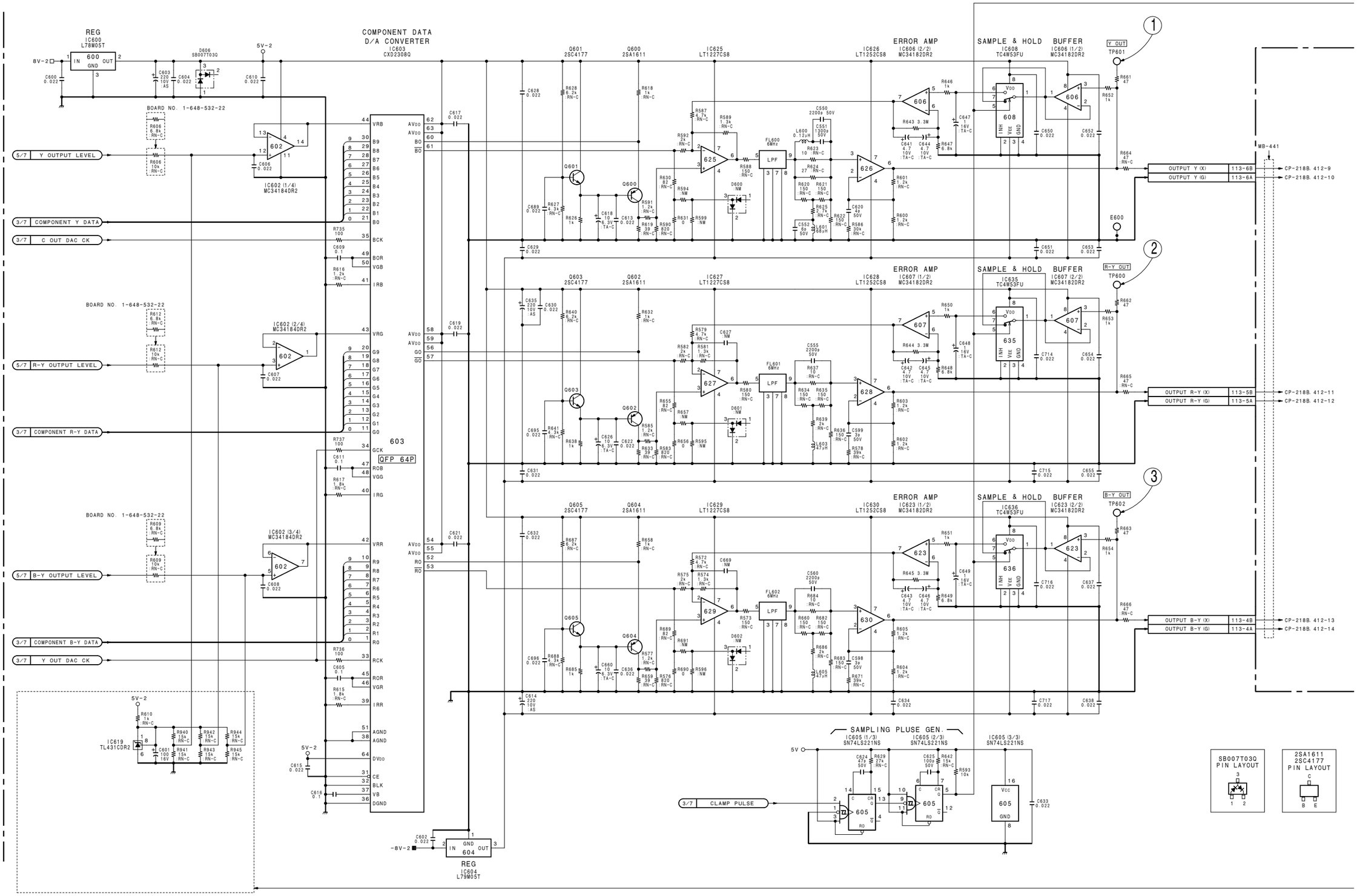


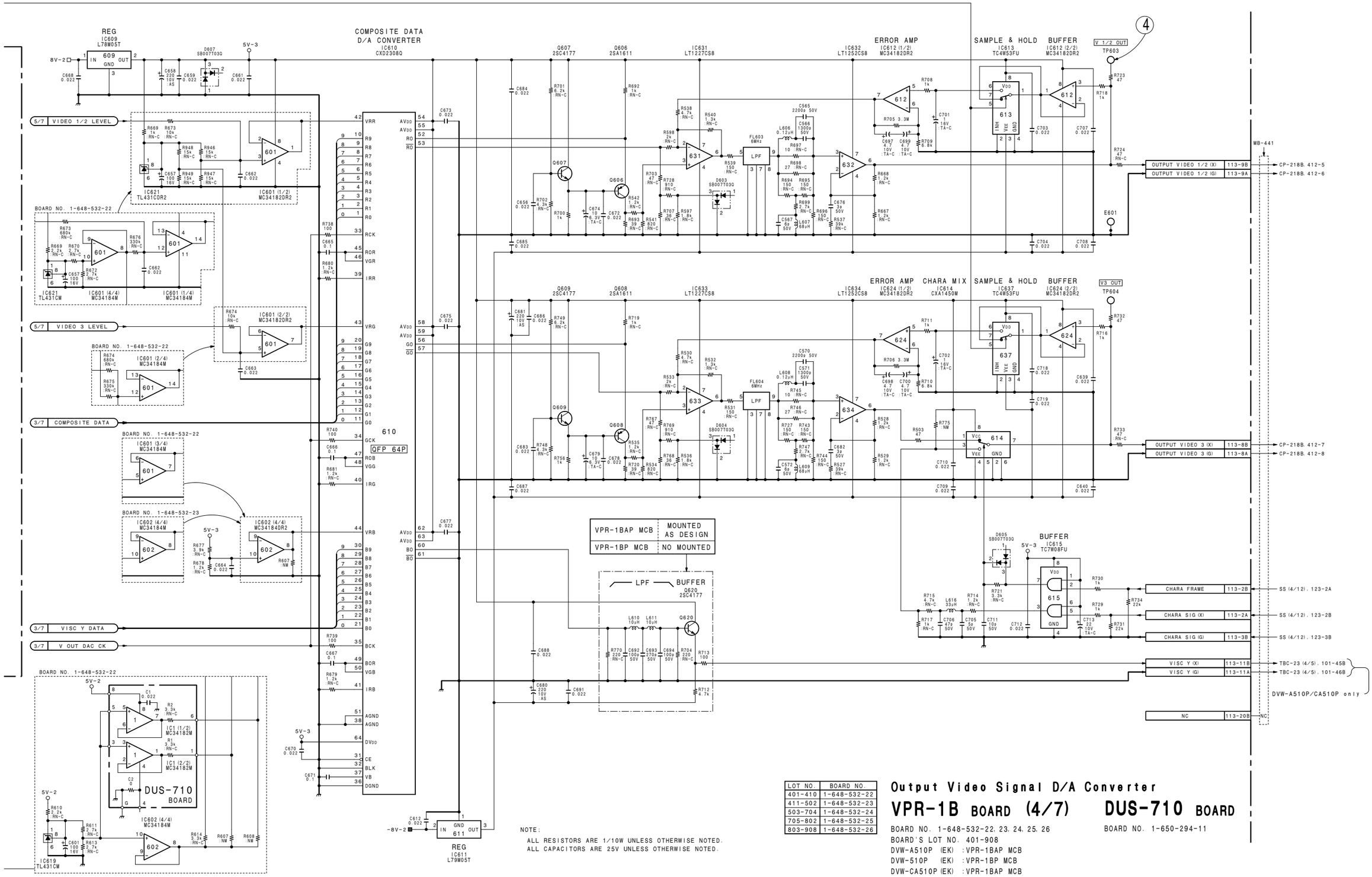
Digital Video Data Encoder

VPR-1B BOARD (3/7)

BOARD NO. 1-648-532-22, 23, 24, 25, 26
BOARD'S LOT NO. 401-908
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510P (EK) : VPR-1BP MCB
DVW-CA510P (EK) : VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-S/M-03-B


REG
IC600
L78M05T
8V-2
5V-2
C600 0.022
C603 220 10V AS
C604 0.022
D606 SB007T03Q
C610 0.022
BOARD NO. 1-648-532-22
R606 6.8k RN-C
R606 10k RN-C
IC602 (1/4) MC34184DR2
C608 0.022
5/7 Y OUTPUT LEVEL
3/7 COMPONENT Y DATA
3/7 C OUT DAC CK
R735 100
C609 0.1
R616 1.2k RN-C
BOARD NO. 1-648-532-22
R612 6.8k RN-C
R612 10k RN-C
IC602 (2/4) MC34184DR2
C607 0.022
5/7 R-Y OUTPUT LEVEL
3/7 COMPONENT R-Y DATA
R737 100
C611 0.1
R617 1.8k RN-C
BOARD NO. 1-648-532-22
R609 6.8k RN-C
R609 10k RN-C
IC602 (3/4) MC34184DR2
C608 0.022
5/7 B-Y OUTPUT LEVEL
3/7 COMPONENT B-Y DATA
3/7 Y OUT DAC CK
R736 100
C605 0.1
R615 1.8k RN-C
5V-2
R610 1k RN-C
IC619 TL431CDR2
R940 15k RN-C
R941 15k RN-C
R942 15k RN-C
R943 15k RN-C
R944 15k RN-C
R945 15k RN-C
C601 100 16V
5V-2
C615 0.022
C616 0.1
COMPONENT DATA
D/A CONVERTER
IC603
CXD2308Q
603
QFP 64P
VRB
B9
B8
B7
B6
B5
B4
B3
B2
B1
B0
BCK
BOR
VGB
IRB
VRG
G9
G8
G7
G6
G5
G4
G3
G2
G1
G0
GCK
ROB
VGG
IRG
VRR
R9
R8
R7
R6
R5
R4
R3
R2
R1
R0
RCK
ROR
VGR
IRR
AGND
AGND
DVDD
CE
BLK
VB
DGND
AVDD
AVDD
BG
BG
GG
GG
RG
RG
C617 0.022
C619 0.022
C621 0.022
C602 0.022
-8V-2
GND IN OUT
IC604
L79M05T
Q601 2SC4177
Q600 2SA1611
IC625 LT1227CS8
IC626 LT1252CS8
ERROR AMP
IC606 (2/2) MC34182DR2
SAMPLE & HOLD BUFFER
IC608 TC4W53FU
IC606 (1/2) MC34182DR2
Y OUT
TP601
E600
OUTPUT Y (X) 113-6B
OUTPUT Y (G) 113-6A
Q603 2SC4177
Q602 2SA1611
IC627 LT1227CS8
IC628 LT1252CS8
ERROR AMP
IC607 (1/2) MC34182DR2
SAMPLE & HOLD BUFFER
IC635 TC4W53FU
IC607 (2/2) MC34182DR2
R-Y OUT
TP600
OUTPUT R-Y (X) 113-5B
OUTPUT R-Y (G) 113-5A
Q605 2SC4177
Q604 2SA1611
IC629 LT1227CS8
IC630 LT1252CS8
ERROR AMP
IC623 (1/2) MC34182DR2
SAMPLE & HOLD BUFFER
IC636 TC4W53FU
IC623 (2/2) MC34182DR2
B-Y OUT
TP602
OUTPUT B-Y (X) 113-4B
OUTPUT B-Y (G) 113-4A
LPF
FL600 6MHz
FL601 6MHz
FL602 6MHz
SAMPLING PLUSE GEN.
IC605 (1/3) SN74LS221NS
IC605 (2/3) SN74LS221NS
IC605 (3/3) SN74LS221NS
5V
3/7 CLAMP PULSE
MB-441
CP-218B. 412-9
CP-218B. 412-10
CP-218B. 412-11
CP-218B. 412-12
CP-218B. 412-13
CP-218B. 412-14
SB007T03Q PIN LAYOUT
2SA1611 2SC4177 PIN LAYOUT



NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

LOT NO.	BOARD NO.
401-410	1-648-532-22
411-502	1-648-532-23
503-704	1-648-532-24
705-802	1-648-532-25
803-908	1-648-532-26

Output Video Signal D/A Converter

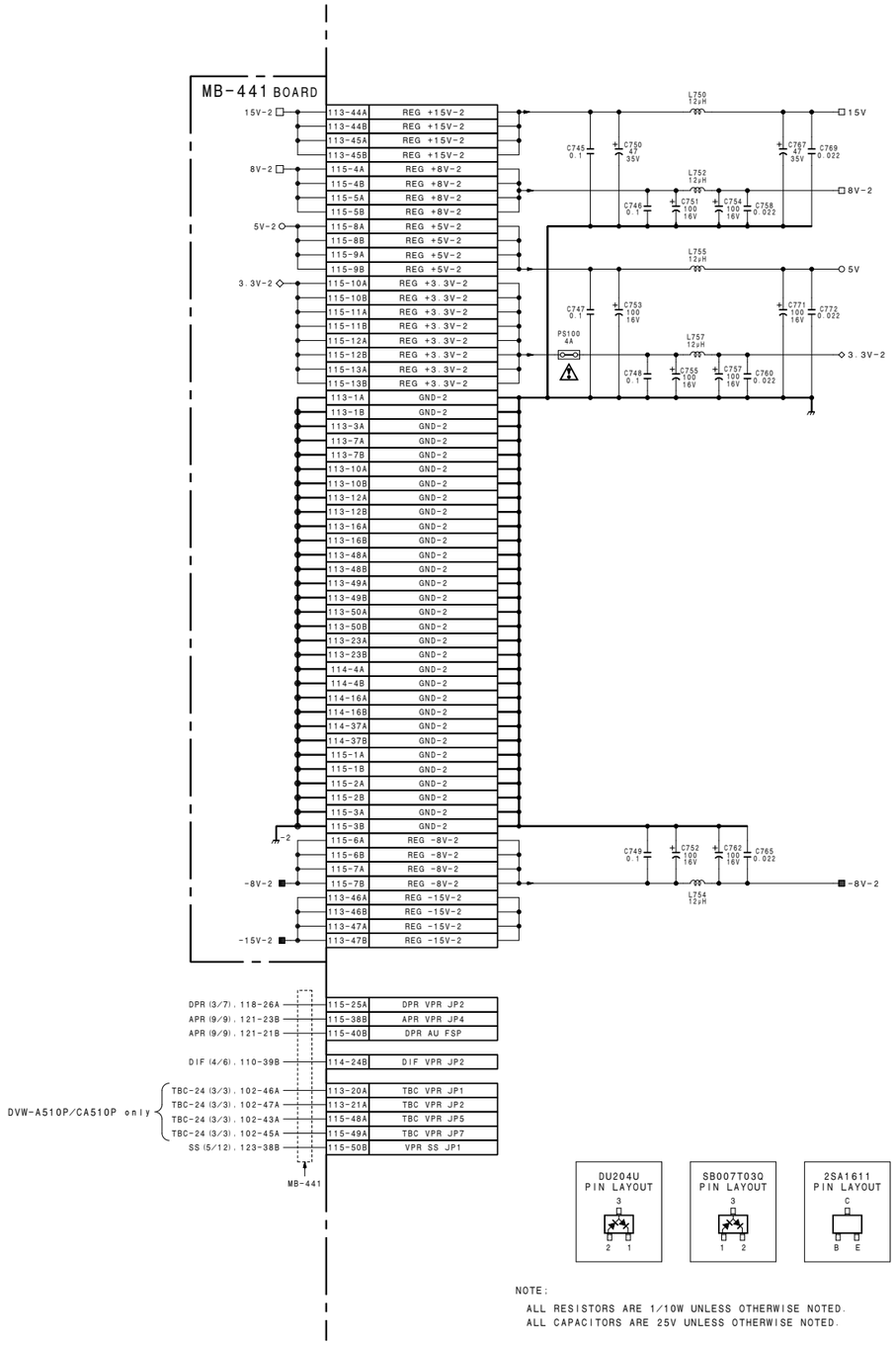
VPR-1B BOARD (4/7)

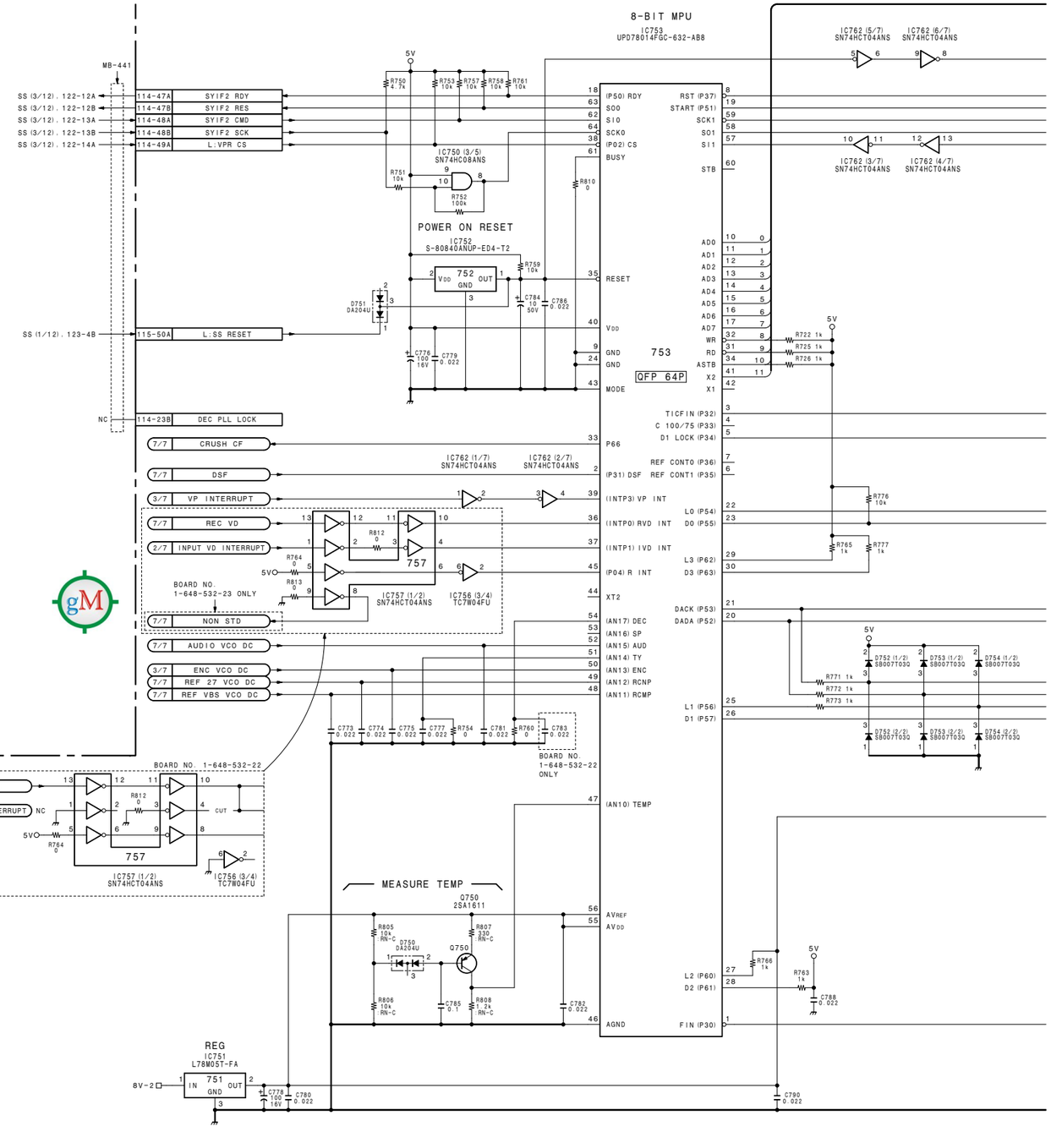
BOARD NO. 1-648-532-22, 23, 24, 25, 26
BOARD'S LOT NO. 401-908
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510P (EK) : VPR-1BP MCB
DVW-CA510P (EK) : VPR-1BAP MCB

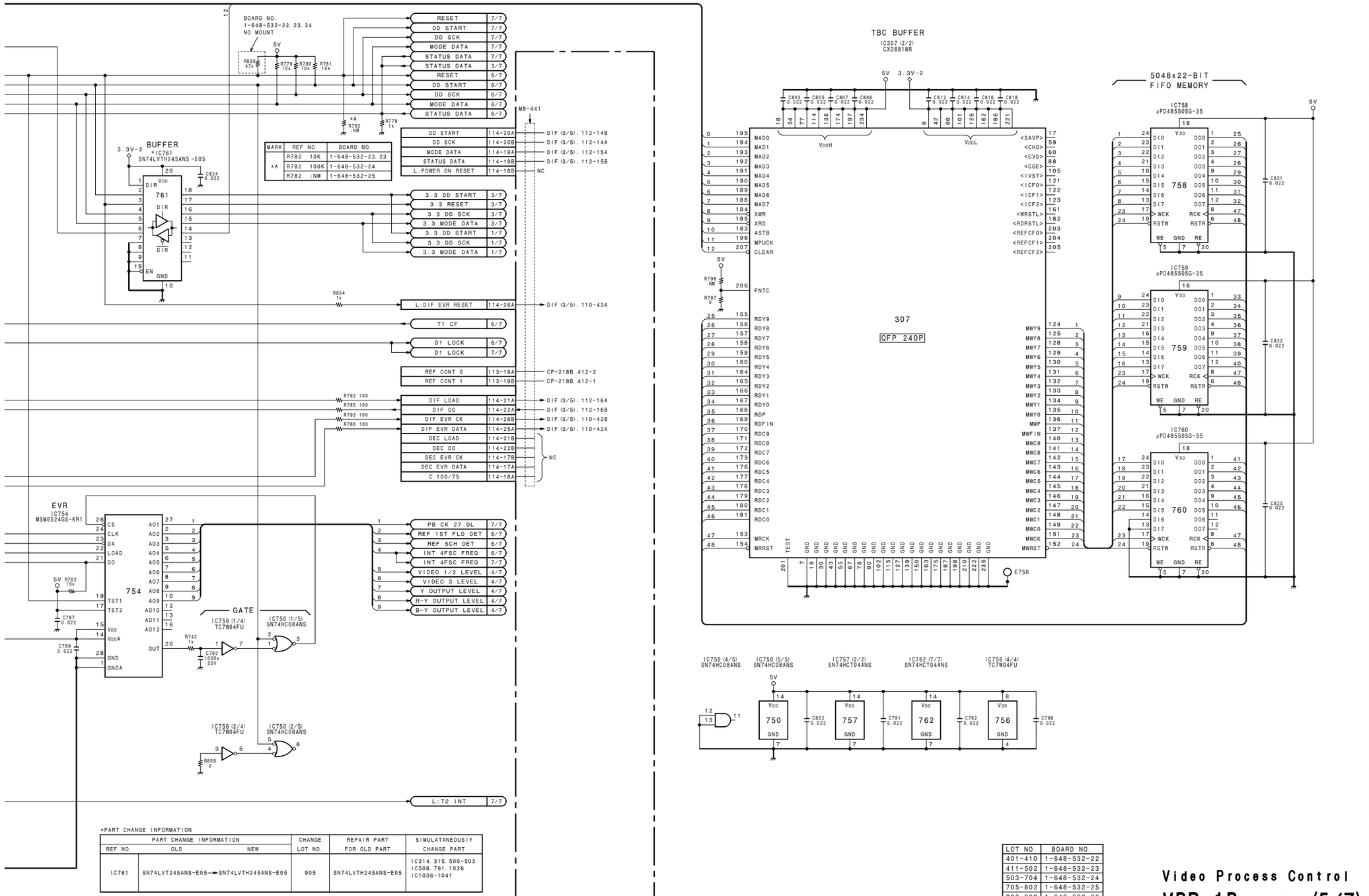
DVW-VPR1-PAL-PLAY-S/M-03-B

DUS-710 BOARD

BOARD NO. 1-650-294-11


MB-441 BOARD
15V-2
8V-2
5V-2
3.3V-2
-8V-2
-15V-2
113-44A REG +15V-2
113-44B REG +15V-2
113-45A REG +15V-2
113-45B REG +15V-2
115-4A REG +8V-2
115-4B REG +8V-2
115-5A REG +8V-2
115-5B REG +8V-2
115-8A REG +5V-2
115-8B REG +5V-2
115-9A REG +5V-2
115-9B REG +5V-2
115-10A REG +3.3V-2
115-10B REG +3.3V-2
115-11A REG +3.3V-2
115-11B REG +3.3V-2
115-12A REG +3.3V-2
115-12B REG +3.3V-2
115-13A REG +3.3V-2
115-13B REG +3.3V-2
113-1A GND-2
113-1B GND-2
113-3A GND-2
113-7A GND-2
113-7B GND-2
113-10A GND-2
113-10B GND-2
113-12A GND-2
113-12B GND-2
113-16A GND-2
113-16B GND-2
113-48A GND-2
113-48B GND-2
113-49A GND-2
113-49B GND-2
113-50A GND-2
113-50B GND-2
113-23A GND-2
113-23B GND-2
114-4A GND-2
114-4B GND-2
114-16A GND-2
114-16B GND-2
114-37A GND-2
114-37B GND-2
115-1A GND-2
115-1B GND-2
115-2A GND-2
115-2B GND-2
115-3A GND-2
115-3B GND-2
115-6A REG -8V-2
115-6B REG -8V-2
115-7A REG -8V-2
115-7B REG -8V-2
113-46A REG -15V-2
113-46B REG -15V-2
113-47A REG -15V-2
113-47B REG -15V-2
L750 12μH
L752 12μH
L755 12μH
L757 12μH
L754 12μH
PS100 4A
DPR (3/7), 118-26A
APR (9/9), 121-23B
APR (9/9), 121-21B
DIF (4/6), 110-39B
TBC-24 (3/3), 102-46A
TBC-24 (3/3), 102-47A
TBC-24 (3/3), 102-43A
TBC-24 (3/3), 102-45A
SS (5/12), 123-38B
DVW-A510P/CA510P only
115-25A DPR VPR JP2
115-38B APR VPR JP4
115-40B DPR AU FSP
114-24B DIF VPR JP2
113-20A TBC VPR JP1
113-21A TBC VPR JP2
115-48A TBC VPR JP5
115-49A TBC VPR JP7
115-50B VPR SS JP1
MB-441
DU204U PIN LAYOUT
SB007T03Q PIN LAYOUT
2SA1611 PIN LAYOUT
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.


8-BIT MPU
IC753 UPD78014FGC-632-AB8
MB-441
SS (3/12), 122-12A
SS (3/12), 122-12B
SS (3/12), 122-13A
SS (3/12), 122-13B
SS (3/12), 122-14A
114-47A SYIF2 RDY
114-47B SYIF2 RES
114-48A SYIF2 CMD
114-48B SYIF2 SCK
114-49A L:VPR CS
SS (1/12), 123-4B
115-50A L:SS RESET
NC
114-23B DEC PLL LOCK
7/7 CRUSH CF
7/7 DSF
3/7 VP INTERRUPT
7/7 REC VD
2/7 INPUT VD INTERRUPT
7/7 NON STD
7/7 AUDIO VCO DC
3/7 ENC VCO DC
7/7 REF 27 VCO DC
7/7 REF VBS VCO DC
BOARD NO. 1-648-532-23 ONLY
BOARD NO. 1-648-532-22 ONLY
IC750 (3/5) SN74HC08ANS
POWER ON RESET
IC752 S-80840ANUP-ED4-T2
D751 DA204U
IC762 (1/7) SN74HCT04ANS
IC762 (2/7) SN74HCT04ANS
IC762 (3/7) SN74HCT04ANS
IC762 (4/7) SN74HCT04ANS
IC762 (5/7) SN74HCT04ANS
IC762 (6/7) SN74HCT04ANS
IC757 (1/2) SN74HCT04ANS
IC756 (3/4) TC7W04FU
753
QFP 64P
MEASURE TEMP
Q750 2SA1611
REG
IC751 L78M05T-FA
(P50) RDY
SOO
SIO
SCK0
(P02) CS
BUSY
STB
RESET
VDD
GND
GND
MODE
P66
(P31) DSF
(INTP3) VP INT
(INTP0) RVD INT
(INTP1) IVD INT
(P04) R INT
XT2
(AN17) DEC
(AN16) SP
(AN15) AUD
(AN14) TY
(AN13) ENC
(AN12) RCNP
(AN11) RCMP
(AN10) TEMP
AVREF
AVDD
AGND
RST (P37)
START (P51)
SCK1
SO1
SI1
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
WR
RD
ASTB
X2
X1
TICFIN (P32)
C 100/75 (P33)
D1 LOCK (P34)
REF CONT0 (P36)
REF CONT1 (P35)
LO (P54)
DO (P55)
L3 (P62)
D3 (P63)
DACK (P53)
DADA (P52)
L1 (P56)
D1 (P57)
L2 (P60)
D2 (P61)
FIN (P30)
5V
8V-2
-8V-2
-15V-2



*PART CHANGE INFORMATION

PART CHANGE INFORMATION		CHANGE	REPAIR PART	SIMULATANEOUSIY
REF NO.	OLD → NEW	LOT NO.	FOR OLD PART	CHANGE PART
IC761	SN74LVT245ANS-E05 → SN74LVTH245ANS-E05	905	SN74LVTH245ANS-E05	IC314, 315, 500-503 IC508, 761, 1026 IC1036-1041

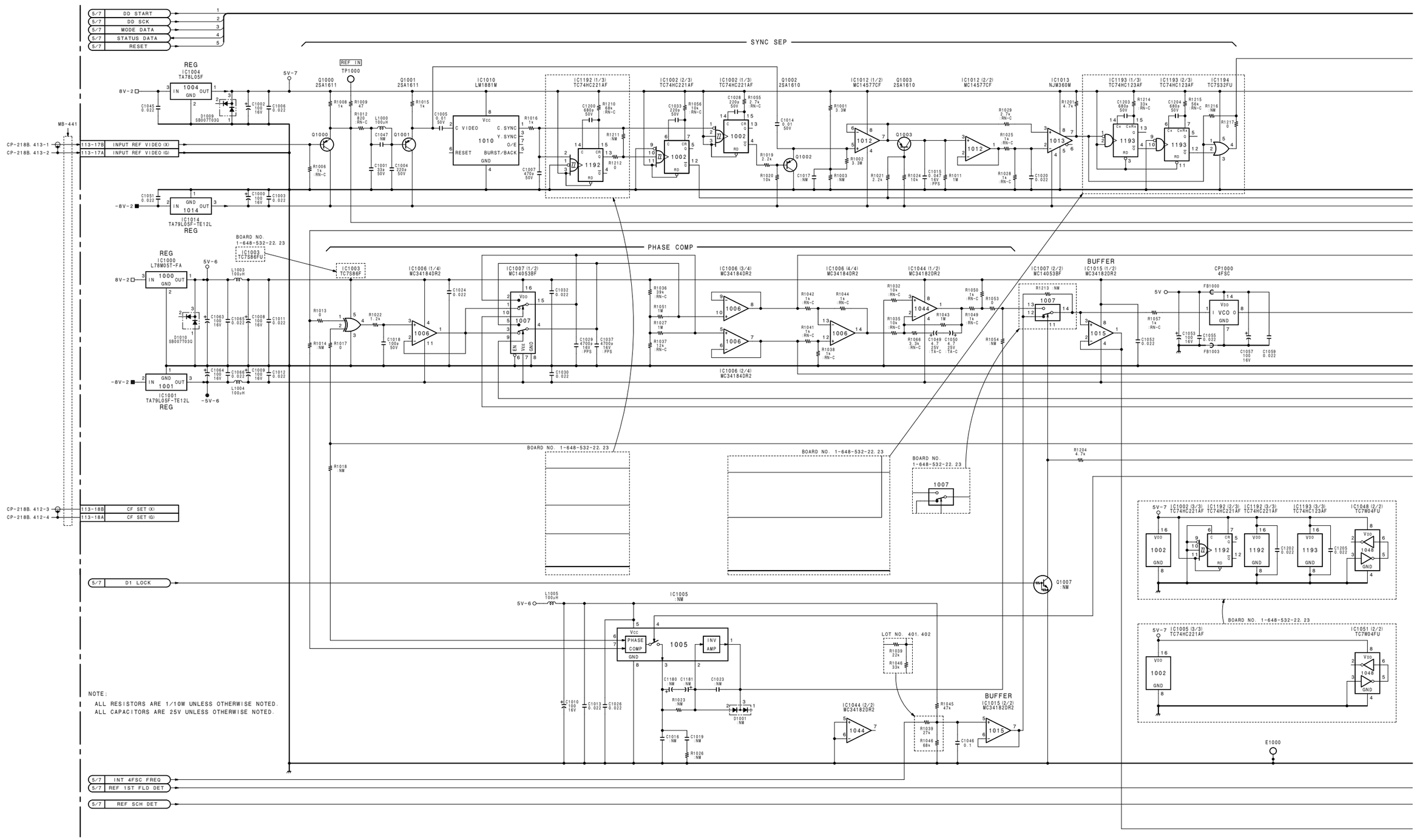
LOT NO.	BOARD NO.
401-410	1-648-532-22
411-502	1-648-532-23
503-704	1-648-532-24
705-802	1-648-532-25
803-908	1-648-532-26

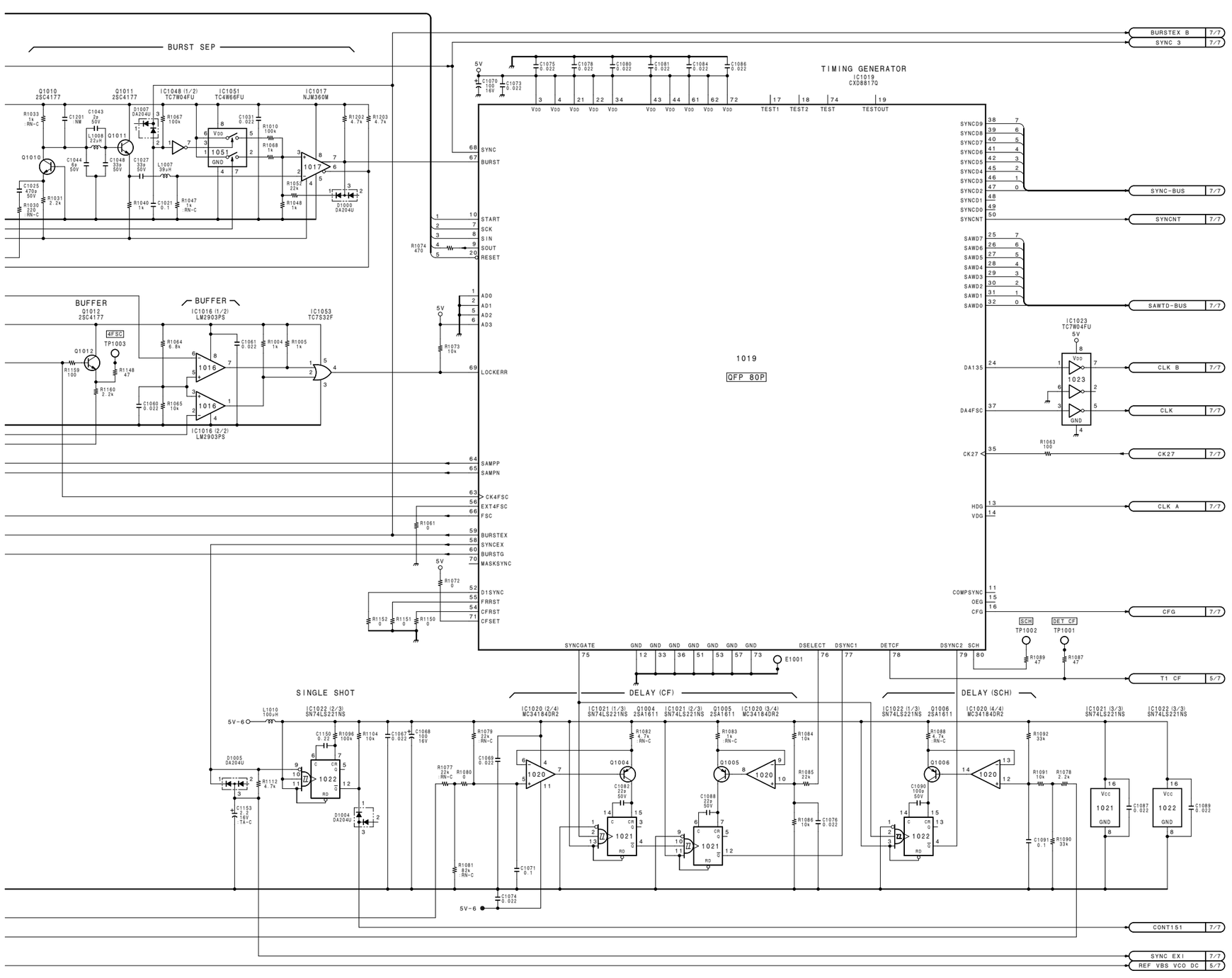
Video Process Control

VPR-1B BOARD (5/7)

BOARD NO. 1-648-532-22, 23, 24, 25, 26
BOARD'S LOT NO. 401-908
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510P (EK) : VPR-1BP MCB
DVW-CA510P (EK) : VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-S/M-03-B


SYNC SEP
PHASE COMP
BUFFER
REG
IC1004 TA78L05F
IC1014 TA79L05F-TE12L
IC1001 TA79L05F-TE12L
IC1000 L78M05T-FA
IC1003 TC7S86FU
IC1010 LM1881M
IC1005 :NM
IC1015 (1/2) MC34182DR2
IC1044 (2/2) MC34182DR2
IC1051 (2/2) TC7W04FU
IC1048 (2/2) TC7W04FU
IC1194 TC7S32FU
CP1000 4FSC
E1000
Q1007 :NM
BOARD NO. 1-648-532-22.23
BOARD NO. 1-648-532-22.23
BOARD NO. 1-648-532-22.23
BOARD NO. 1-648-532-22.23
LOT NO. 401, 402
MB-441
CP-218B. 413-1
CP-218B. 413-2
113-17B INPUT REF VIDEO (X)
113-17A INPUT REF VIDEO (G)
CP-218B. 412-3
CP-218B. 412-4
113-18B CF SET (X)
113-18A CF SET (G)
5/7 DD START
5/7 DD SCK
5/7 MODE DATA
5/7 STATUS DATA
5/7 RESET
5/7 D1 LOCK
5/7 INT 4FSC FREQ
5/7 REF 1ST FLD DET
5/7 REF SCH DET
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



DA204U
PIN LAYOUT

SB007T03Q
PIN LAYOUT

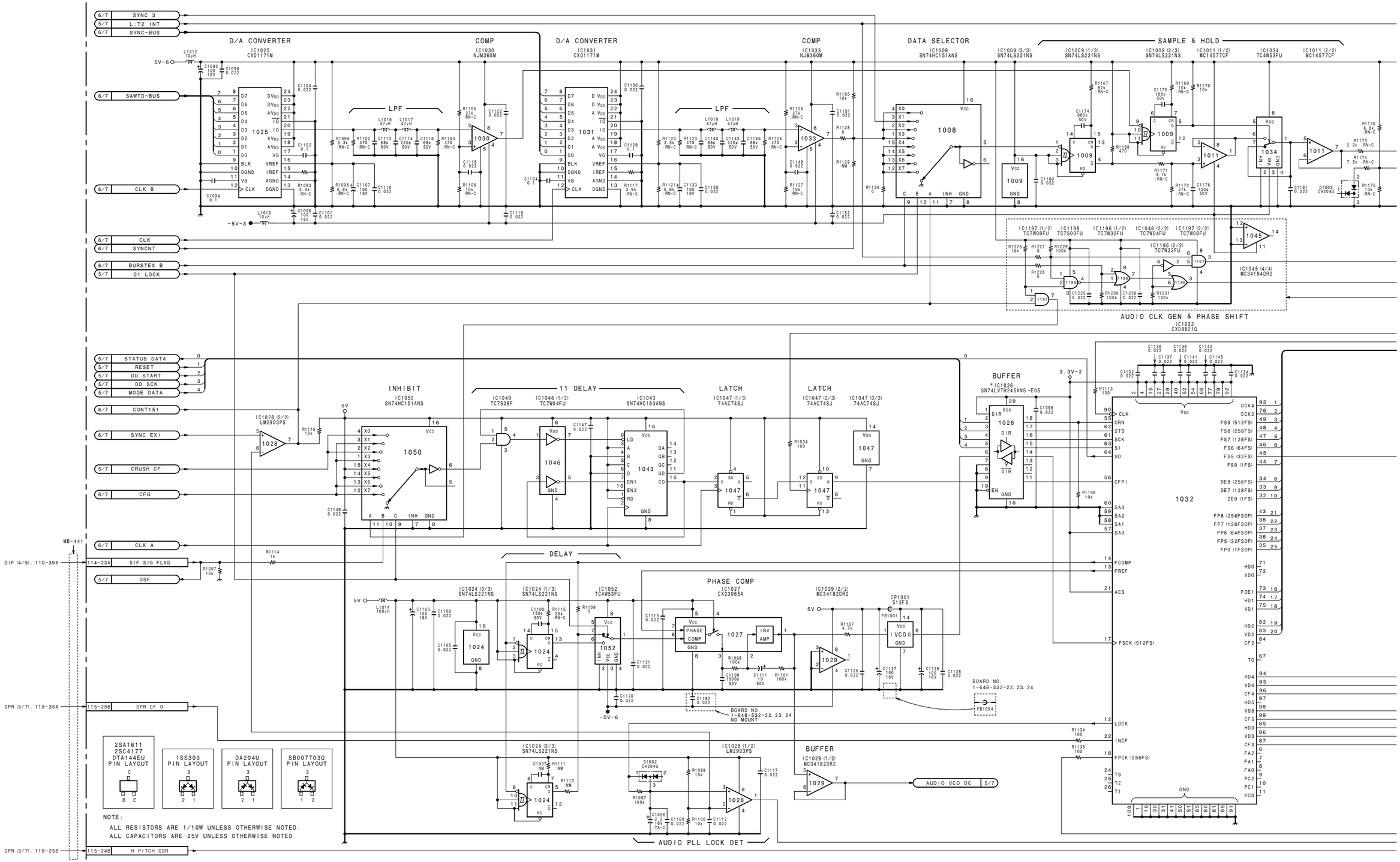
2SA1610
2SA1611
2SC4177
PIN LAYOUT

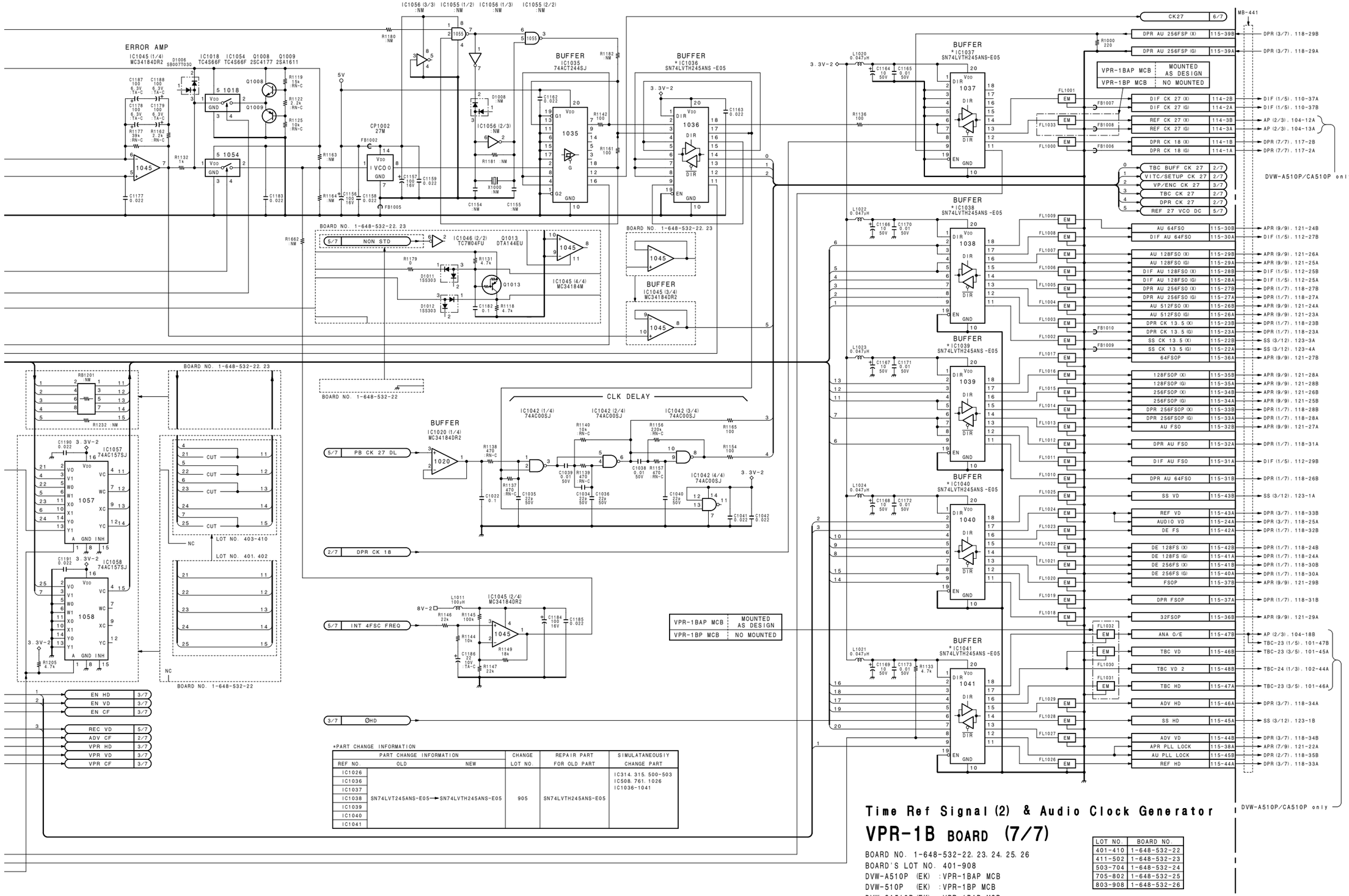
LOT NO.	BOARD NO.
401-410	1-648-532-22
410-502	1-648-532-23
503-704	1-648-532-24
705-802	1-648-532-25
803-908	1-648-532-26

Time Ref Signal (1)

VPR-1B BOARD (6/7)

BOARD NO. 1-648-532-22, 23, 24, 25, 26
BOARD'S LOT NO. 401-908
DVW-A510P (EK) : VPR-1BAP MCB
DVW-510P (EK) : VPR-1BP MCB
DVW-CA510P (EK) : VPR-1BAP MCB
DVW-VPR1-PAL-PLAY-S/M-03-B


D/A CONVERTER
IC1025 CXD1171M
COMP
IC1030 NJM360M
D/A CONVERTER
IC1031 CXD1171M
COMP
IC1033 NJM360M
DATA SELECTOR
IC1008 SN74HC151ANS
SAMPLE & HOLD
IC1009 (3/3) SN74LS221NS
IC1009 (1/3) SN74LS221NS
IC1009 (2/3) SN74LS221NS
IC1011 (1/2) MC14577CF
IC1034 TC4W53FU
IC1011 (2/2) MC14577CF
LPF
LPF
5V-6
-5V-3
SAWTD-BUS
CLK B
CLK
SYNCNT
BURSTEX B
D1 LOCK
SYNC 3
L:T2 INT
SYNC-BUS
AUDIO CLK GEN & PHASE SHIFT
IC1032 CXD8821Q
IC1045 (4/4) MC34184DR2
IC1197 (1/2) TC7W08FU
IC1198 TC7S00FU
IC1196 (1/2) TC7W32FU
IC1046 (2/2) TC7W04FU
IC1196 (2/2) TC7W32FU
IC1197 (2/2) TC7W08FU
STATUS DATA
RESET
DD START
DD SCK
MODE DATA
CONT151
SYNC EXI
CRUSH CF
CFG
CLK A
DIF SIG FLAG
DSF
INHIBIT
IC1050 SN74HC151ANS
11 DELAY
IC1049 TC7S08F
IC1046 (1/2) TC7W04FU
IC1043 SN74HC163ANS
LATCH
IC1047 (1/3) 74AC74SJ
LATCH
IC1047 (2/3) 74AC74SJ
IC1047 (3/3) 74AC74SJ
IC1028 (2/2) LM2903PS
MB-441
DIF (4/5), 110-39A
DELAY
PHASE COMP
IC1027 CX23065A
IC1024 (3/3) SN74LS221NS
IC1024 (1/3) SN74LS221NS
IC1052 TC4W53FU
IC1029 (2/2) MC34182DR2
CP1001 512FS
BUFFER
IC1026 SN74LVTH245ANS-E05
BUFFER
IC1029 (1/2) MC34182DR2
AUDIO VCO DC 5/7
IC1024 (2/3) SN74LS221NS
IC1028 (1/2) LM2903PS
AUDIO PLL LOCK DET
DPR (3/7), 118-35A
DPR (3/7), 118-25B
DPR CF 0
H PITCH COR
BOARD NO. 1-648-532-22, 23, 24 NO MOUNT
BOARD NO. 1-648-532-22, 23, 24
2SA1611 2SC4177 DTA144EU PIN LAYOUT
1SS303 PIN LAYOUT
DA204U PIN LAYOUT
SB007T03Q PIN LAYOUT
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

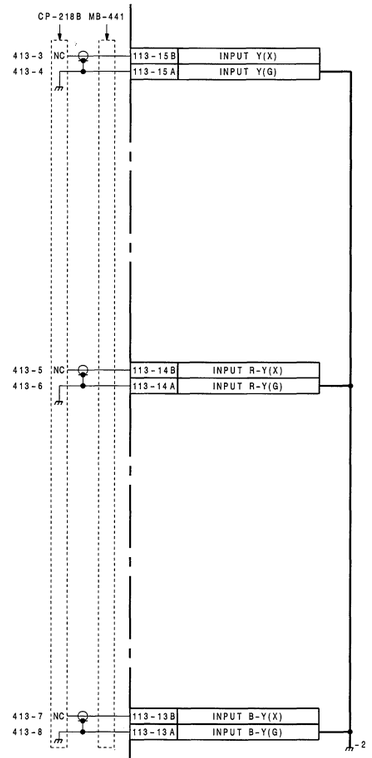


*PART CHANGE INFORMATION

PART CHANGE INFORMATION			CHANGE	REPAIR PART	SIMULATANEOUSLY
REF NO.	OLD	NEW	LOT NO.	FOR OLD PART	CHANGE PART
IC1026	SN74LVT245ANS-E05→SN74LVTH245ANS-E05		905	SN74LVTH245ANS-E05	IC314. 315. 500-503 IC508. 761. 1026 IC1036-1041
IC1036					
IC1037					
IC1038					
IC1039					
IC1040					
IC1041					

LOT NO.	BOARD NO.
401-410	1-648-532-22
411-502	1-648-532-23
503-704	1-648-532-24
705-802	1-648-532-25
803-908	1-648-532-26

VPR-1B (1/7)

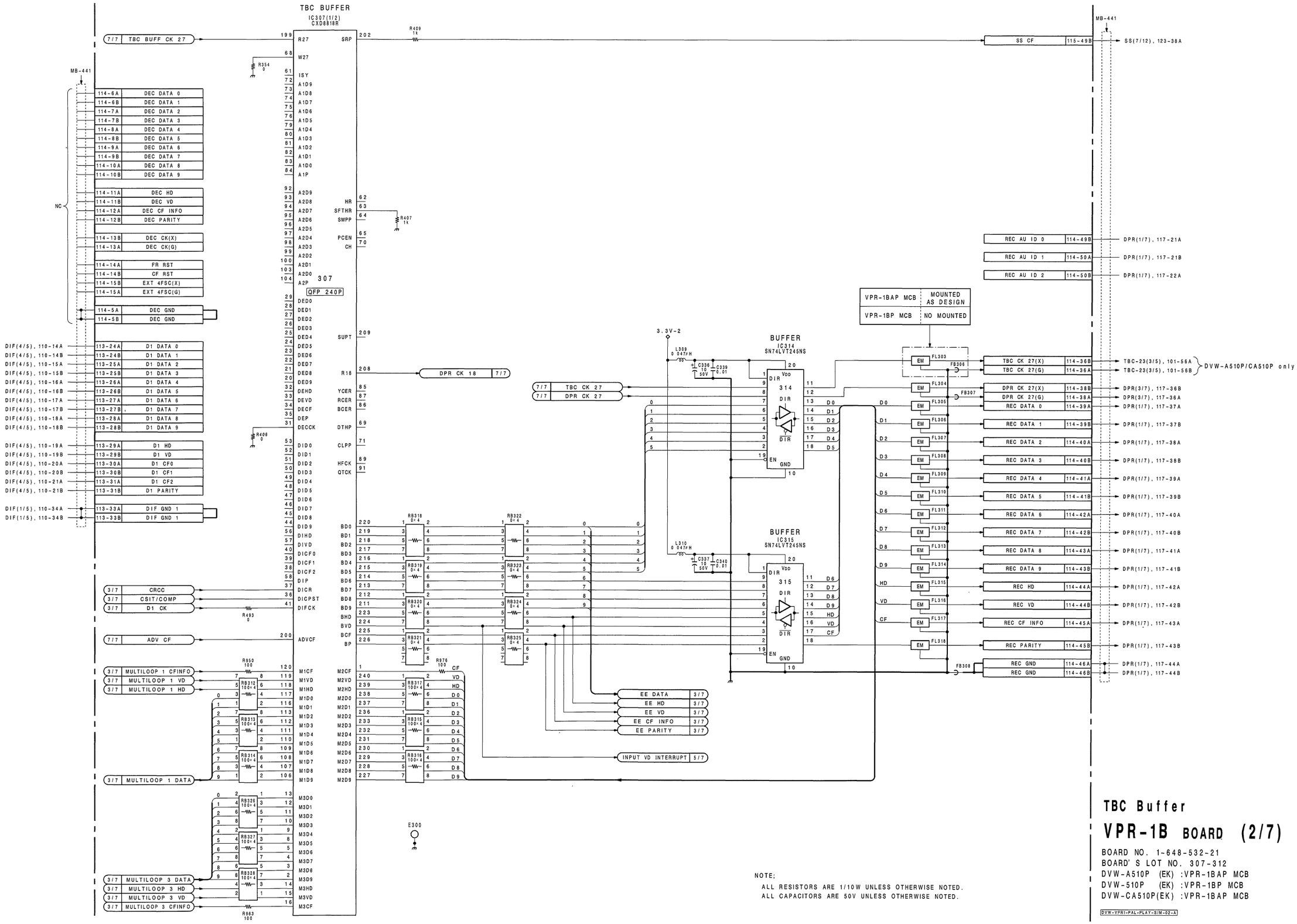


VPR-1B BOARD (1/7)

BOARD NO. 1-648-532-21
BOARD' S LOT NO. 307-312
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510P (EK) :VPR-1BP MCB
DVW-CA510P(EK) :VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-SJM-02-A

1-6 (a)



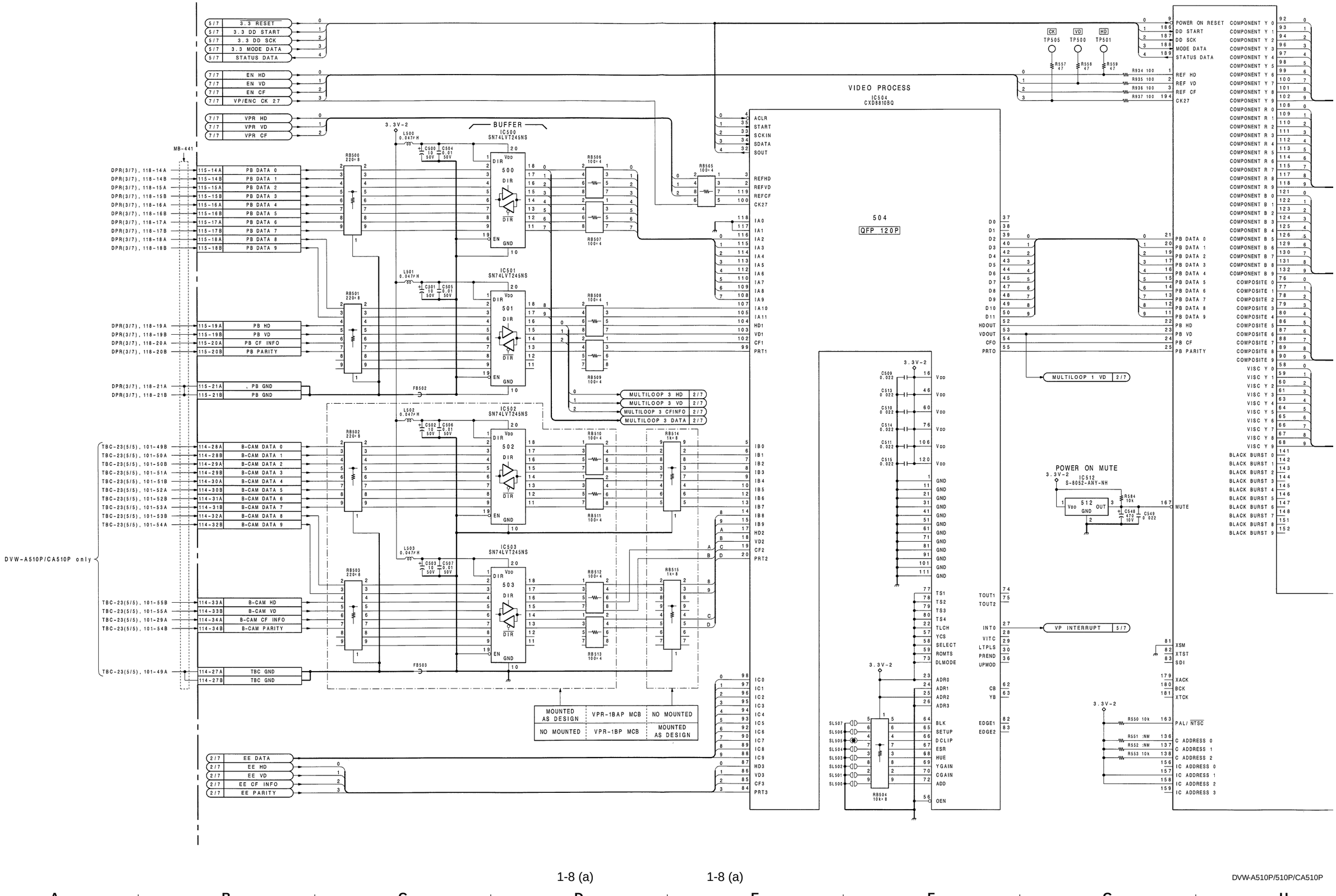
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

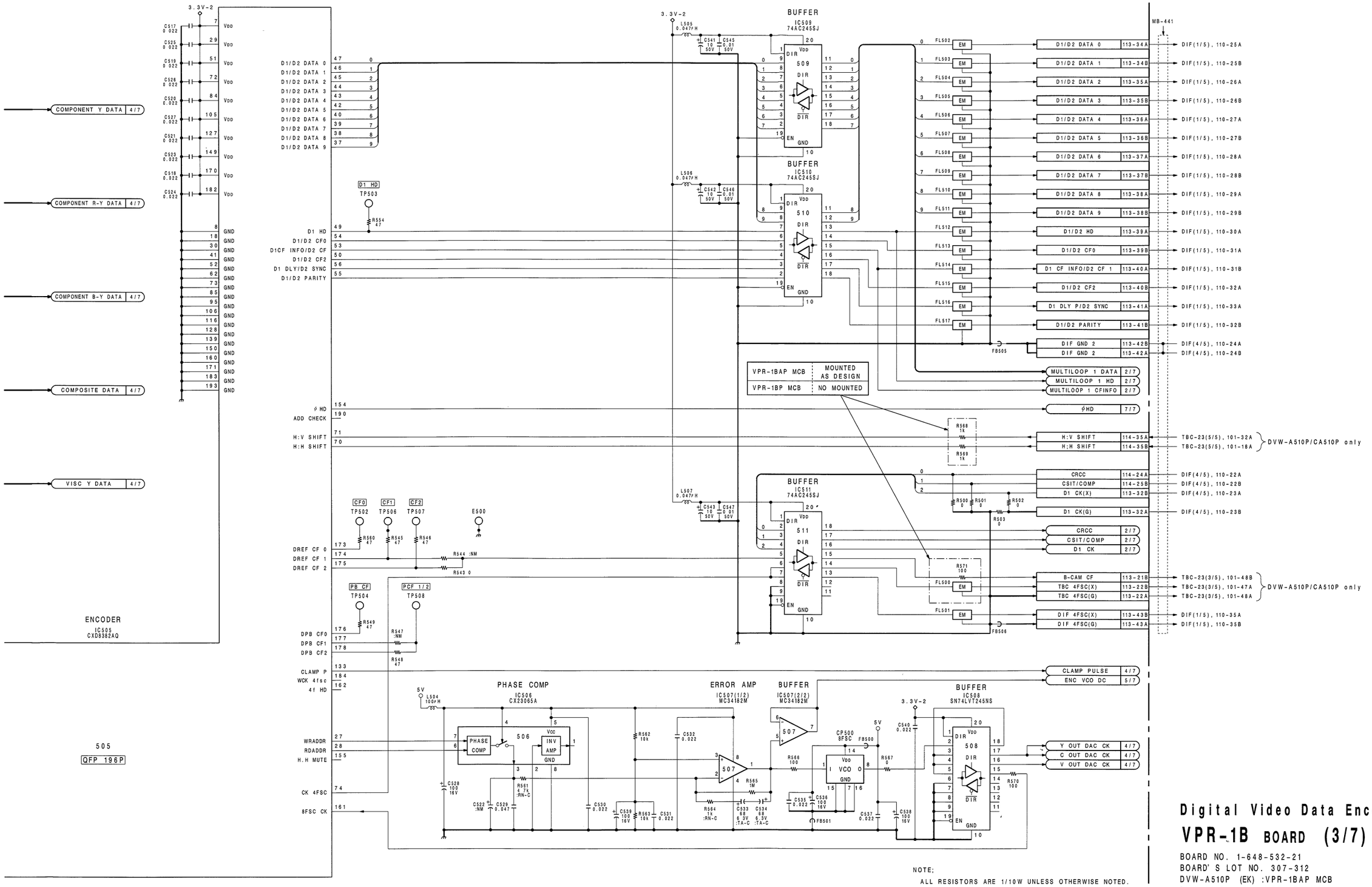
TBC Buffer

VPR-1B BOARD (2/7)

BOARD NO. 1-648-532-21
BOARD' S LOT NO. 307-312
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510P (EK) :VPR-1BP MCB
DVW-CA510P(EK) :VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-SJM-02-A


5/7 3.3 RESET
5/7 3.3 DD START
5/7 3.3 DD SCK
5/7 3.3 MODE DATA
5/7 STATUS DATA
7/7 EN HD
7/7 EN VD
7/7 EN CF
7/7 VP/ENC CK 27
7/7 VPR HD
7/7 VPR VD
7/7 VPR CF
MB-441
DPR(3/7), 118-14A
DPR(3/7), 118-14B
DPR(3/7), 118-15A
DPR(3/7), 118-15B
DPR(3/7), 118-16A
DPR(3/7), 118-16B
DPR(3/7), 118-17A
DPR(3/7), 118-17B
DPR(3/7), 118-18A
DPR(3/7), 118-18B
115-14A PB DATA 0
115-14B PB DATA 1
115-15A PB DATA 2
115-15B PB DATA 3
115-16A PB DATA 4
115-16B PB DATA 5
115-17A PB DATA 6
115-17B PB DATA 7
115-18A PB DATA 8
115-18B PB DATA 9
DPR(3/7), 118-19A
DPR(3/7), 118-19B
DPR(3/7), 118-20A
DPR(3/7), 118-20B
115-19A PB HD
115-19B PB VD
115-20A PB CF INFO
115-20B PB PARITY
DPR(3/7), 118-21A
DPR(3/7), 118-21B
115-21A PB GND
115-21B PB GND
TBC-23(5/5), 101-49B
TBC-23(5/5), 101-50A
TBC-23(5/5), 101-50B
TBC-23(5/5), 101-51A
TBC-23(5/5), 101-51B
TBC-23(5/5), 101-52A
TBC-23(5/5), 101-52B
TBC-23(5/5), 101-53A
TBC-23(5/5), 101-53B
TBC-23(5/5), 101-54A
114-28A B-CAM DATA 0
114-28B B-CAM DATA 1
114-29A B-CAM DATA 2
114-29B B-CAM DATA 3
114-30A B-CAM DATA 4
114-30B B-CAM DATA 5
114-31A B-CAM DATA 6
114-31B B-CAM DATA 7
114-32A B-CAM DATA 8
114-32B B-CAM DATA 9
DVW-A510P/CA510P only
TBC-23(5/5), 101-55B
TBC-23(5/5), 101-55A
TBC-23(5/5), 101-29A
TBC-23(5/5), 101-54B
114-33A B-CAM HD
114-33B B-CAM VD
114-34A B-CAM CF INFO
114-34B B-CAM PARITY
TBC-23(5/5), 101-49A
114-27A TBC GND
114-27B TBC GND
3.3V-2
BUFFER
IC500 SN74LVT245NS
IC501 SN74LVT245NS
IC502 SN74LVT245NS
IC503 SN74LVT245NS
L500 0.047µH
L501 0.047µH
L502 0.047µH
L503 0.047µH
C500 10 50V
C501 10 50V
C502 10 50V
C503 10 50V
C504 0.01 50V
C505 0.01 50V
C506 0.01 50V
C507 0.01 50V
RB500 220×8
RB501 220×8
RB502 220×8
RB503 220×8
RB504 10k×8
RB505 100×4
RB506 100×4
RB507 100×4
RB508 100×4
RB509 100×4
RB510 100×4
RB511 100×4
RB512 100×4
RB513 100×4
RB514 1k×8
RB515 1k×8
FB502
FB503
MULTILOOP 3 HD 2/7
MULTILOOP 3 VD 2/7
MULTILOOP 3 CFINFO 2/7
MULTILOOP 3 DATA 2/7
2/7 EE DATA
2/7 EE HD
2/7 EE VD
2/7 EE CF INFO
2/7 EE PARITY
MOUNTED AS DESIGN | VPR-1BAP MCB | NO MOUNTED
NO MOUNTED | VPR-1BP MCB | MOUNTED AS DESIGN
VIDEO PROCESS
IC504
CXD9810BQ
504
QFP 120P
ACLR
START
SCKIN
SDATA
SOUT
REFHD
REFVD
REFCF
CK27
IA0
IA1
IA2
IA3
IA4
IA5
IA6
IA7
IA8
IA9
IA10
IA11
HD1
VD1
CF1
PRT1
IB0
IB1
IB2
IB3
IB4
IB5
IB6
IB7
IB8
IB9
HD2
VD2
CF2
PRT2
IC0
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
IC9
HD3
VD3
CF3
PRT3
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
HDOUT
VDOUT
CFO
PRTO
TP505 CK
TP500 VD
TP501 HD
R557 47
R558 47
R559 47
R934 100
R935 100
R936 100
R937 100
POWER ON RESET
DD START
DD SCK
MODE DATA
STATUS DATA
REF HD
REF VD
REF CF
CK27
PB DATA 0
PB DATA 1
PB DATA 2
PB DATA 3
PB DATA 4
PB DATA 5
PB DATA 6
PB DATA 7
PB DATA 8
PB DATA 9
PB HD
PB VD
PB CF
PB PARITY
MULTILOOP 1 VD 2/7
COMPONENT Y 0
COMPONENT Y 1
COMPONENT Y 2
COMPONENT Y 3
COMPONENT Y 4
COMPONENT Y 5
COMPONENT Y 6
COMPONENT Y 7
COMPONENT Y 8
COMPONENT Y 9
COMPONENT R 0
COMPONENT R 1
COMPONENT R 2
COMPONENT R 3
COMPONENT R 4
COMPONENT R 5
COMPONENT R 6
COMPONENT R 7
COMPONENT R 8
COMPONENT R 9
COMPONENT B 0
COMPONENT B 1
COMPONENT B 2
COMPONENT B 3
COMPONENT B 4
COMPONENT B 5
COMPONENT B 6
COMPONENT B 7
COMPONENT B 8
COMPONENT B 9
COMPOSITE 0
COMPOSITE 1
COMPOSITE 2
COMPOSITE 3
COMPOSITE 4
COMPOSITE 5
COMPOSITE 6
COMPOSITE 7
COMPOSITE 8
COMPOSITE 9
VISC Y 0
VISC Y 1
VISC Y 2
VISC Y 3
VISC Y 4
VISC Y 5
VISC Y 6
VISC Y 7
VISC Y 8
VISC Y 9
BLACK BURST 0
BLACK BURST 1
BLACK BURST 2
BLACK BURST 3
BLACK BURST 4
BLACK BURST 5
BLACK BURST 6
BLACK BURST 7
BLACK BURST 8
BLACK BURST 9
C509 0.022
C513 0.022
C510 0.022
C514 0.022
C511 0.022
C515 0.022
GND
TS1
TS2
TS3
TS4
TLCH
YCS
SELECT
ROMTS
DLMODE
ADR0
ADR1
ADR2
ADR3
BLK
SETUP
DCLIP
ESR
HUE
YGAIN
CGAIN
ADD
OEN
SL507
SL506
SL505
SL504
SL503
SL502
SL501
SL500
TOUT1
TOUT2
INT0
VITC
LTPLS
PREND
UPMOD
CB
YB
EDGE1
EDGE2
VP INTERRUPT 5/7
POWER ON MUTE
IC512
S-8052-ANY-NH
R584 10k
C548 470 10V
C549 0.022
MUTE
XSM
XTST
SDI
XACK
BCK
XTCK
R550 10k
PAL/ NTSC
R551 :NM
R552 :NM
R553 10k
C ADDRESS 0
C ADDRESS 1
C ADDRESS 2
IC ADDRESS 0
IC ADDRESS 1
IC ADDRESS 2
IC ADDRESS 3



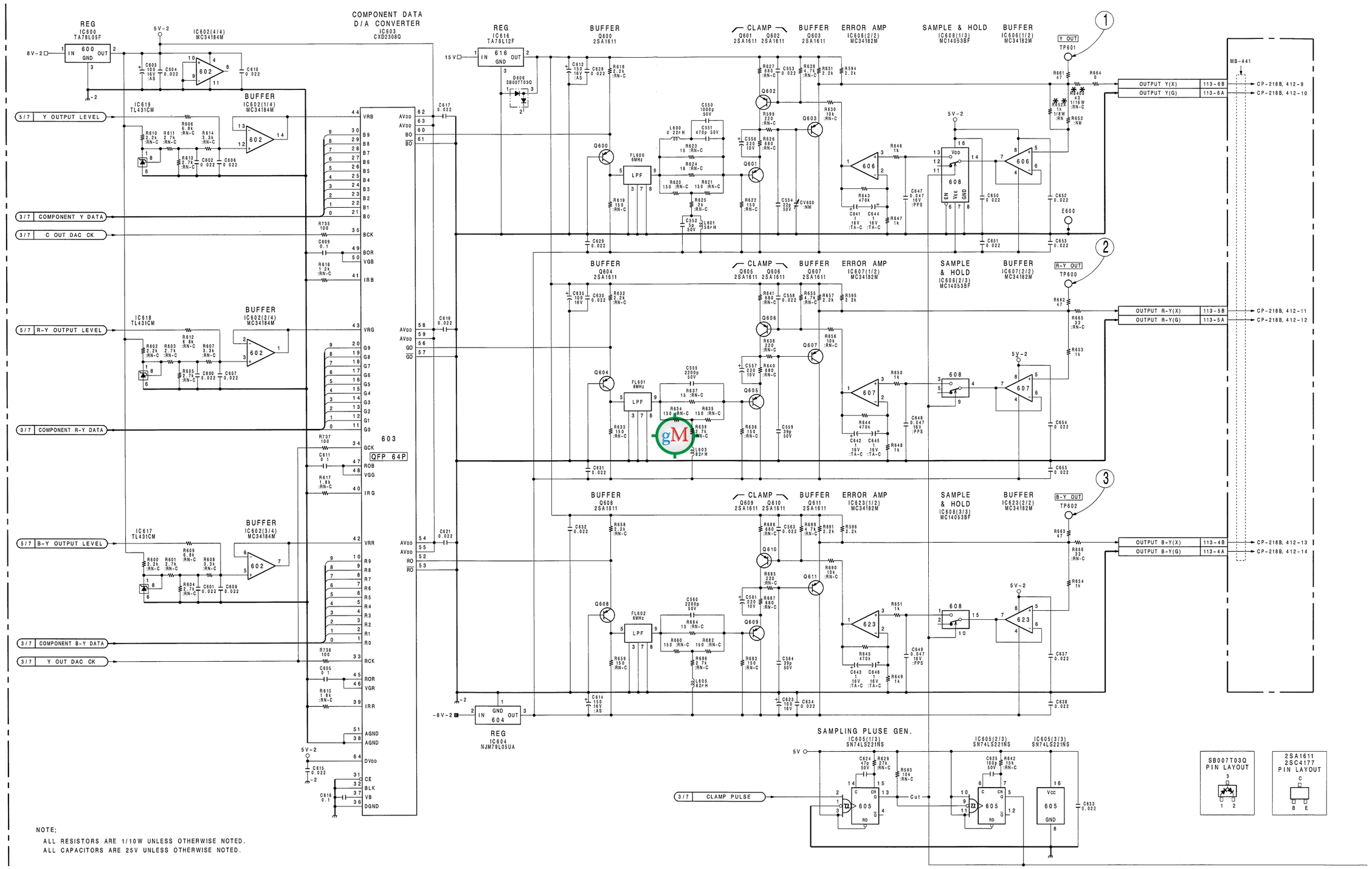
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

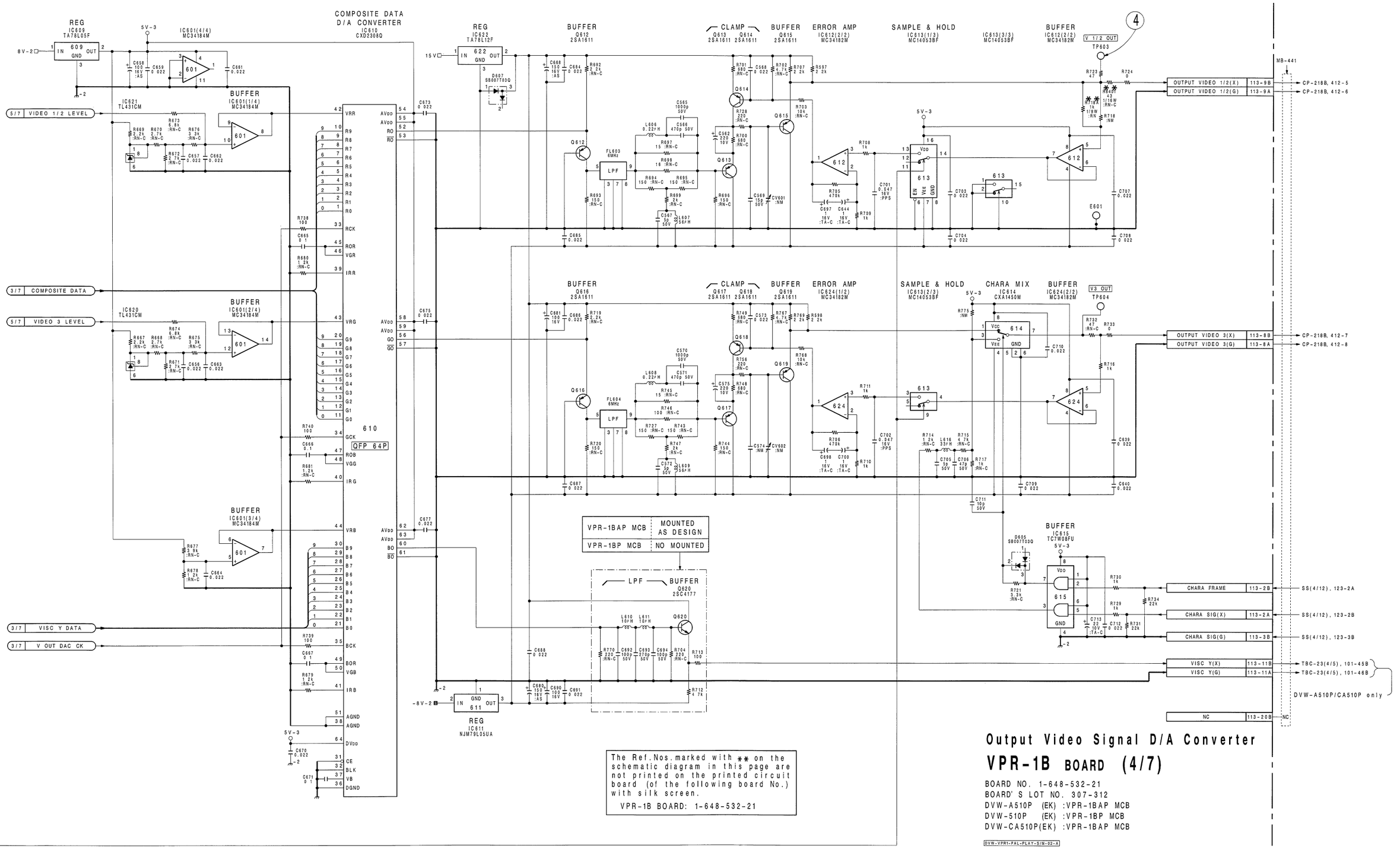
Digital Video Data Encoder

VPR-1B BOARD (3/7)

BOARD NO. 1-648-532-21
BOARD' S LOT NO. 307-312
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510P (EK) :VPR-1BP MCB
DVW-CA510P(EK) :VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-STM-02-A


REG
IC600
TA78L05F
5V-2
IC602(4/4)
MC34184M
COMPONENT DATA
D/A CONVERTER
IC603
CXD2308Q
REG
IC616
TA78L12F
15V
BUFFER
Q600
2SA1611
CLAMP
Q601
2SA1611
Q602
2SA1611
BUFFER
Q603
2SA1611
ERROR AMP
IC606(2/2)
MC34182M
SAMPLE & HOLD
IC608(1/3)
MC14053BF
BUFFER
IC606(1/2)
MC34182M
Y OUT
TP601
OUTPUT Y(X)
113-6B
OUTPUT Y(G)
113-6A
CP-218B, 412-9
CP-218B, 412-10
MB-441
IC619
TL431CM
BUFFER
IC602(1/4)
MC34184M
5/7 Y OUTPUT LEVEL
3/7 COMPONENT Y DATA
3/7 C OUT DAC CK
BUFFER
Q604
2SA1611
CLAMP
Q605
2SA1611
Q606
2SA1611
BUFFER
Q607
2SA1611
ERROR AMP
IC607(1/2)
MC34182M
SAMPLE & HOLD
IC608(2/3)
MC14053BF
BUFFER
IC607(2/2)
MC34182M
R-Y OUT
TP600
OUTPUT R-Y(X)
113-5B
OUTPUT R-Y(G)
113-5A
CP-218B, 412-11
CP-218B, 412-12
IC618
TL431CM
BUFFER
IC602(2/4)
MC34184M
5/7 R-Y OUTPUT LEVEL
3/7 COMPONENT R-Y DATA
603
QFP 64P
BUFFER
Q608
2SA1611
CLAMP
Q609
2SA1611
Q610
2SA1611
BUFFER
Q611
2SA1611
ERROR AMP
IC623(1/2)
MC34182M
SAMPLE & HOLD
IC608(3/3)
MC14053BF
BUFFER
IC623(2/2)
MC34182M
B-Y OUT
TP602
OUTPUT B-Y(X)
113-4B
OUTPUT B-Y(G)
113-4A
CP-218B, 412-13
CP-218B, 412-14
IC617
TL431CM
BUFFER
IC602(3/4)
MC34184M
5/7 B-Y OUTPUT LEVEL
3/7 COMPONENT B-Y DATA
3/7 Y OUT DAC CK
REG
IC604
NJM79L05UA
SAMPLING PLUSE GEN.
IC605(1/3)
SN74LS221NS
IC605(2/3)
SN74LS221NS
IC605(3/3)
SN74LS221NS
3/7 CLAMP PULSE
SB007T03Q
PIN LAYOUT
2SA1611
2SC4177
PIN LAYOUT
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



The Ref.Nos. marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

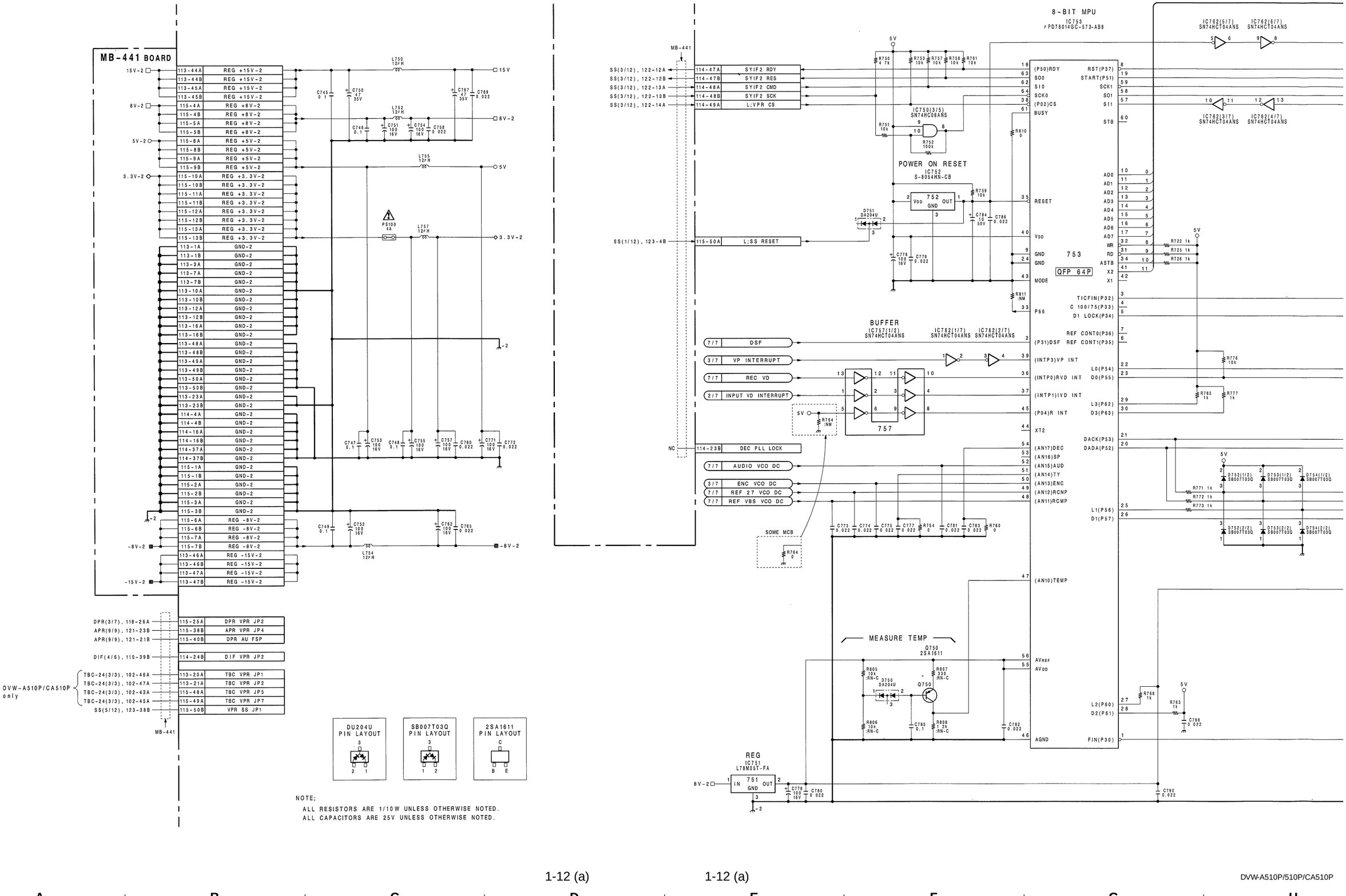
VPR-1B BOARD: 1-648-532-21

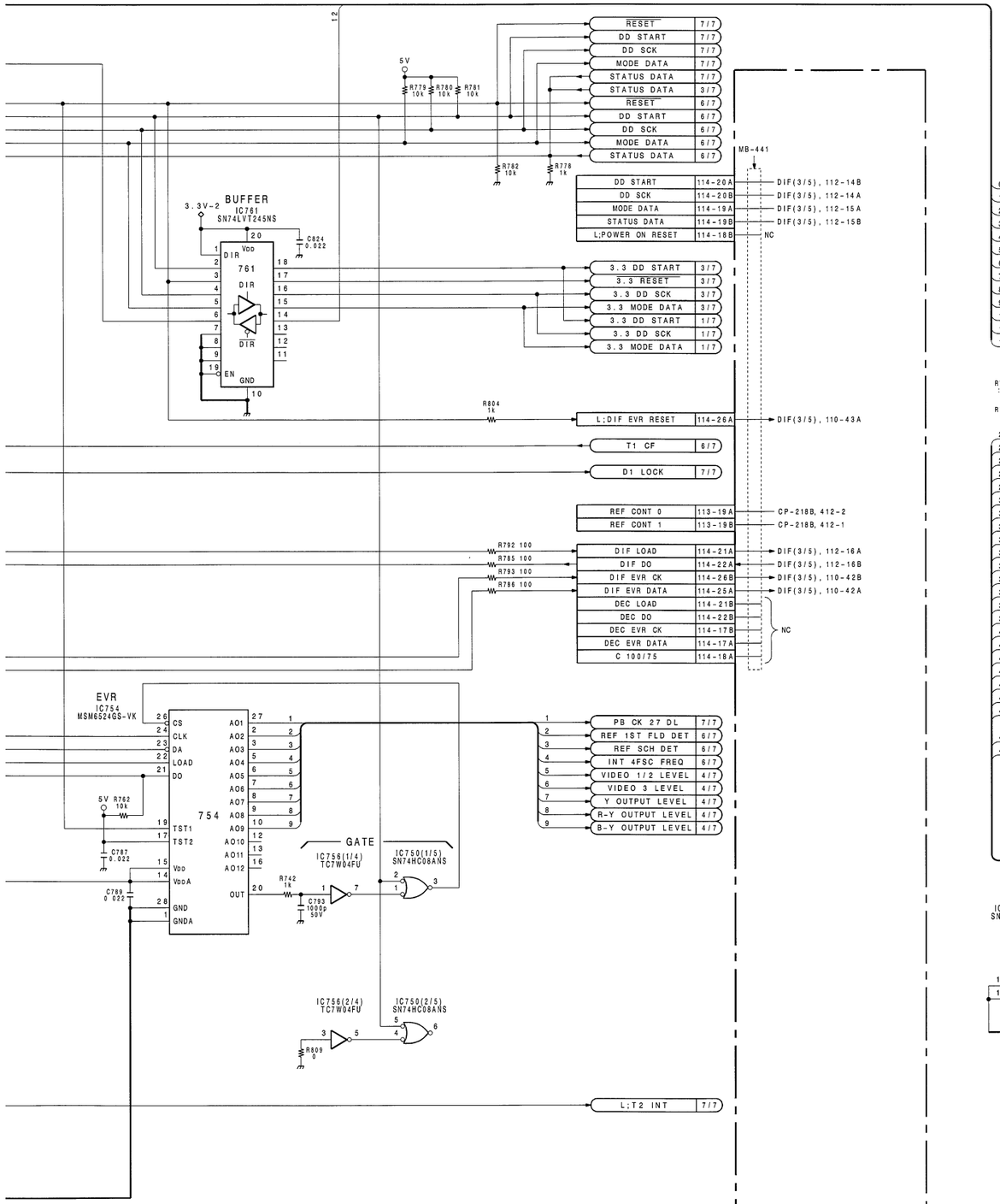
Output Video Signal D/A Converter

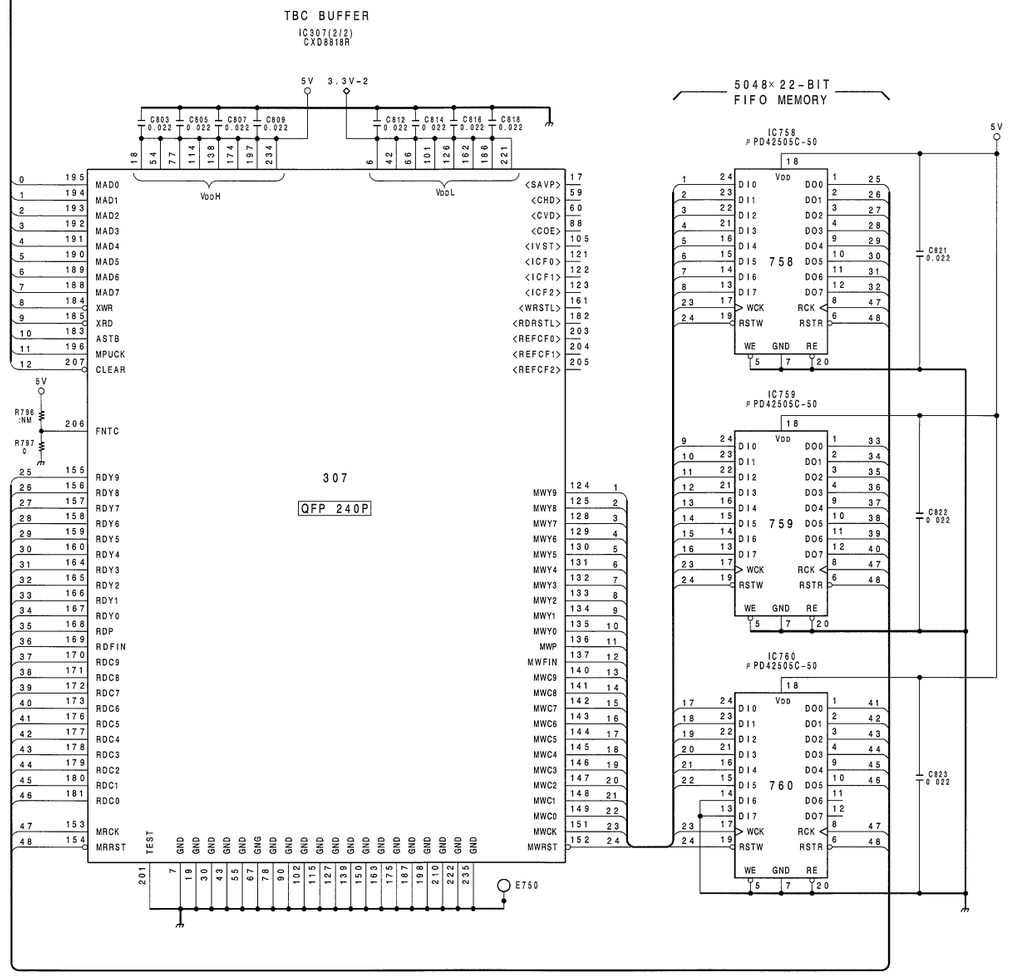
VPR-1B BOARD (4/7)

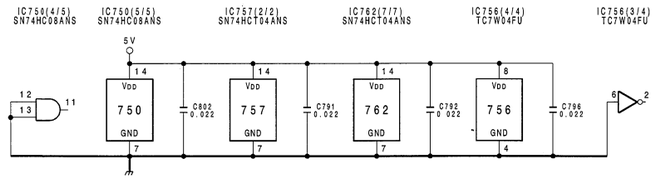
BOARD NO. 1-648-532-21
BOARD' S LOT NO. 307-312
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510P (EK) :VPR-1BP MCB
DVW-CA510P(EK) :VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-S/M-02-A


MB-441 BOARD
15V-2
8V-2
5V-2
3.3V-2
-2
-8V-2
-15V-2
113-44A REG +15V-2
113-44B REG +15V-2
113-45A REG +15V-2
113-45B REG +15V-2
115-4A REG +8V-2
115-4B REG +8V-2
115-5A REG +8V-2
115-5B REG +8V-2
115-8A REG +5V-2
115-8B REG +5V-2
115-9A REG +5V-2
115-9B REG +5V-2
115-10A REG +3.3V-2
115-10B REG +3.3V-2
115-11A REG +3.3V-2
115-11B REG +3.3V-2
115-12A REG +3.3V-2
115-12B REG +3.3V-2
115-13A REG +3.3V-2
115-13B REG +3.3V-2
113-1A GND-2
113-1B GND-2
113-3A GND-2
113-7A GND-2
113-7B GND-2
113-10A GND-2
113-10B GND-2
113-12A GND-2
113-12B GND-2
113-16A GND-2
113-16B GND-2
113-48A GND-2
113-48B GND-2
113-49A GND-2
113-49B GND-2
113-50A GND-2
113-50B GND-2
113-23A GND-2
113-23B GND-2
114-4A GND-2
114-4B GND-2
114-16A GND-2
114-16B GND-2
114-37A GND-2
114-37B GND-2
115-1A GND-2
115-1B GND-2
115-2A GND-2
115-2B GND-2
115-3A GND-2
115-3B GND-2
115-6A REG -8V-2
115-6B REG -8V-2
115-7A REG -8V-2
115-7B REG -8V-2
113-46A REG -15V-2
113-46B REG -15V-2
113-47A REG -15V-2
113-47B REG -15V-2
L750 12µH
L752 12µH
L755 12µH
L757 12µH
L754 12µH
PS100 4A
C745 0.1
C750 47 35V
C767 47 35V
C769 0.022
C746 0.1
C751 100 16V
C754 100 16V
C758 0.022
C747 0.1
C753 100 16V
C748 0.1
C755 100 16V
C757 100 16V
C760 0.022
C771 100 16V
C772 0.022
C749 0.1
C752 100 16V
C762 100 16V
C765 0.022
DPR(3/7), 118-26A
APR(9/9), 121-23B
APR(9/9), 121-21B
DIF(4/6), 110-39B
DVW-A510P/CA510P only
TBC-24(3/3), 102-46A
TBC-24(3/3), 102-47A
TBC-24(3/3), 102-43A
TBC-24(3/3), 102-45A
SS(5/12), 123-38B
115-25A DPR VPR JP2
115-38B APR VPR JP4
115-40B DPR AU FSP
114-24B DIF VPR JP2
113-20A TBC VPR JP1
113-21A TBC VPR JP2
115-48A TBC VPR JP5
115-49A TBC VPR JP7
115-50B VPR SS JP1
MB-441
DU204U PIN LAYOUT
SB007T03Q PIN LAYOUT
2SA1611 PIN LAYOUT
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.
8-BIT MPU
IC753
μPD78014GC-573-AB8
MB-441
SS(3/12), 122-12A
SS(3/12), 122-12B
SS(3/12), 122-13A
SS(3/12), 122-13B
SS(3/12), 122-14A
114-47A SYIF2 RDY
114-47B SYIF2 RES
114-48A SYIF2 CMD
114-48B SYIF2 SCK
114-49A L;VPR CS
SS(1/12), 123-4B
115-50A L;SS RESET
NC
114-23B DEC PLL LOCK
IC750(3/5) SN74HC08ANS
POWER ON RESET
IC752 S-8054HN-CB
D751 DA204U
BUFFER
IC757(1/2) SN74HCT04ANS
IC762(1/7) SN74HCT04ANS
IC762(2/7) SN74HCT04ANS
7/7 DSF
3/7 VP INTERRUPT
7/7 REC VD
2/7 INPUT VD INTERRUPT
IC757
7/7 AUDIO VCO DC
3/7 ENC VCO DC
7/7 REF 27 VCO DC
7/7 REF VBS VCO DC
SOME MCB
MEASURE TEMP
Q750 2SA1611
D750 DA204U
REG
IC751 L78M05T-FA
IC762(5/7) SN74HCT04ANS
IC762(6/7) SN74HCT04ANS
IC762(3/7) SN74HCT04ANS
IC762(4/7) SN74HCT04ANS
(P50)RDY
SO0
SI0
SCK0
(P02)CS
BUSY
STB
RESET
VDD
GND
GND
MODE
P66
(P31)DSF
(INTP3)VP INT
(INTP0)RVD INT
(INTP1)IVD INT
(P04)R INT
XT2
(AN17)DEC
(AN16)SP
(AN15)AUD
(AN14)TY
(AN13)ENC
(AN12)RCNP
(AN11)RCMP
(AN10)TEMP
AVREF
AVDD
AGND
RST(P37)
START(P51)
SCK1
SO1
SI1
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
WR
RD
ASTB
X2
X1
TICFIN(P32)
C 100/75(P33)
D1 LOCK(P34)
REF CONT0(P36)
REF CONT1(P35)
L0(P54)
D0(P55)
L3(P62)
D3(P63)
DACK(P53)
DADA(P52)
L1(P56)
D1(P57)
L2(P60)
D2(P61)
FIN(P30)
753
QFP 64P





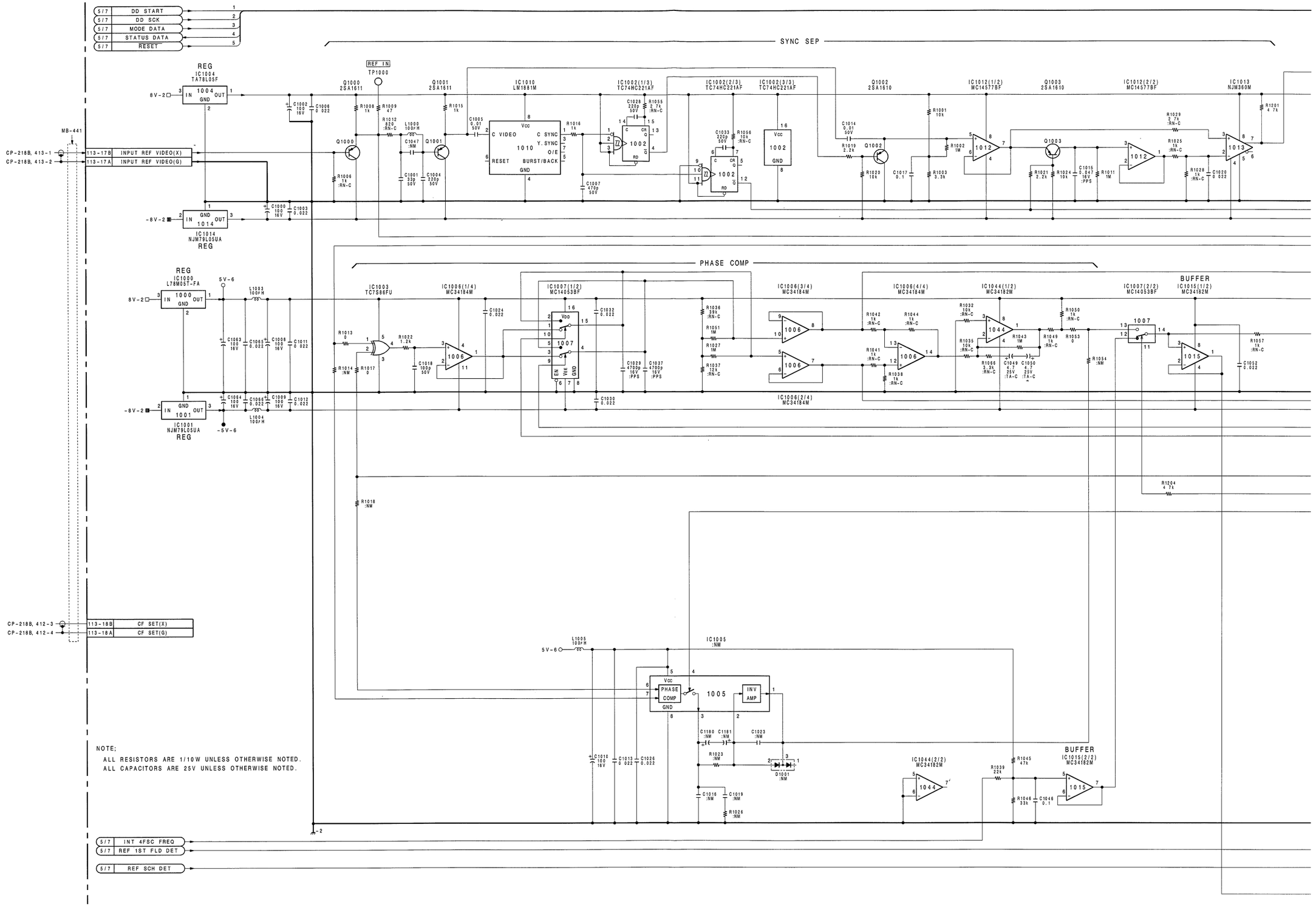


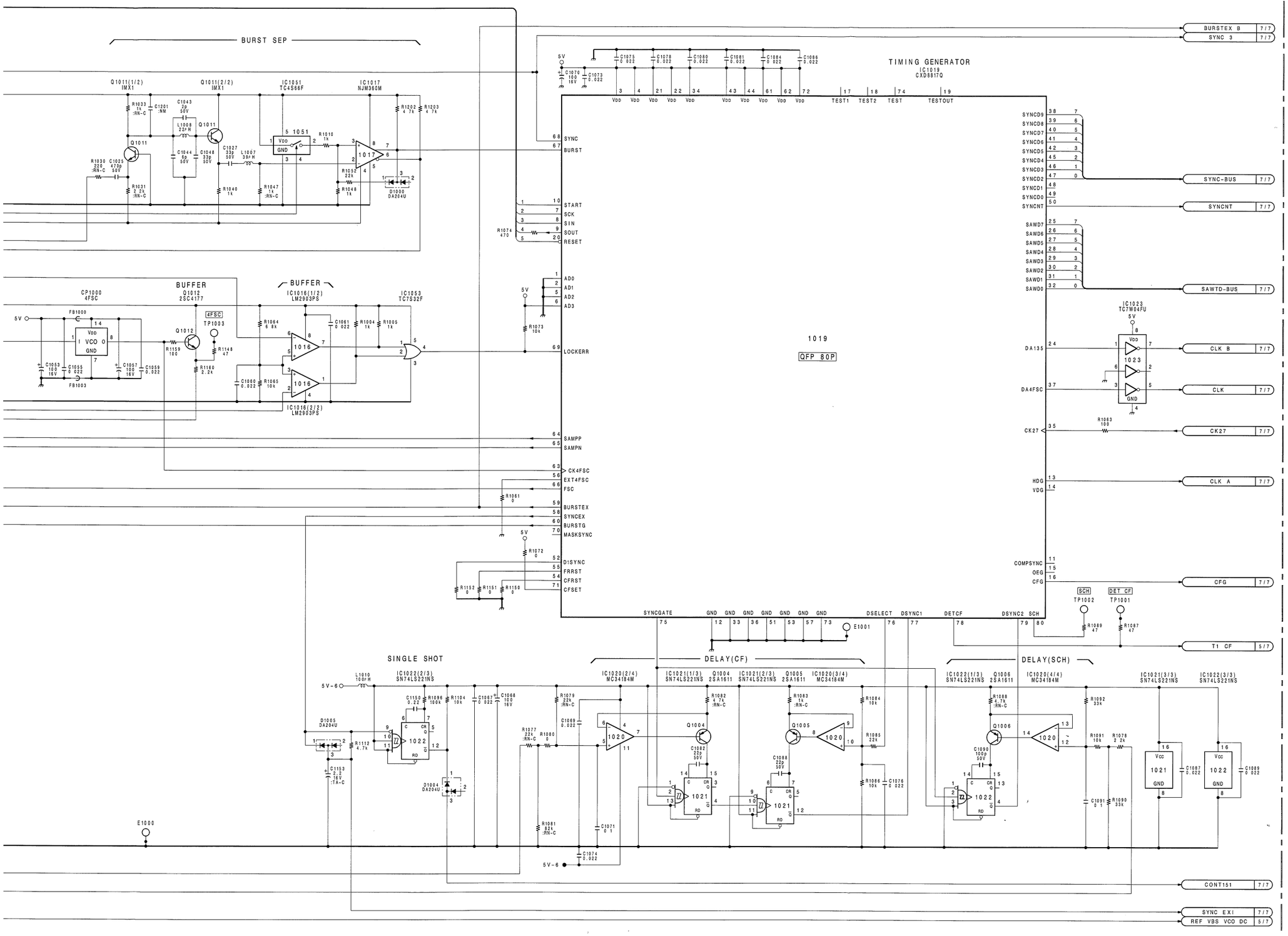
Video Process Control

VPR-1B BOARD (5/7)

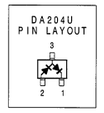
BOARD NO. 1-648-532-21
BOARD'S LOT NO. 307-312
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510P (EK) :VPR-1BP MCB
DVW-CA510P(EK) :VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-SIM-02-A

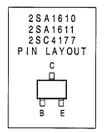

SYNC SEP
PHASE COMP
BUFFER
REG
IC1004 TA78L05F
IC1000 L78M05T-FA
IC1001 NJM79L05UA
IC1014 NJM78L05UA
IC1003 TC7S86FU
IC1005 :NM
IC1010 LM1881M
IC1002(1/3) TC74HC221AF
IC1002(2/3) TC74HC221AF
IC1002(3/3) TC74HC221AF
IC1006(1/4) MC34184M
IC1006(2/4) MC34184M
IC1006(3/4) MC34184M
IC1006(4/4) MC34184M
IC1007(1/2) MC14053BF
IC1007(2/2) MC14053BF
IC1012(1/2) MC14577BF
IC1012(2/2) MC14577BF
IC1013 NJM360M
IC1044(1/2) MC34182M
IC1044(2/2) MC34182M
IC1015(1/2) MC34182M
IC1015(2/2) MC34182M
Q1000 2SA1611
Q1001 2SA1611
Q1002 2SA1610
Q1003 2SA1610
Q1000
Q1002
Q1003
MB-441
CP-218B, 413-1
CP-218B, 413-2
113-17B INPUT REF VIDEO(X)
113-17A INPUT REF VIDEO(G)
CP-218B, 412-3
CP-218B, 412-4
113-18B CF SET(X)
113-18A CF SET(G)
5/7 DD START
5/7 DD SCK
5/7 MODE DATA
5/7 STATUS DATA
5/7 RESET
5/7 INT 4FSC FREQ
5/7 REF 1ST FLD DET
5/7 REF SCH DET
REF IN
TP1000
8V-2
-8V-2
5V-6
-5V-6
R1018 :NM
D1001 :NM
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



DA204U PIN LAYOUT



2SA1610
2SA1611
2SC4177
PIN LAYOUT

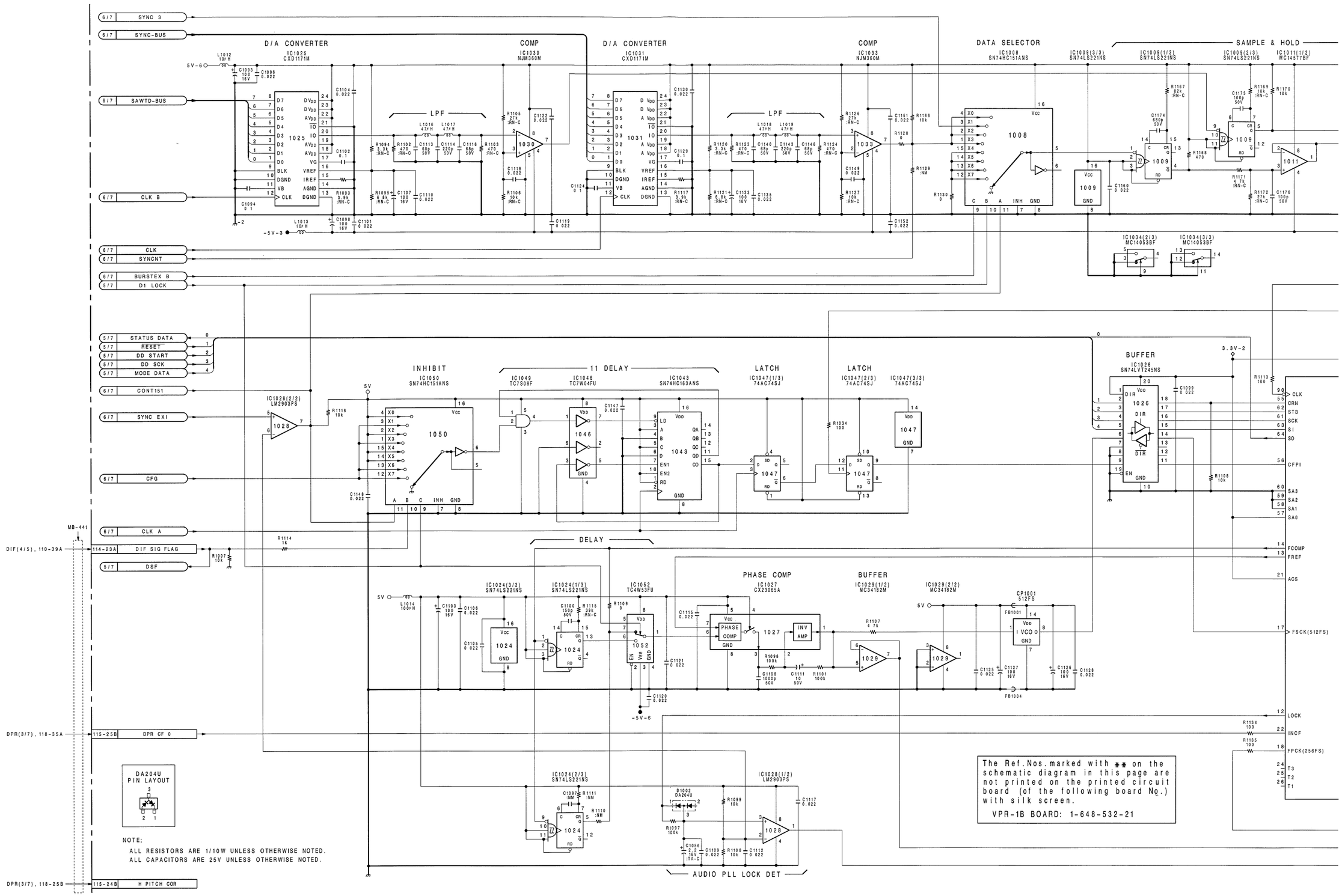


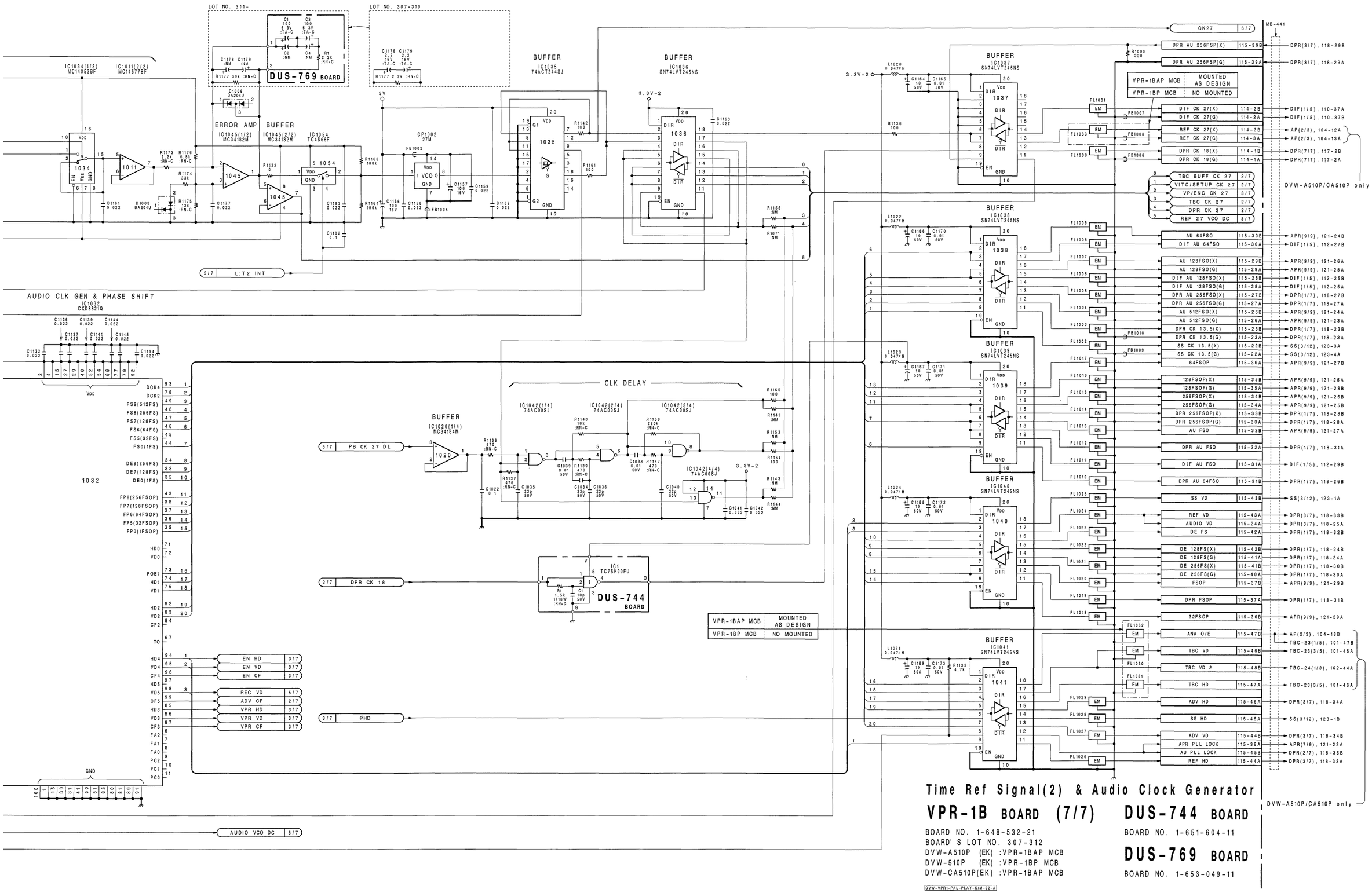
Time Ref Signal(1)

VPR-1B BOARD (6/7)

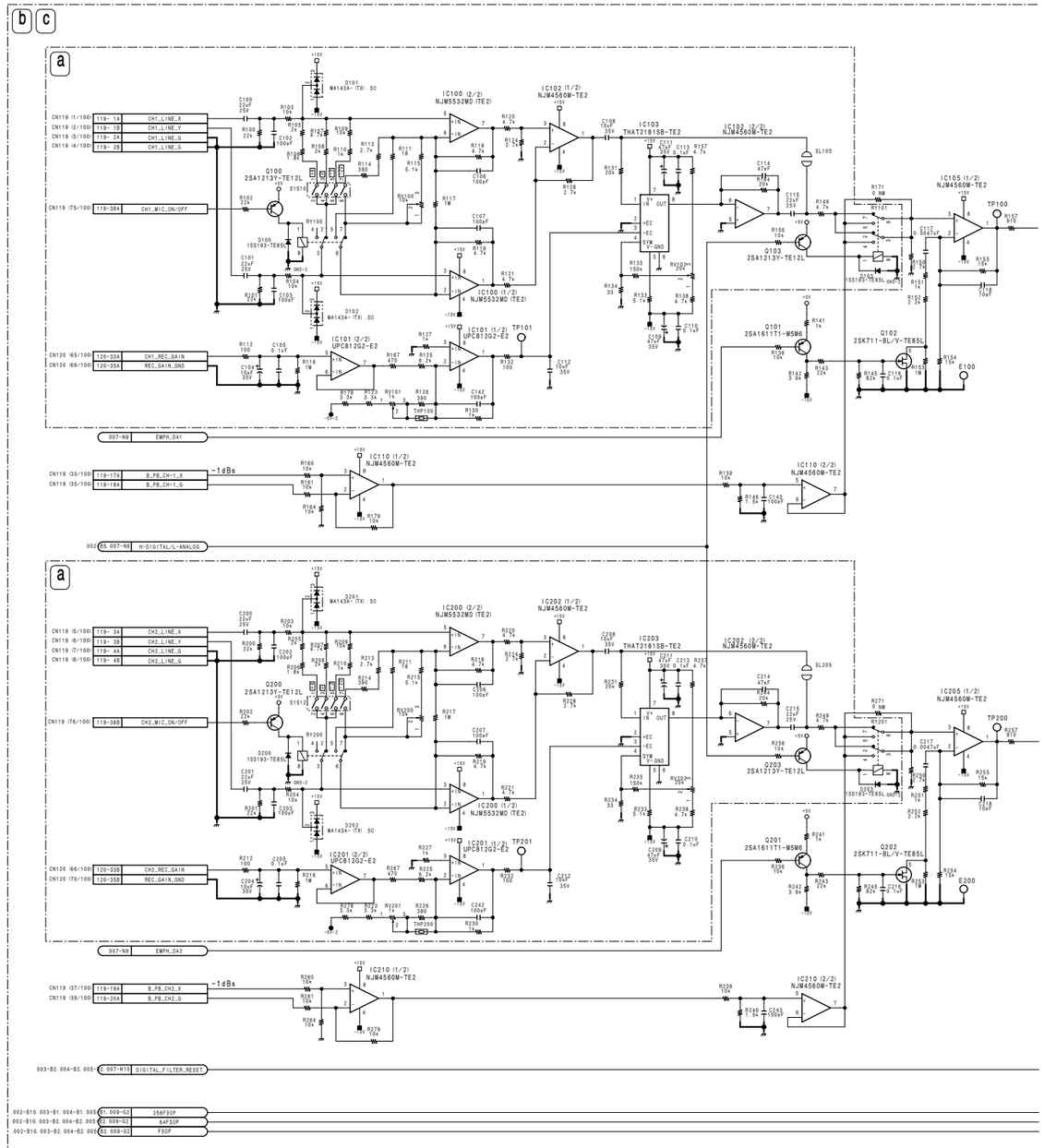
BOARD NO. 1-648-532-21
BOARD' S LOT NO. 307-312
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510P (EK) :VPR-1BP MCB
DVW-CA510P(EK) :VPR-1BAP MCB

DVW-VPR1-PAL-PLAY-S/M-02-A


D/A CONVERTER
IC1025 CXD1171M
COMP
IC1030 NJM360M
D/A CONVERTER
IC1031 CXD1171M
COMP
IC1033 NJM360M
DATA SELECTOR
IC1008 SN74HC151ANS
SAMPLE & HOLD
IC1009(3/3) SN74LS221NS
IC1009(1/3) SN74LS221NS
IC1009(2/3) SN74LS221NS
IC1011(1/2) MC14577BF
LPF
LPF
IC1034(2/3) MC14053BF
IC1034(3/3) MC14053BF
6/7 SYNC 3
6/7 SYNC-BUS
6/7 SAWTD-BUS
6/7 CLK B
6/7 CLK
6/7 SYNCNT
6/7 BURSTEX B
5/7 D1 LOCK
5/7 STATUS DATA
5/7 RESET
5/7 DD START
5/7 DD SCK
5/7 MODE DATA
6/7 CONT151
6/7 SYNC EXI
6/7 CFG
6/7 CLK A
DIF(4/5), 110-39A
114-23A DIF SIG FLAG
5/7 DSF
DPR(3/7), 118-35A
115-25B DPR CF 0
DPR(3/7), 118-25B
115-24B H PITCH COR
MB-441
INHIBIT
IC1050 SN74HC151ANS
11 DELAY
IC1049 TC7S08F
IC1046 TC7W04FU
IC1043 SN74HC163ANS
LATCH
IC1047(1/3) 74AC74SJ
LATCH
IC1047(2/3) 74AC74SJ
IC1047(3/3) 74AC74SJ
IC1028(2/2) LM2903PS
DELAY
PHASE COMP
IC1027 CX23065A
BUFFER
IC1029(1/2) MC34182M
IC1028(2/2) MC34182M
BUFFER
IC1026 SN74LVT245NS
IC1024(3/3) SN74LS221NS
IC1024(1/3) SN74LS221NS
IC1052 TC4W53FU
IC1024(2/3) SN74LS221NS
IC1028(1/2) LM2903PS
AUDIO PLL LOCK DET
CP1001 512FS
3.3V-2
5V
-5V-6
-5V-3
CLK
CRN
STB
SCK
SI
SO
CFPI
SA3
SA2
SA1
SA0
FCOMP
FREF
ACS
FSCK(512FS)
LOCK
INCF
FPCK(256FS)
T3
T2
T1
DA204U PIN LAYOUT
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.
The Ref.Nos. marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.
VPR-1B BOARD: 1-648-532-21


LOT NO. 311-
LOT NO. 307-310
DUS-769 BOARD
ERROR AMP
BUFFER
CLK DELAY
AUDIO CLK GEN & PHASE SHIFT
IC1032 CXD8821Q
IC1034(1/3) MC14053BF
IC1011(2/2) MC14577BF
IC1045(1/2) MC34182M
IC1054 TC4S66F
IC1035 74ACT244SJ
IC1036 SN74LVT245NS
IC1037 SN74LVT245NS
IC1038 SN74LVT245NS
IC1039 SN74LVT245NS
IC1040 SN74LVT245NS
IC1041 SN74LVT245NS
IC1042(1/4) 74AC00SJ
IC1042(2/4) 74AC00SJ
IC1042(3/4) 74AC00SJ
IC1042(4/4) 74AC00SJ
IC1020(1/4) MC34184M
CP1002 27M
D1006 DA204U
D1003 DA204U
5/7 L;T2 INT
5/7 PB CK 27 DL
2/7 DPR CK 18
3/7 ϕHD
IC1 TC7SH00FU
DUS-744 BOARD
VPR-1BAP MCB MOUNTED AS DESIGN
VPR-1BP MCB NO MOUNTED
EN HD 3/7
EN VD 3/7
EN CF 3/7
REC VD 5/7
ADV CF 2/7
VPR HD 3/7
VPR VD 3/7
VPR CF 3/7
AUDIO VCO DC 5/7
CK27 6/7
DPR AU 256FSP(X) 115-39B
DPR AU 256FSP(G) 115-39A
DIF CK 27(X) 114-2B
DIF CK 27(G) 114-2A
REF CK 27(X) 114-3B
REF CK 27(G) 114-3A
DPR CK 18(X) 114-1B
DPR CK 18(G) 114-1A
TBC BUFF CK 27 2/7
VITC/SETUP CK 27 2/7
VP/ENC CK 27 3/7
TBC CK 27 2/7
DPR CK 27 2/7
REF 27 VCO DC 5/7
AU 64FSO 115-30B
DIF AU 64FSO 115-30A
AU 128FSO(X) 115-29B
AU 128FSO(G) 115-29A
DIF AU 128FSO(X) 115-28B
DIF AU 128FSO(G) 115-28A
DPR AU 256FSO(X) 115-27B
DPR AU 256FSO(G) 115-27A
AU 512FSO(X) 115-26B
AU 512FSO(G) 115-26A
DPR CK 13.5(X) 115-23B
DPR CK 13.5(G) 115-23A
SS CK 13.5(X) 115-22B
SS CK 13.5(G) 115-22A
64FSOP 115-36A
128FSOP(X) 115-35B
128FSOP(G) 115-35A
256FSOP(X) 115-34B
256FSOP(G) 115-34A
DPR 256FSOP(X) 115-33B
DPR 256FSOP(G) 115-33A
AU FSO 115-32B
DPR AU FSO 115-32A
DIF AU FSO 115-31A
DPR AU 64FSO 115-31B
SS VD 115-43B
REF VD 115-43A
AUDIO VD 115-24A
DE FS 115-42A
DE 128FS(X) 115-42B
DE 128FS(G) 115-41A
DE 256FS(X) 115-41B
DE 256FS(G) 115-40A
FSOP 115-37B
DPR FSOP 115-37A
32FSOP 115-36B
ANA O/E 115-47B
TBC VD 115-46B
TBC VD 2 115-48B
TBC HD 115-47A
ADV HD 115-46A
SS HD 115-45A
ADV VD 115-44B
APR PLL LOCK 115-38A
AU PLL LOCK 115-45B
REF HD 115-44A
VPR-1BAP MCB MOUNTED AS DESIGN
VPR-1BP MCB NO MOUNTED
DVW-A510P only
DVW-A510P/CA510P only
MB-441
Time Ref Signal(2) & Audio Clock Generator
VPR-1B BOARD (7/7)
BOARD NO. 1-648-532-21
BOARD' S LOT NO. 307-312
DVW-A510P (EK) :VPR-1BAP MCB
DVW-510P (EK) :VPR-1BP MCB
DVW-CA510P(EK) :VPR-1BAP MCB
DUS-744 BOARD
BOARD NO. 1-651-604-11
DUS-769 BOARD
BOARD NO. 1-653-049-11
DVW-VPR1-PAL-PLAY-S/M-02-A

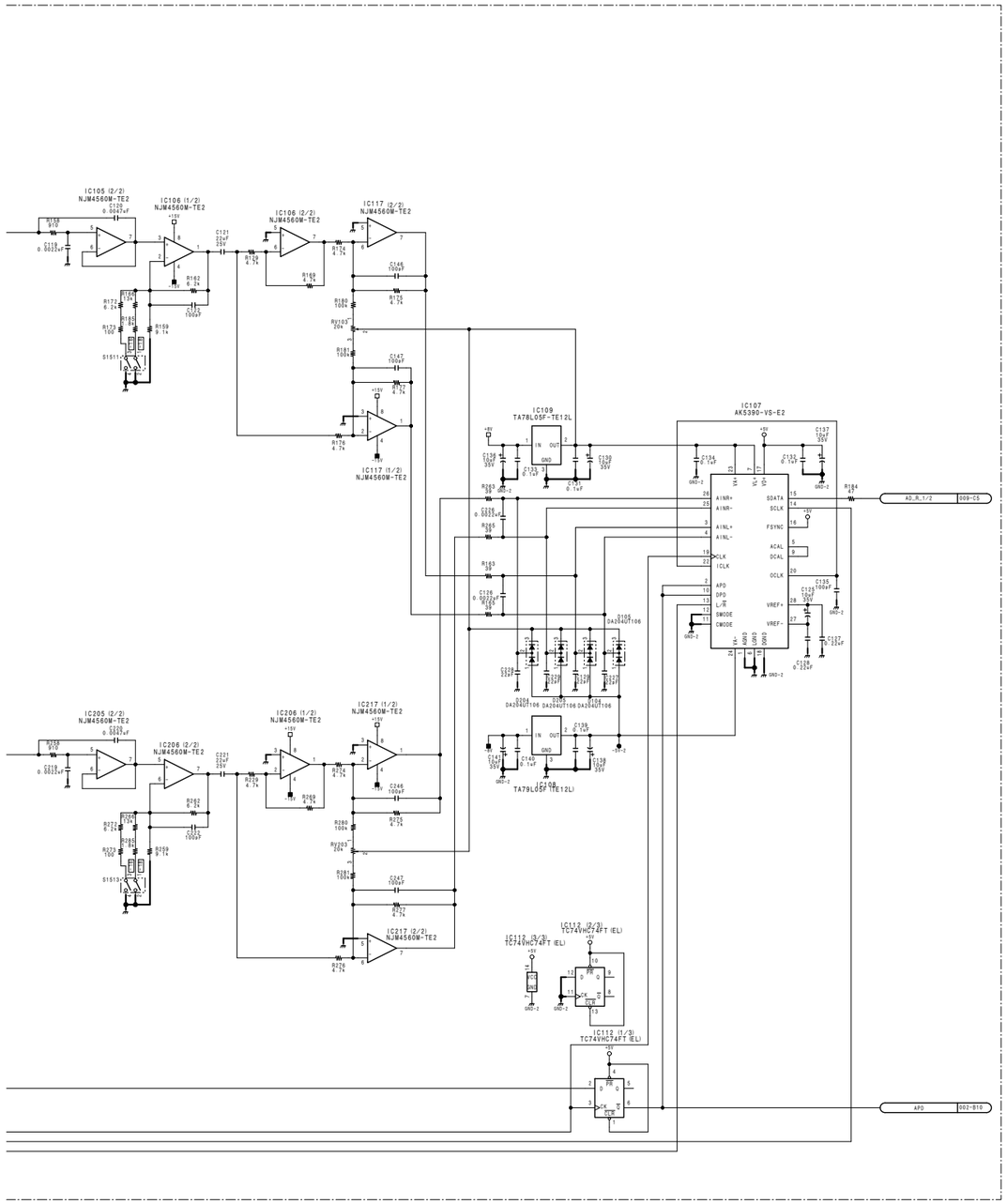
APR-1 (1/9)



	DVW-A500 DVW-500	DVW-A510	DVW-510	DVW-522
a	MOUNT	NO MOUNT	NO MOUNT	NO MOUNT
b	MOUNT	MOUNT	NO MOUNT	NO MOUNT
c	MOUNT	MOUNT	MOUNT	NO MOUNT

1-18 (b)

APR-1 (1/9)

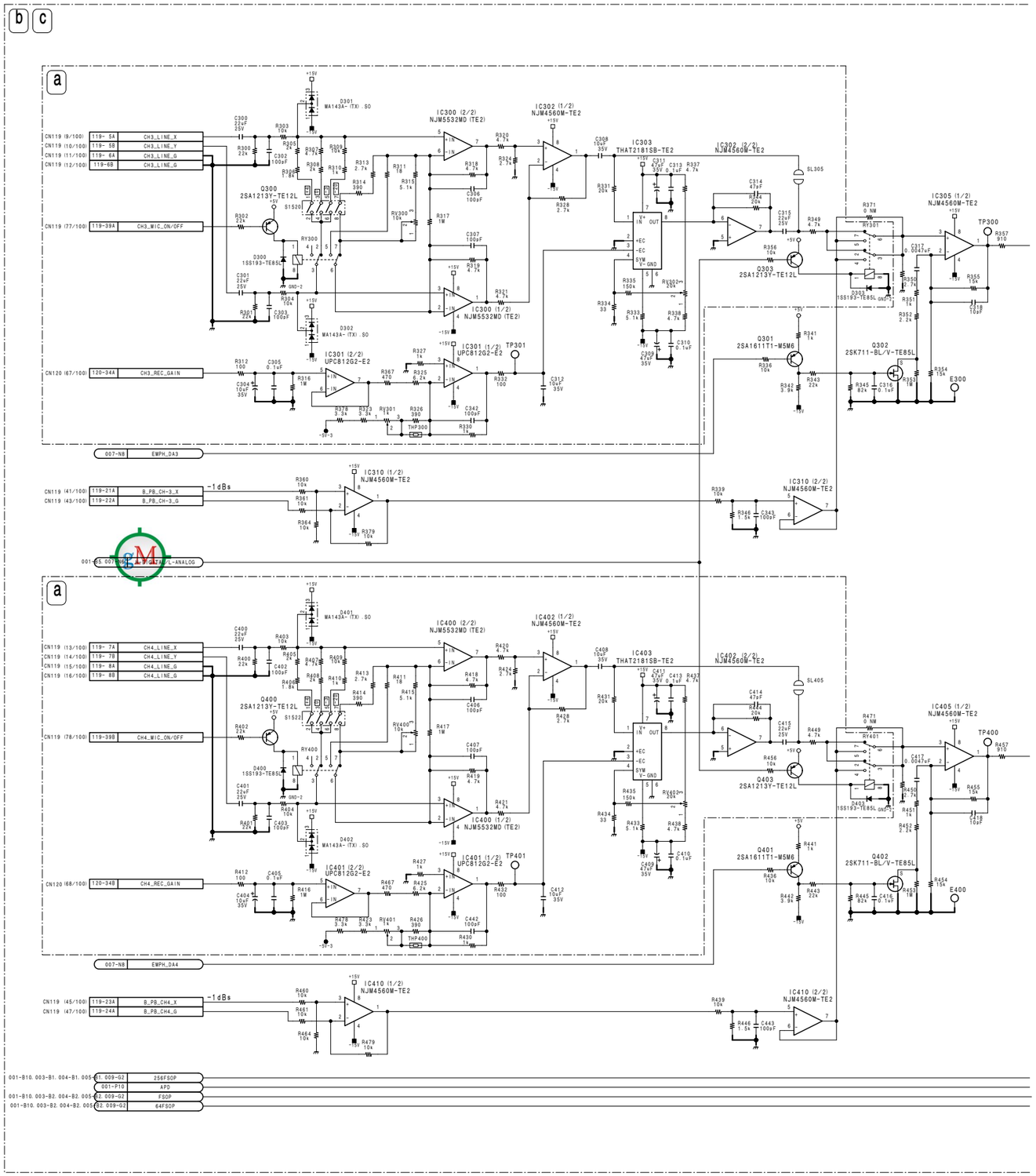


CH-1/CH-2 A/D Convert

APR-1 BOARD (1/9)

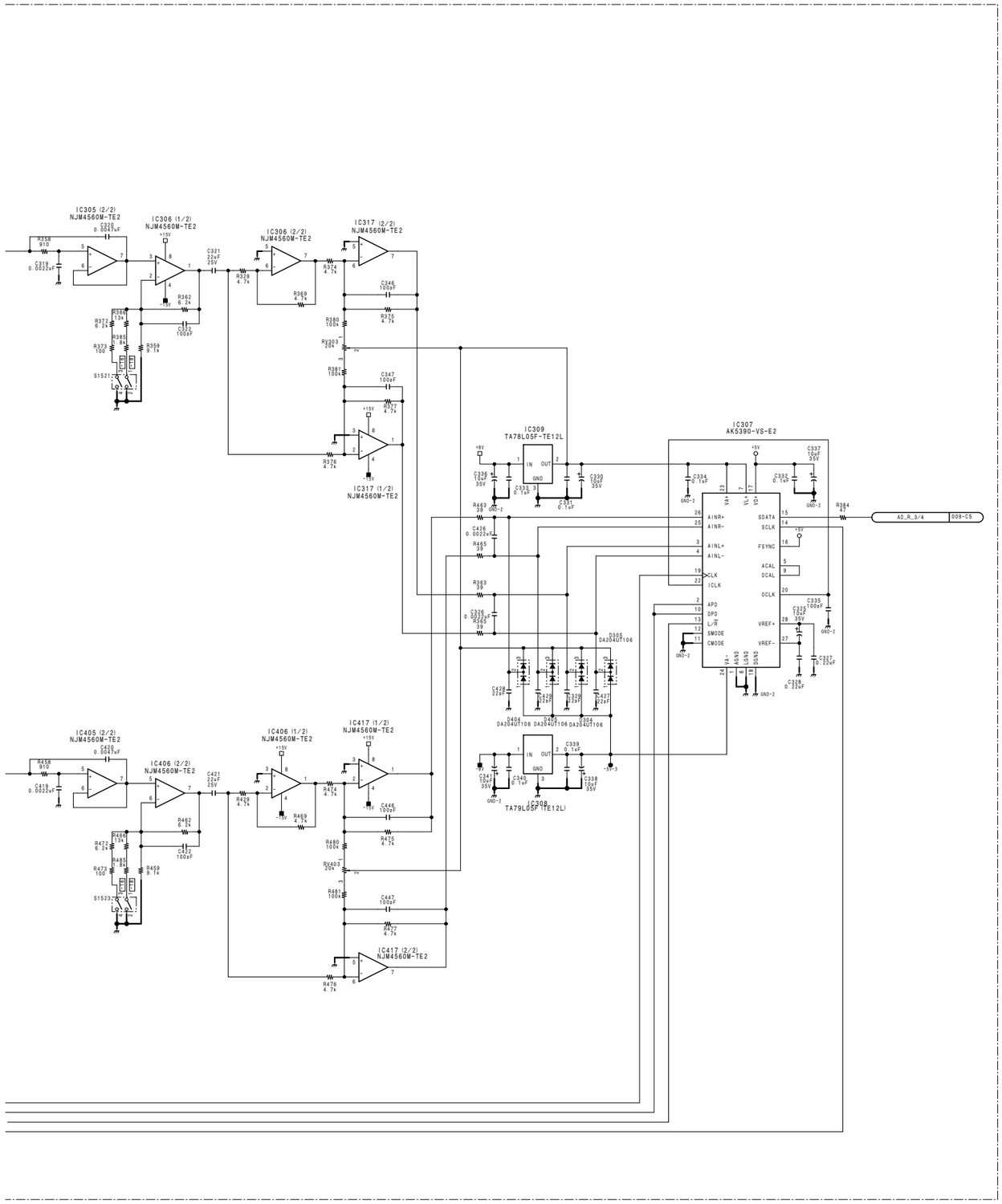
BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB
DVW-A500_APR-1_016_1

APR-1 (2/9)


IC300 (2/2) NJM5532MD (TE2)
IC302 (1/2) NJM4560M-TE2
IC303 THAT2181SB-TE2
IC302 (2/2) NJM4560M-TE2
IC305 (1/2) NJM4560M-TE2
IC300 (1/2) NJM5532MD (TE2)
IC301 (2/2) UPC812G2-E2
IC301 (1/2) UPC812G2-E2
IC310 (1/2) NJM4560M-TE2
IC310 (2/2) NJM4560M-TE2
IC400 (2/2) NJM5532MD (TE2)
IC402 (1/2) NJM4560M-TE2
IC403 THAT2181SB-TE2
IC402 (2/2) NJM4560M-TE2
IC405 (1/2) NJM4560M-TE2
IC400 (1/2) NJM5532MD (TE2)
IC401 (2/2) UPC812G2-E2
IC401 (1/2) UPC812G2-E2
IC410 (1/2) NJM4560M-TE2
IC410 (2/2) NJM4560M-TE2
Q300 2SA1213Y-TE12L
Q303 2SA1213Y-TE12L
Q301 2SA1611T1-M5M6
Q302 2SK711-BL/V-TE85L
Q400 2SA1213Y-TE12L
Q403 2SA1213Y-TE12L
Q401 2SA1611T1-M5M6
Q402 2SK711-BL/V-TE85L
D300 1SS193-TE85L
D301 MA143A-(TX) .SO
D302 MA143A-(TX) .SO
D303 1SS193-TE85L
D400 1SS193-TE85L
D401 MA143A-(TX) .SO
D402 MA143A-(TX) .SO
D403 1SS193-TE85L
S1502
S1522
SL305
SL405
TP300
TP301
TP400
TP401
E300
E400
CN119 (9/100)
CN119 (10/100)
CN119 (11/100)
CN119 (12/100)
119- 5A CH3_LINE_X
119- 5B CH3_LINE_Y
119- 6A CH3_LINE_G
119-6B CH3_LINE_G
CN119 (77/100)
119-39A CH3_MIC_ON/OFF
CN120 (67/100)
120-34A CH3_REC_GAIN
007-N8 EMPH_DA3
CN119 (41/100)
CN119 (43/100)
119-21A B_PB_CH-3_X
119-22A B_PB_CH-3_G
-1dBs
001-A5 007-N6 L-ANALOG
CN119 (13/100)
CN119 (14/100)
CN119 (15/100)
CN119 (16/100)
119- 7A CH4_LINE_X
119- 7B CH4_LINE_Y
119- 8A CH4_LINE_G
119- 8B CH4_LINE_G
CN119 (78/100)
119-39B CH4_MIC_ON/OFF
CN120 (68/100)
120-34B CH4_REC_GAIN
007-N8 EMPH_DA4
CN119 (45/100)
CN119 (47/100)
119-23A B_PB_CH4_X
119-24A B_PB_CH4_G
-1dBs
001-B10. 003-B1. 004-B1. 005-B1. 009-G2 256FSOP
001-P10 APD
001-B10. 003-B2. 004-B2. 005-B2. 009-G2 FSOP
001-B10. 003-B2. 004-B2. 005-B2. 009-G2 64FSOP

1-20 (b)

APR-1 (2/9)

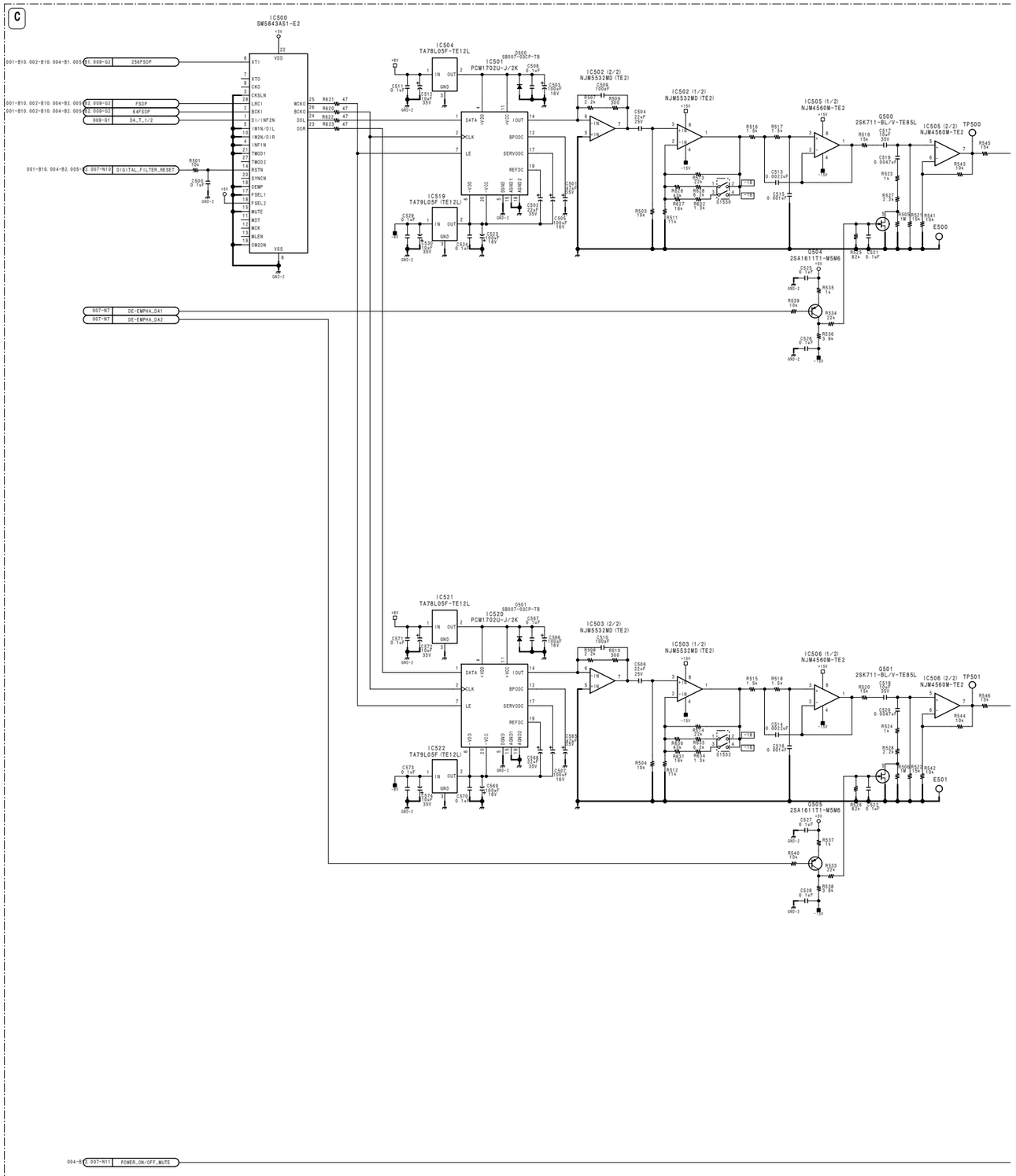


CH-3/CH-4 A/D Convert

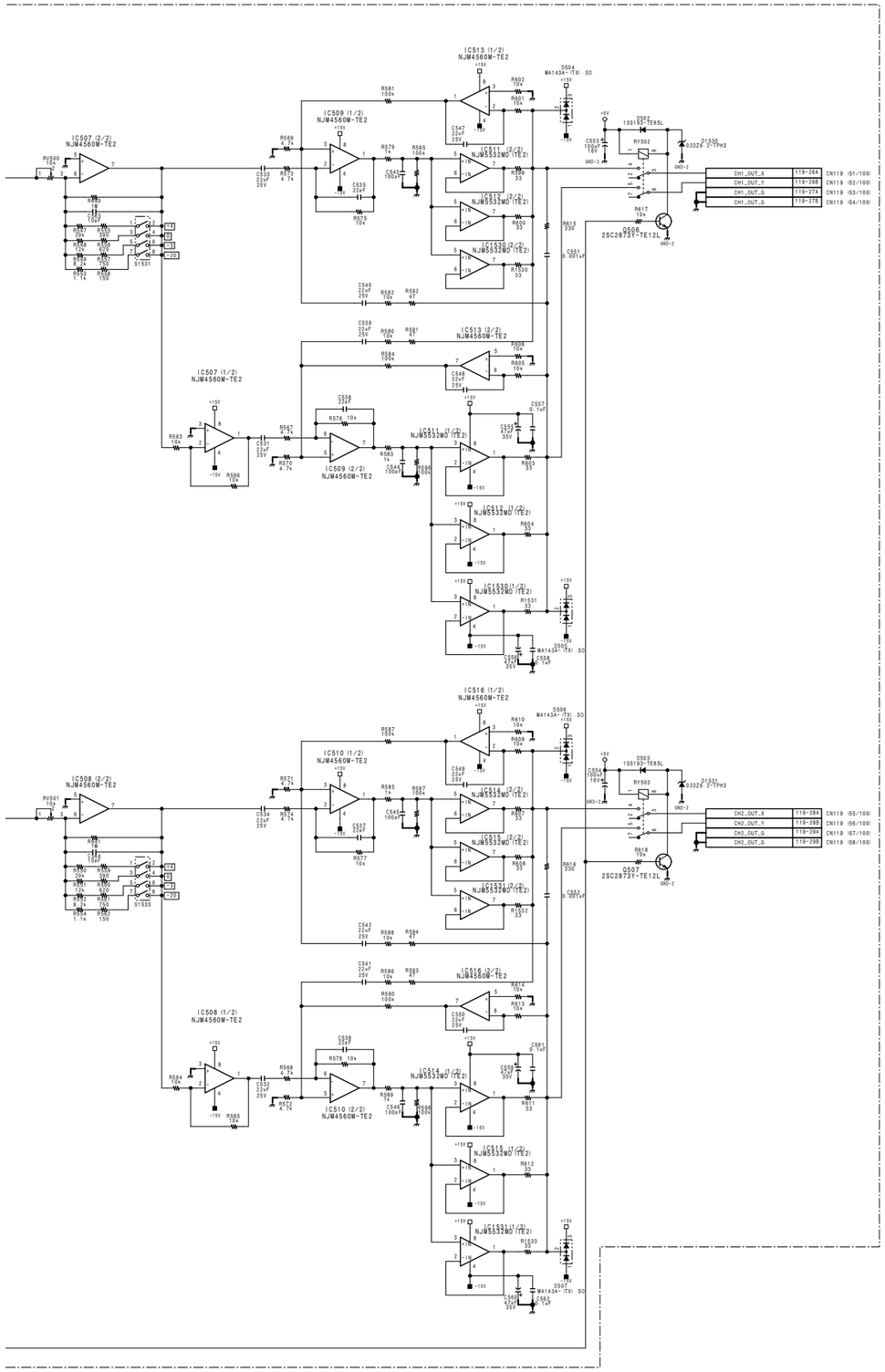
APR-1 BOARD (2/9)

BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB
DVW-A500_APR-1_016_2

APR-1 (3/9)


C
IC500
SM5843AS1-E2
IC504
TA78L05F-TE12L
IC507
PCM1702U-J/2K
D500
S8007-03CP-TB
IC502 (2/2)
NJM5532MD (TE2)
IC502 (1/2)
NJM5532MD (TE2)
IC505 (1/2)
NJM4560M-TE2
Q500
2SK711-BL/V-TE85L
IC505 (2/2)
NJM4560M-TE2
TP500
IC519
TA79L05F (TE12L)
Q504
2SA1611T1-M5M6
E500
IC521
TA78L05F-TE12L
IC520
PCM1702U-J/2K
D501
S8007-03CP-TB
IC503 (2/2)
NJM5532MD (TE2)
IC503 (1/2)
NJM5532MD (TE2)
IC506 (1/2)
NJM4560M-TE2
Q501
2SK711-BL/V-TE85L
IC506 (2/2)
NJM4560M-TE2
TP501
IC522
TA79L05F (TE12L)
Q505
2SA1611T1-M5M6
E501
001-B10. 002-B10. 004-B1. 005
001-B10. 002-B10. 004-B2. 005
001-B10. 004-B2. 005
004-B
DIGITAL_FILTER_RESET
DE-EMPHA_DA1
DE-EMPHA_DA2
POWER_ON/OFF_MUTE

1-22 (b)

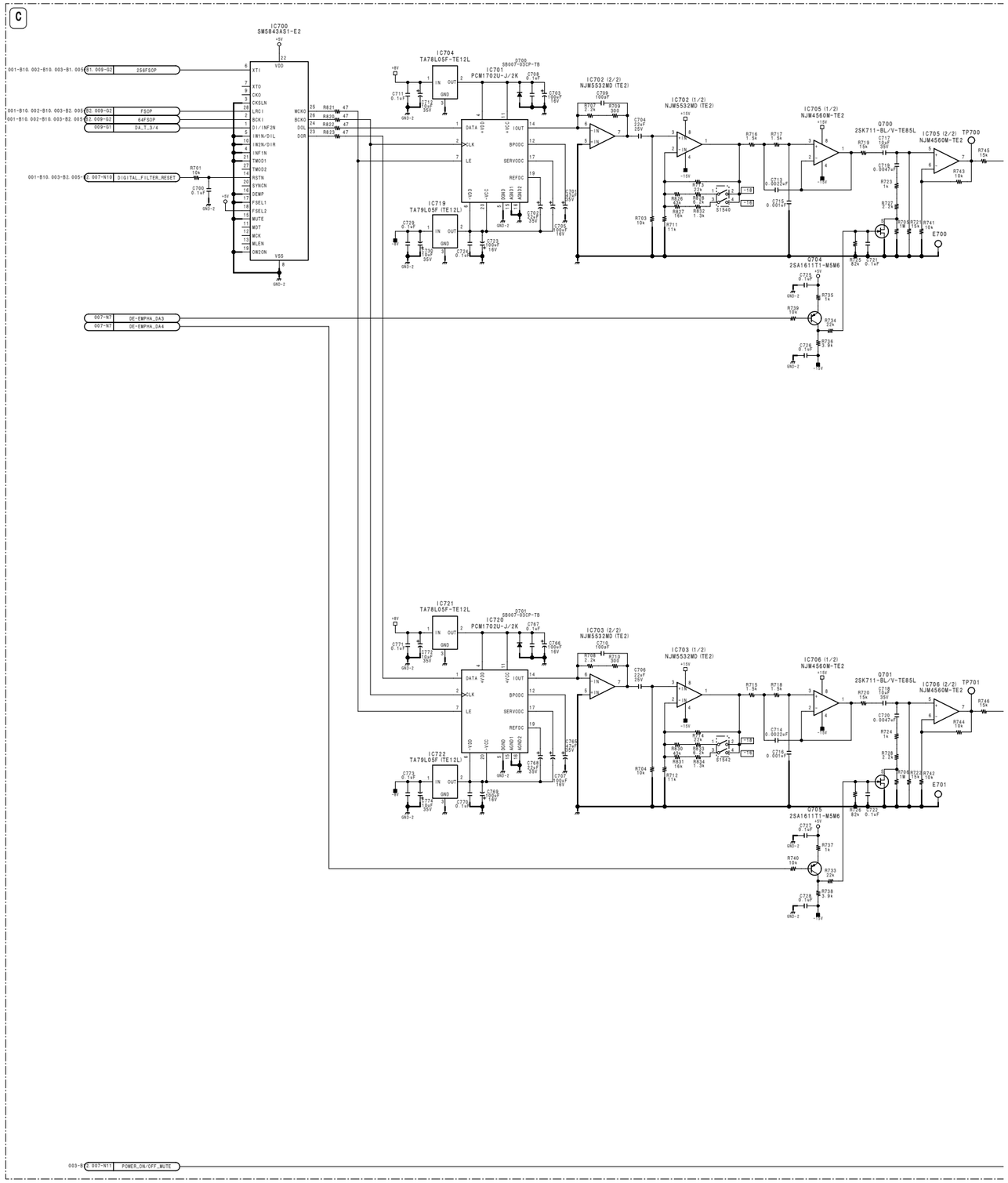


CH-1/CH-2 D/A Convert & Output Drive

APR-1 BOARD (3/9)

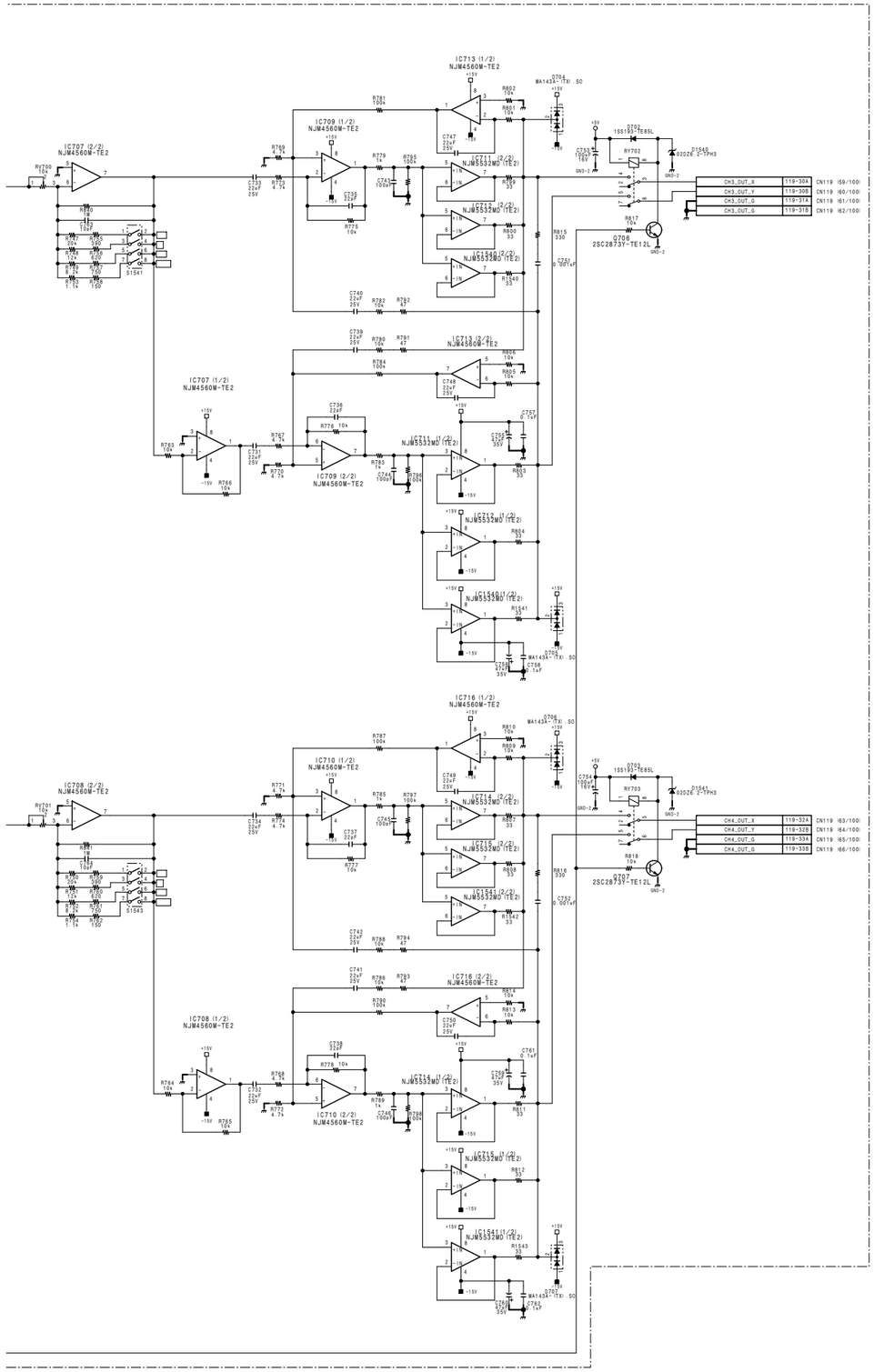
BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB
DVW-A500_APR-1_016_3

APR-1 (4/9)


C
IC700
SM5843AS1-E2
IC704
TA78L05F-TE12L
IC701
PCM1702U-J/2K
IC702 (2/2)
NJM5532MD (TE2)
IC702 (1/2)
NJM5532MD (TE2)
IC705 (1/2)
NJM4560M-TE2
IC705 (2/2)
NJM4560M-TE2
Q700
2SK711-BL/V-TE85L
Q704
2SA1611T1-M5M6
E700
TP700
IC719
TA79L05F (TE12L)
IC721
TA78L05F-TE12L
IC720
PCM1702U-J/2K
IC703 (2/2)
NJM5532MD (TE2)
IC703 (1/2)
NJM5532MD (TE2)
IC706 (1/2)
NJM4560M-TE2
IC706 (2/2)
NJM4560M-TE2
Q701
2SK711-BL/V-TE85L
Q705
2SA1611T1-M5M6
E701
TP701
IC722
TA79L05F (TE12L)
DIGITAL_FILTER_RESET
DE-EMPHA_DA3
DE-EMPHA_DA4
POWER_ON/OFF_MUTE

1-24 (b)

APR-1 (4/9)

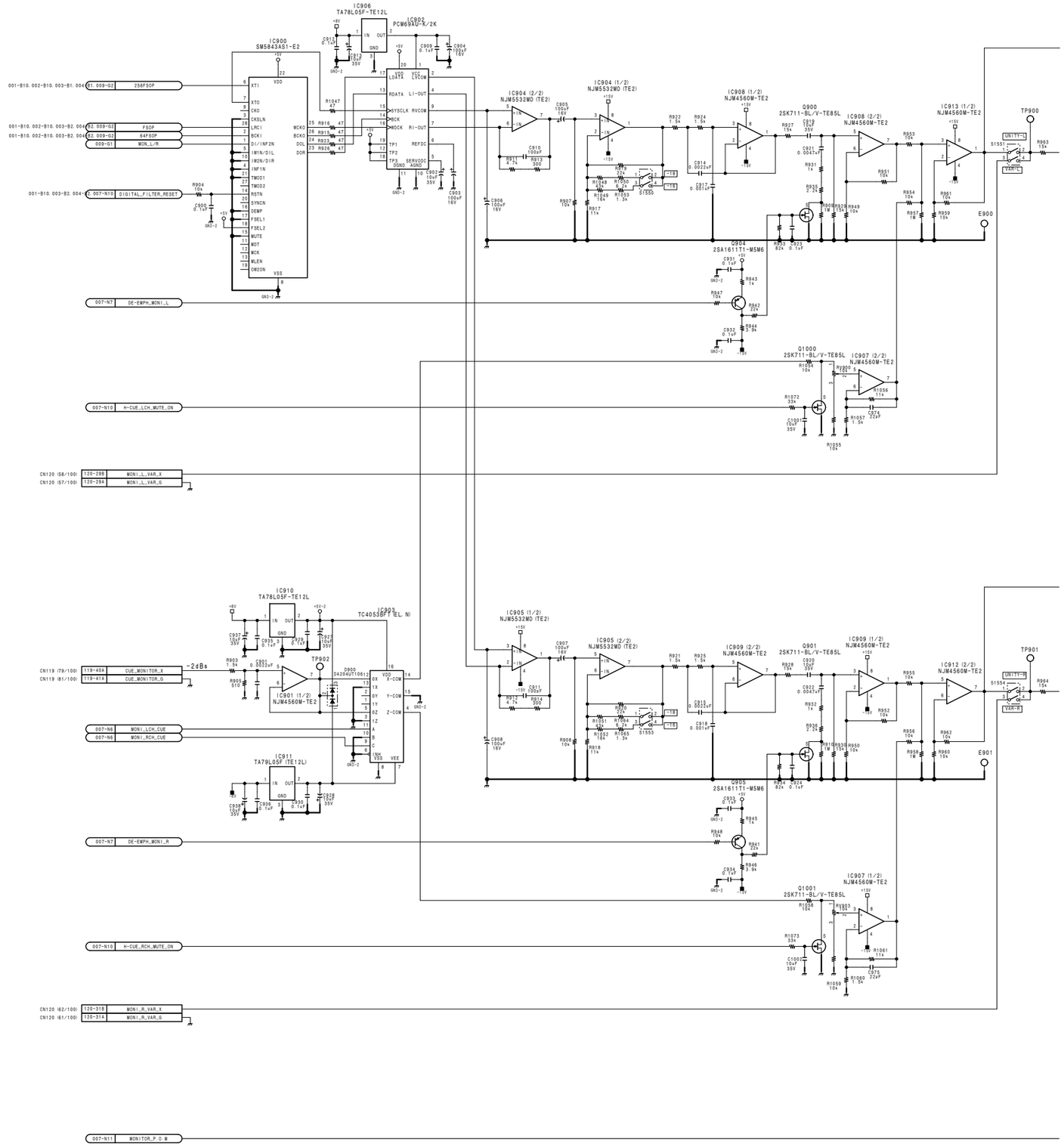


CH-3/CH-4 D/A Convert & Output Drive

APR-1 BOARD (4/9)

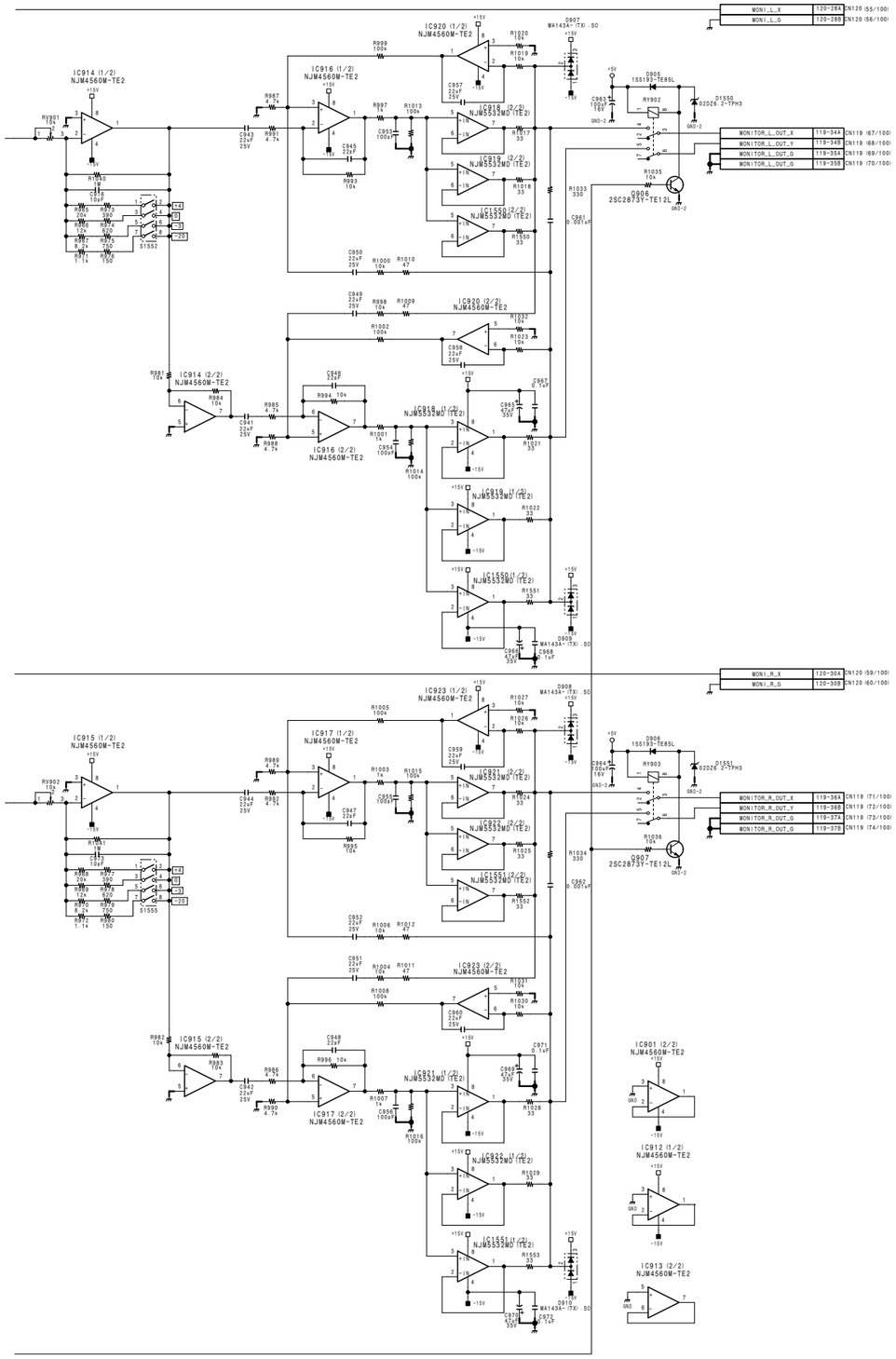
BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB
DVW-A500_APR-1_016_4

APR-1 (5/9)


IC906
TA78L05F-TE12L
IC902
PCM69XU-K/2K
IC900
SM5843AS1-E2
IC904 (2/2)
NJM5532MD (TE2)
IC904 (1/2)
NJM5532MD (TE2)
IC908 (1/2)
NJM4560M-TE2
Q900
2SK711-BL/V-TE85L
IC908 (2/2)
NJM4560M-TE2
IC913 (1/2)
NJM4560M-TE2
TP900
E900
Q904
2SA1611T1-M5M6
Q1000
2SK711-BL/V-TE85L
IC907 (2/2)
NJM4560M-TE2
IC910
TA78L05F-TE12L
IC903
TC4053BF(TEL N)
IC905 (1/2)
NJM5532MD (TE2)
IC905 (2/2)
NJM5532MD (TE2)
IC909 (2/2)
NJM4560M-TE2
Q901
2SK711-BL/V-TE85L
IC909 (1/2)
NJM4560M-TE2
IC912 (2/2)
NJM4560M-TE2
TP901
E901
Q905
2SA1611T1-M5M6
Q1001
2SK711-BL/V-TE85L
IC907 (1/2)
NJM4560M-TE2
IC911
TA79L05F (TE12L)
001-B10. 002-B10. 003-B1. 004
001-B10. 002-B10. 003-B2. 004
001-B10. 002-B10. 003-B2. 004
001-B10. 003-B2. 004
007-N7
007-N10
CN120 (58/100)
CN120 (57/100)
CN119 (79/100)
CN119 (81/100)
007-N6
007-N6
007-N7
007-N10
CN120 (62/100)
CN120 (61/100)
007-N11
256FSOP
FSOP
64FSOP
MON_L/R
DIGITAL_FILTER_RESET
DE-EMPH_MONI_L
H-CUE_LCH_MUTE_ON
MONI_L_VAR_X
MONI_L_VAR_G
-2dBs
CUE_MONITOR_X
CUE_MONITOR_G
MONI_LCH_CUE
MONI_RCH_CUE
DE-EMPH_MONI_R
H-CUE_RCH_MUTE_ON
MONI_R_VAR_X
MONI_R_VAR_G
MONITOR_P. O. W
UNITY-L
VAR-L
UNITY-R
VAR-R

1-26 (b)

APR-1 (5/9)

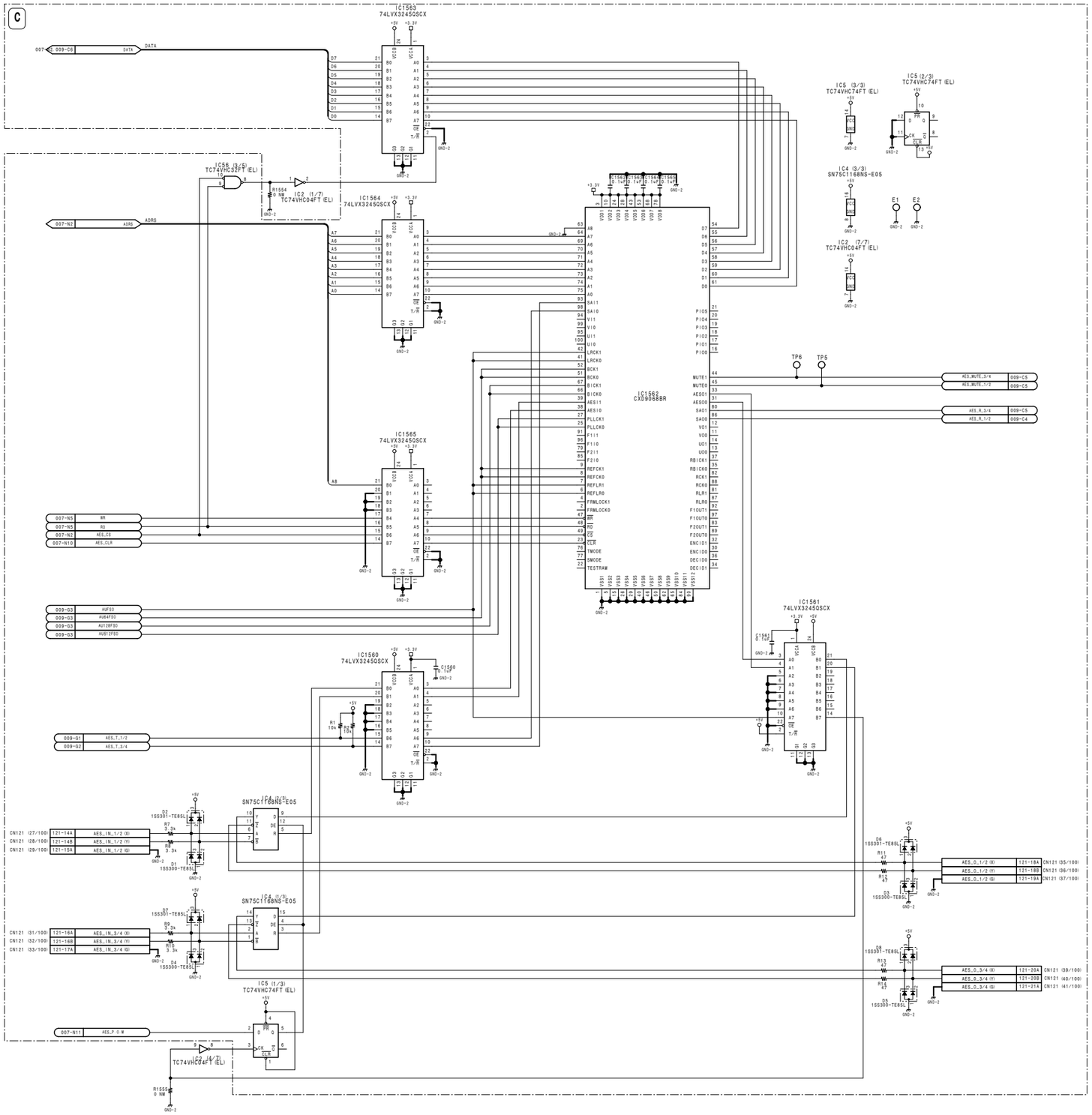


Monitor L/R D/A Convert & Output Drive

APR-1 BOARD (5/9)

BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB

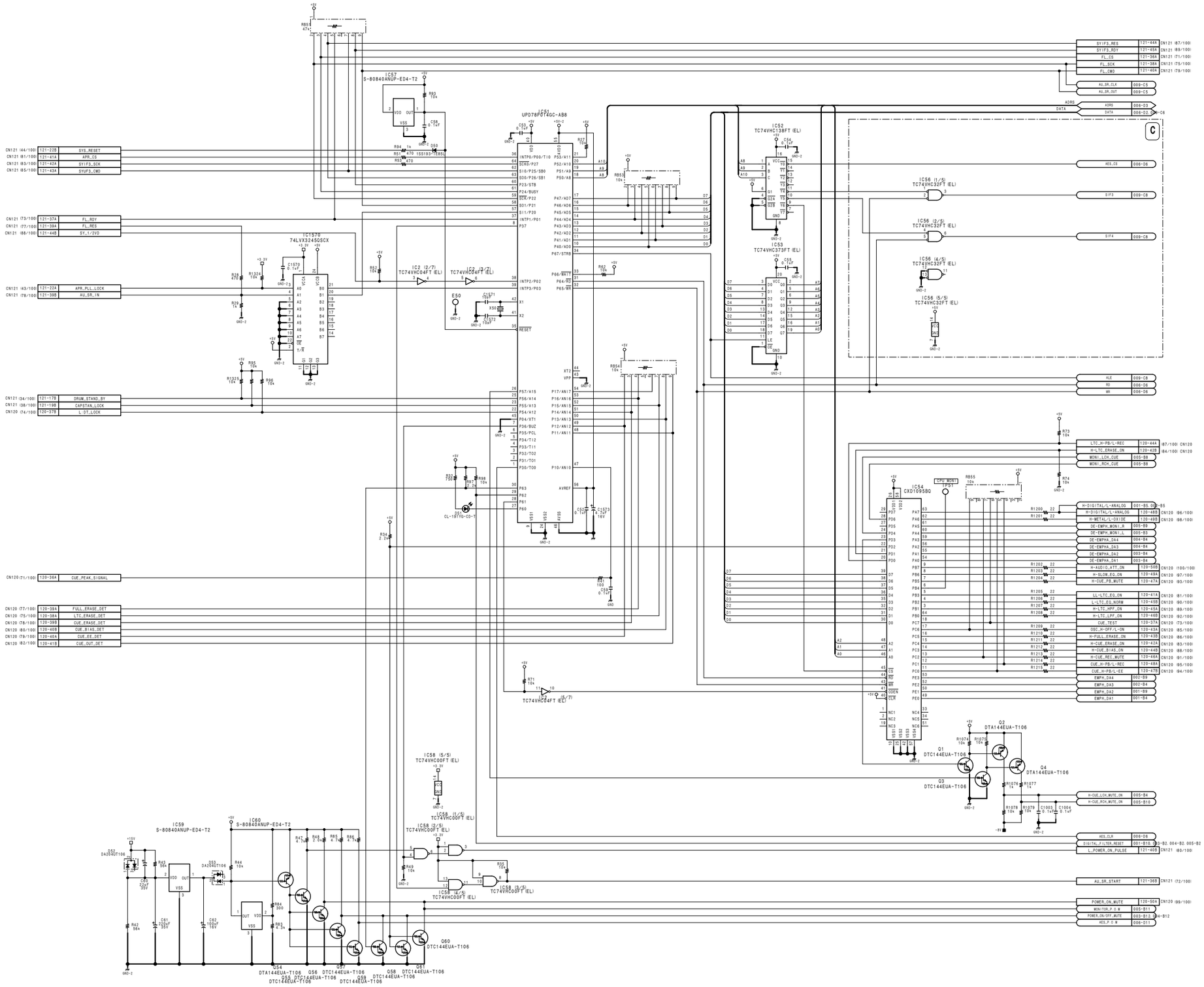
DVW-A500_APR-1_016_5



AES Encode/Decode

APR-1 BOARD (6/9)

BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB
DVW-A500_APR-1_016_6



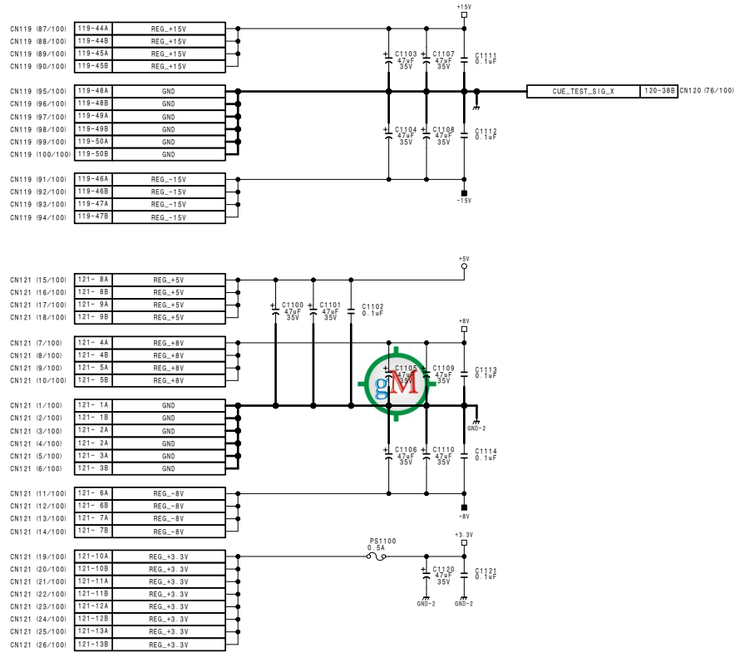
Digital Audio System Control

APR-1 BOARD (7/9)

BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB

DVW-A500_APR-1_016_7

APR-1 (8/9)



Digital Audio Self-Diagnosis

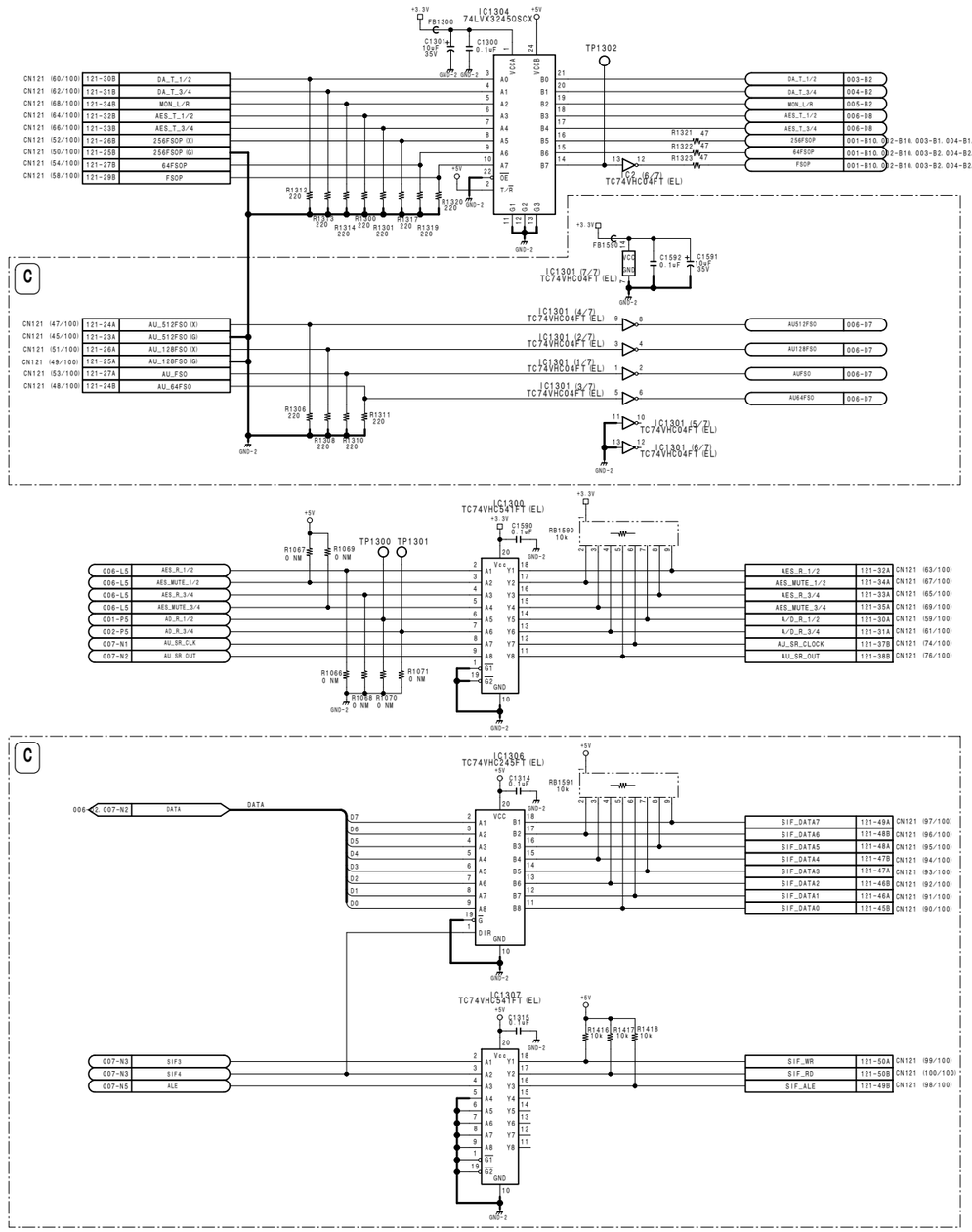
APR-1 BOARD (8/9)

BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB

DVW-A500_APR-1_016_8

1-30 (b)

APR-1 (9/9)



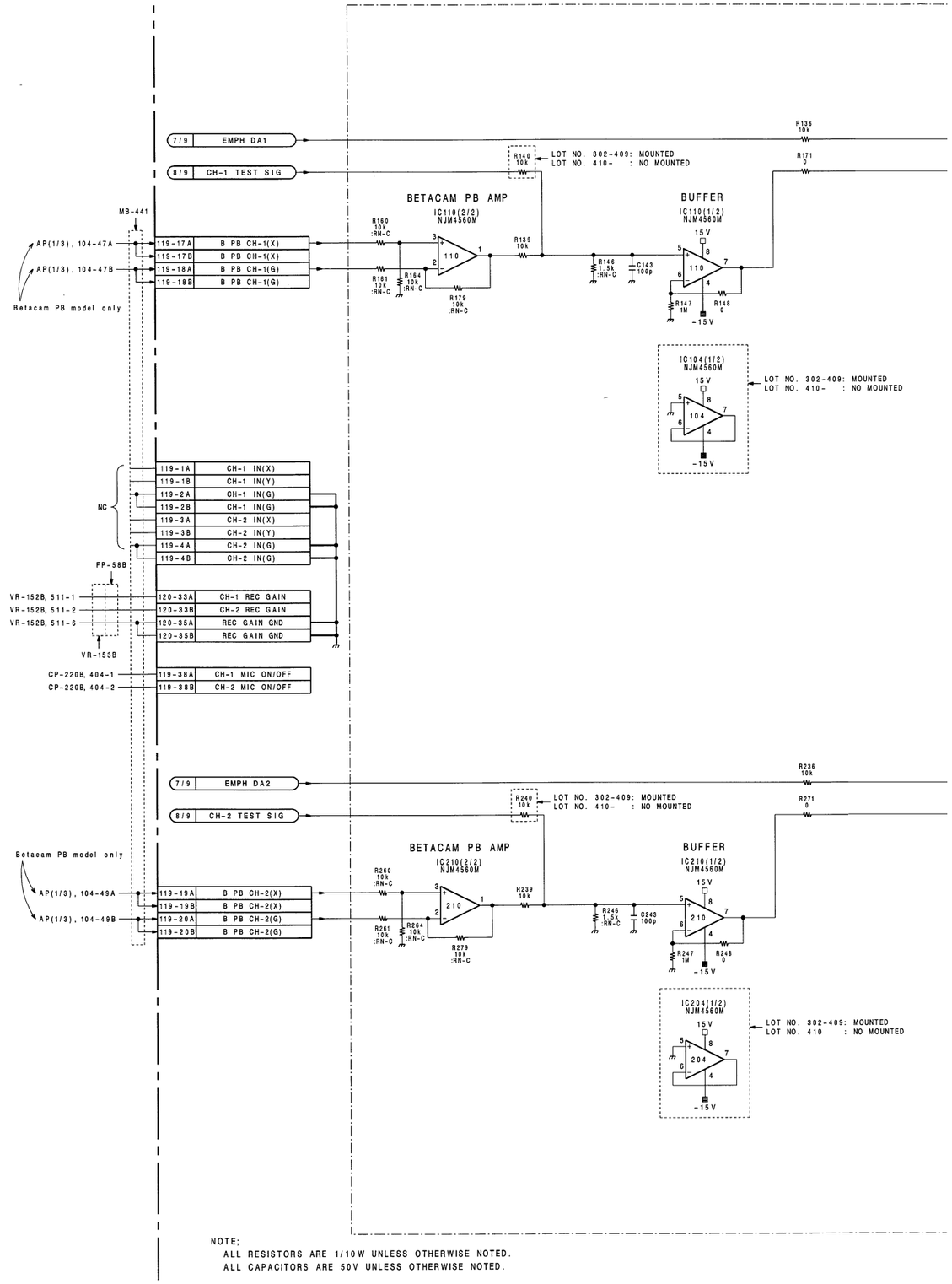
Bus Buffer

APR-1 BOARD (9/9)

BOARD NO. 1-648-534-16
BOARD'S LOT NO. 910-
DVW-A500 (J, UC) : APR-1 MCB
DVW-A500P (EK) : APR-1 MCB
DVW-A500P (UC) : APR-1 MCB
DVW-500 (J, UC) : APR-1 MCB
DVW-500P (EK) : APR-1 MCB
DVW-500P (UC) : APR-1 MCB
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BA MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1B MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BA MCB

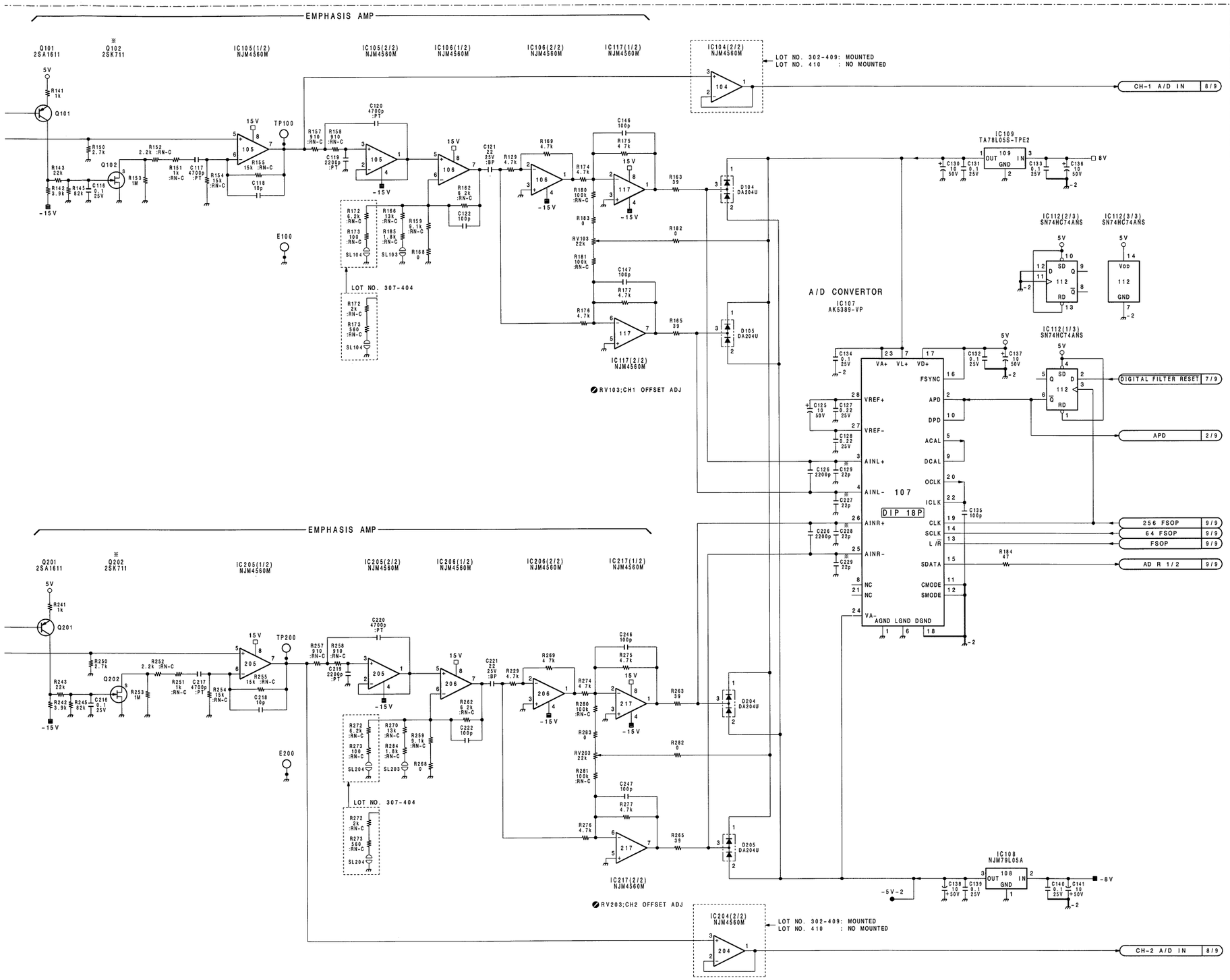
DVW-A500_APR-1_016_9

APR-1BA/1B (1/9)



1-18 (a)

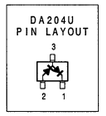
APR-1BA/1B (1/9)



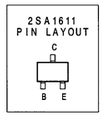
※PART CHANGE INFORMATION

Part change information			Change	Repair part	Simulataneously
Ref. No.	Old	New	LOT No.	for Old part	change part
C129	2200p	22p	401	22p	C227, C228, C229
C227	2200p	22p	401	22p	C129, C228, C229
C228	2200p	22p	401	22p	C129, C227, C229
C229	2200p	22p	401	22p	C129, C227, C228
Q102	2SK300	2SK711	405	2SK711	
Q202	2SK300	2SK711	405	2SK711	

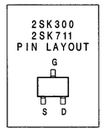
DA204U PIN LAYOUT



2SA1611 PIN LAYOUT



2SK300 2SK711 PIN LAYOUT



For APR-1BA board only

LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

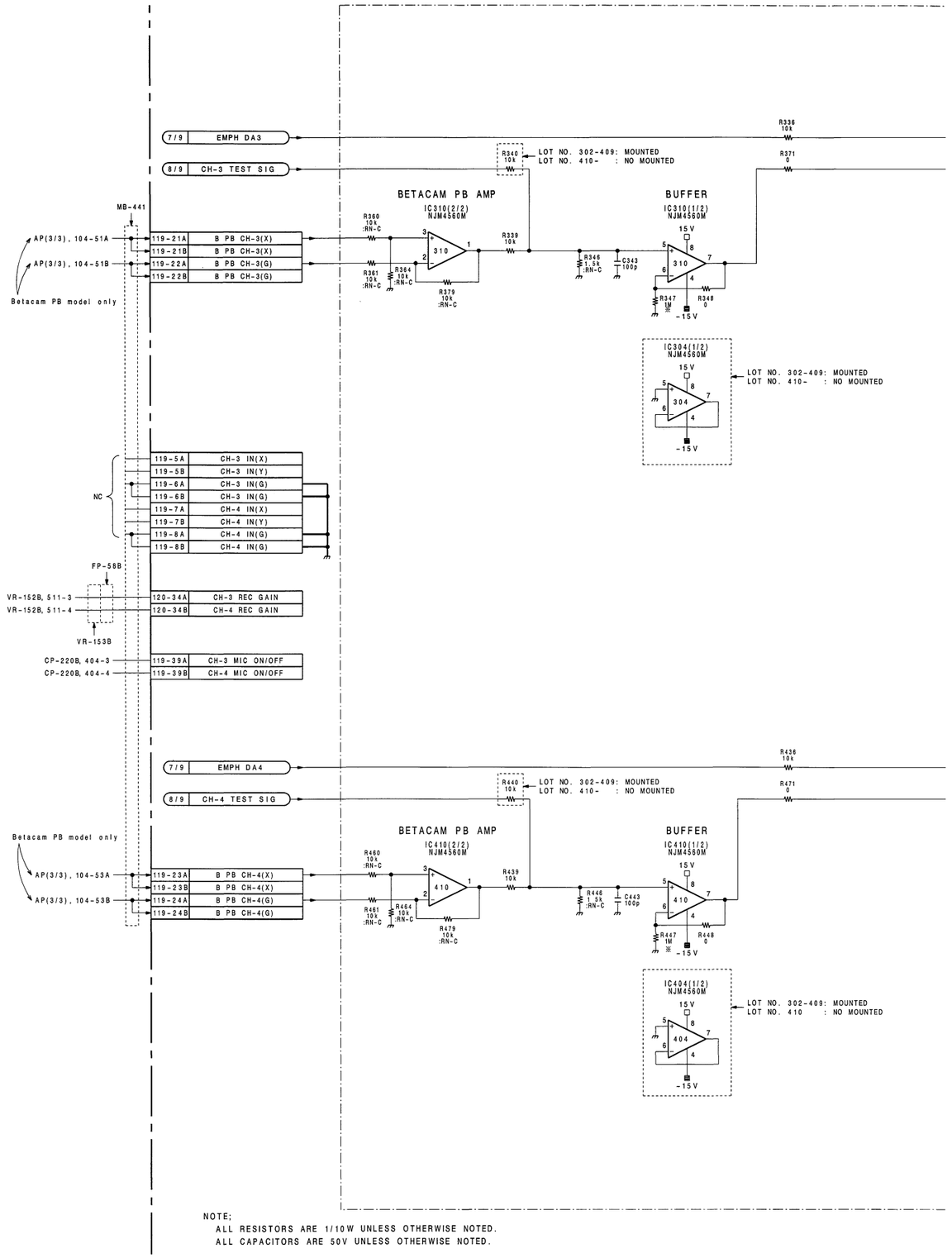
Betacam Audio CH-1/CH-2 A/D Convert

APR-1BA/1B BOARD (1/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD' S LOT NO. 307-909
DVW-A510 (J, UC) :APR-1BA MCB
DVW-A510P (EK) :APR-1BAP MCB
DVW-510 (J, UC) :APR-1B MCB
DVW-510P (EK) :APR-1BP MCB
DVW-CA510(J, UC) :APR-1BA MCB
DVW-CA510P(EK) :APR-1BAP MCB

DVW-APR1-ALL-PLAY-S/M-03

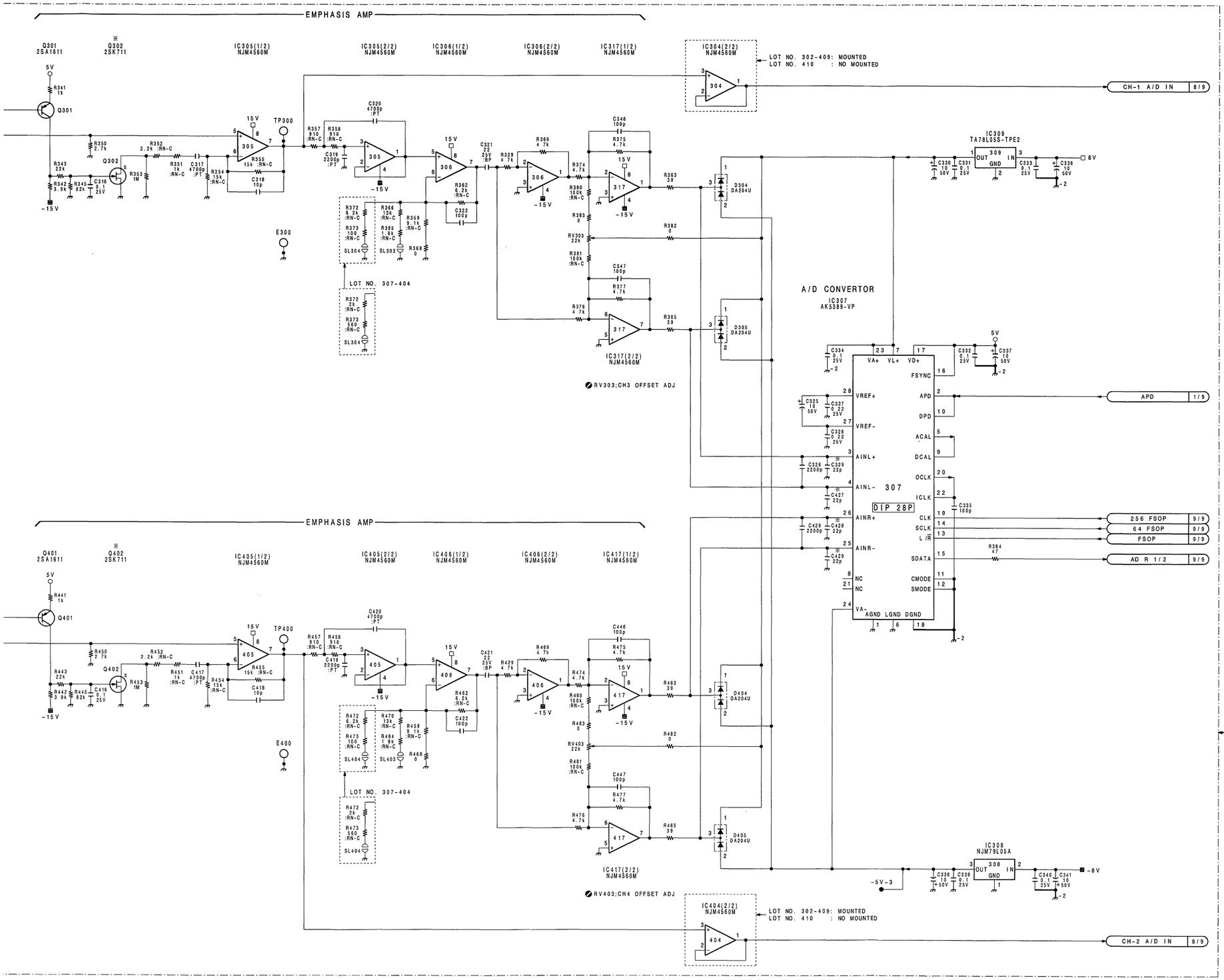
APR-1BA/1B (2/9)



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

1-20 (a)

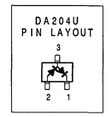
APR-1BA/1B (2/9)



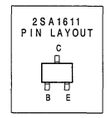
※PART CHANGE INFORMATION

Part change information Ref. No.	Old		New	Change LOT No.	Repair part for Old part	Simulataneously change part
R347	1k	→	1M	310	1M	
R447	1k	→	1M	310	1M	
C329	2200p	→	22p	401	22p	C427, C428, C429
C427	2200p	→	22p	401	22p	C329, C428, C429
C428	2200p	→	22p	401	22p	C329, C427, C429
C429	2200p	→	22p	401	22p	C329, C427, C428
Q302	2SK300	→	2SK711	405	2SK711	
Q402	2SK300	→	2SK711	405	2SK711	

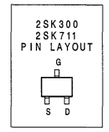
DA204U PIN LAYOUT



2SA1611 PIN LAYOUT



2SK300 2SK711 PIN LAYOUT



For APR-1BA board only

LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

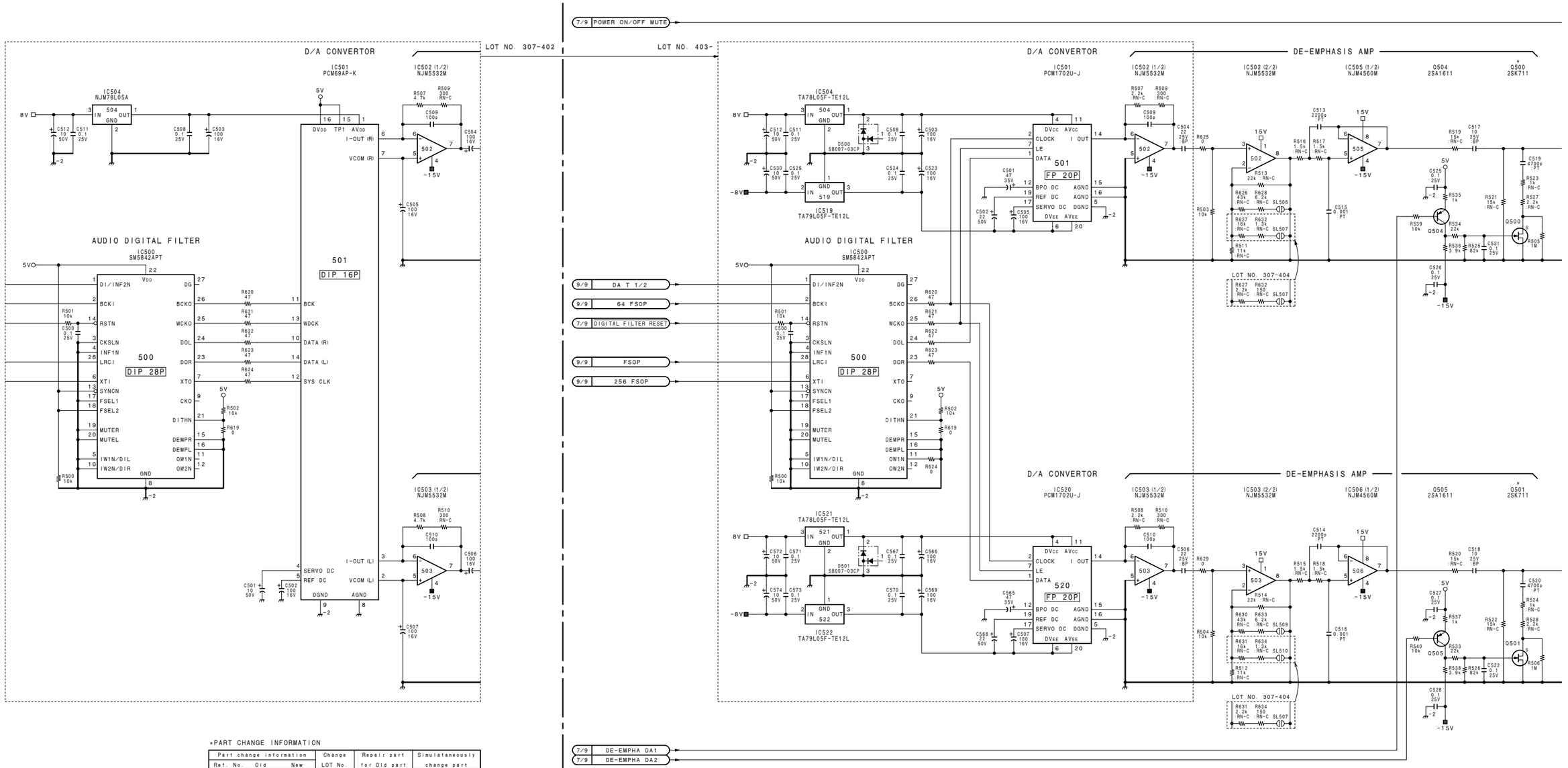
Betacam Audio CH-3/CH-4 A/D Convert

APR-1BA/1B BOARD (2/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD' S LOT NO. 307-909
DVW-A510 (J, UC) :APR-1BA MCB
DVW-A510P (EK) :APR-1BAP MCB
DVW-510 (J, UC) :APR-1B MCB
DVW-510P (EK) :APR-1BP MCB
DVW-CA510(J, UC) :APR-1BA MCB
DVW-CA510P(EK) :APR-1BAP MCB

DVW-APR1-ALL-PLAY-S/M-03

APR-1BA/1B (3/9)



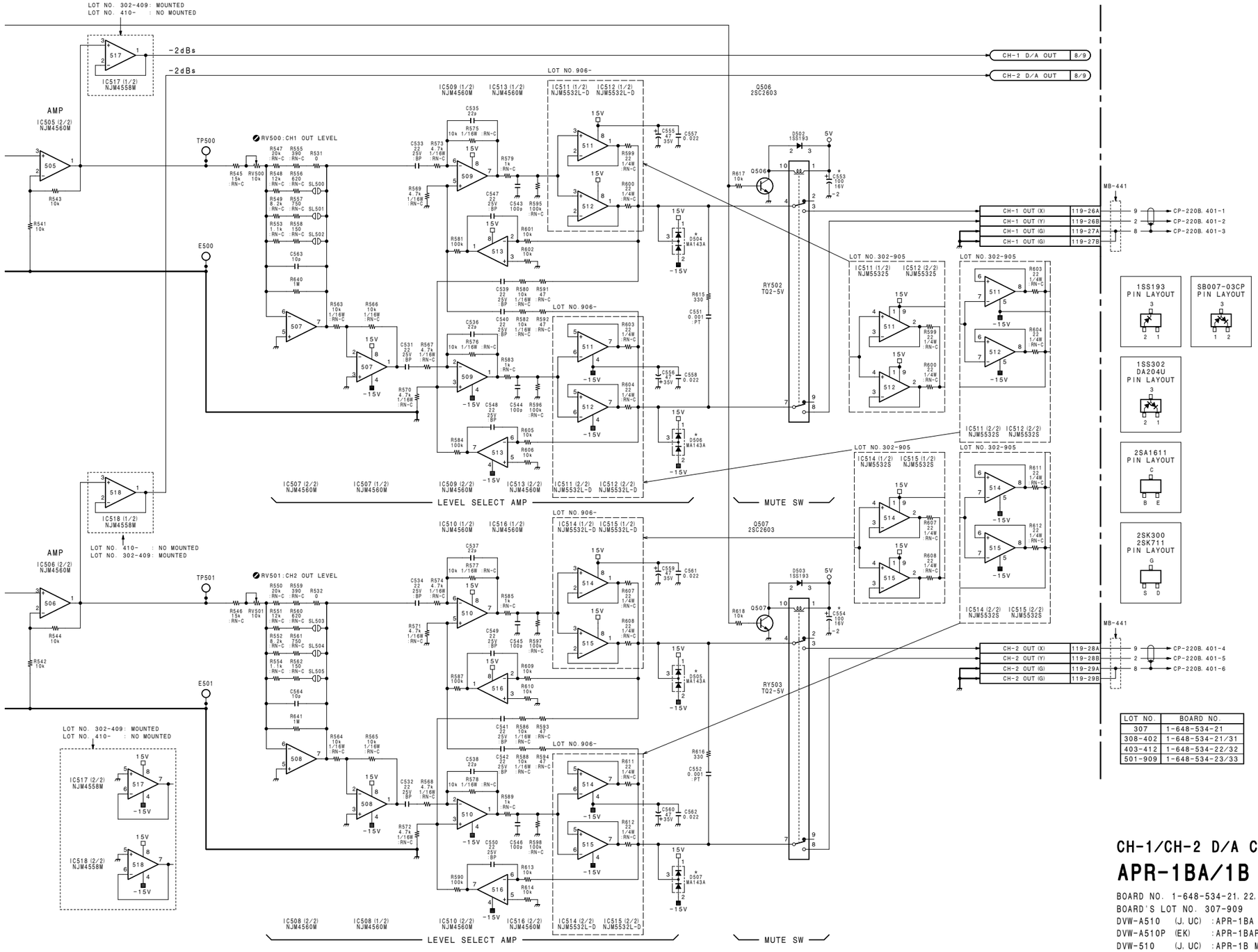
*PART CHANGE INFORMATION

Part change information			Change	Repair part	Simultaneously
Ref. No.	Old	New	LOT No.	for Old part	change part
C553	10 50V	→ 100 16V	310	100 16V	
C554	10 50V	→ 100 16V	310	100 16V	
D504 D505 D506 D507	DA204U 1SS302	→ 1SS302 → MA143A	311 806	MA143A	D504-507. D704-707. D907-910
Q500	2SK300	→ 2SK711	405	2SK711	
Q501	2SK300	→ 2SK711	405	2SK711	

NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

1-22 (a)

APR-1BA/1B (3/9)



LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

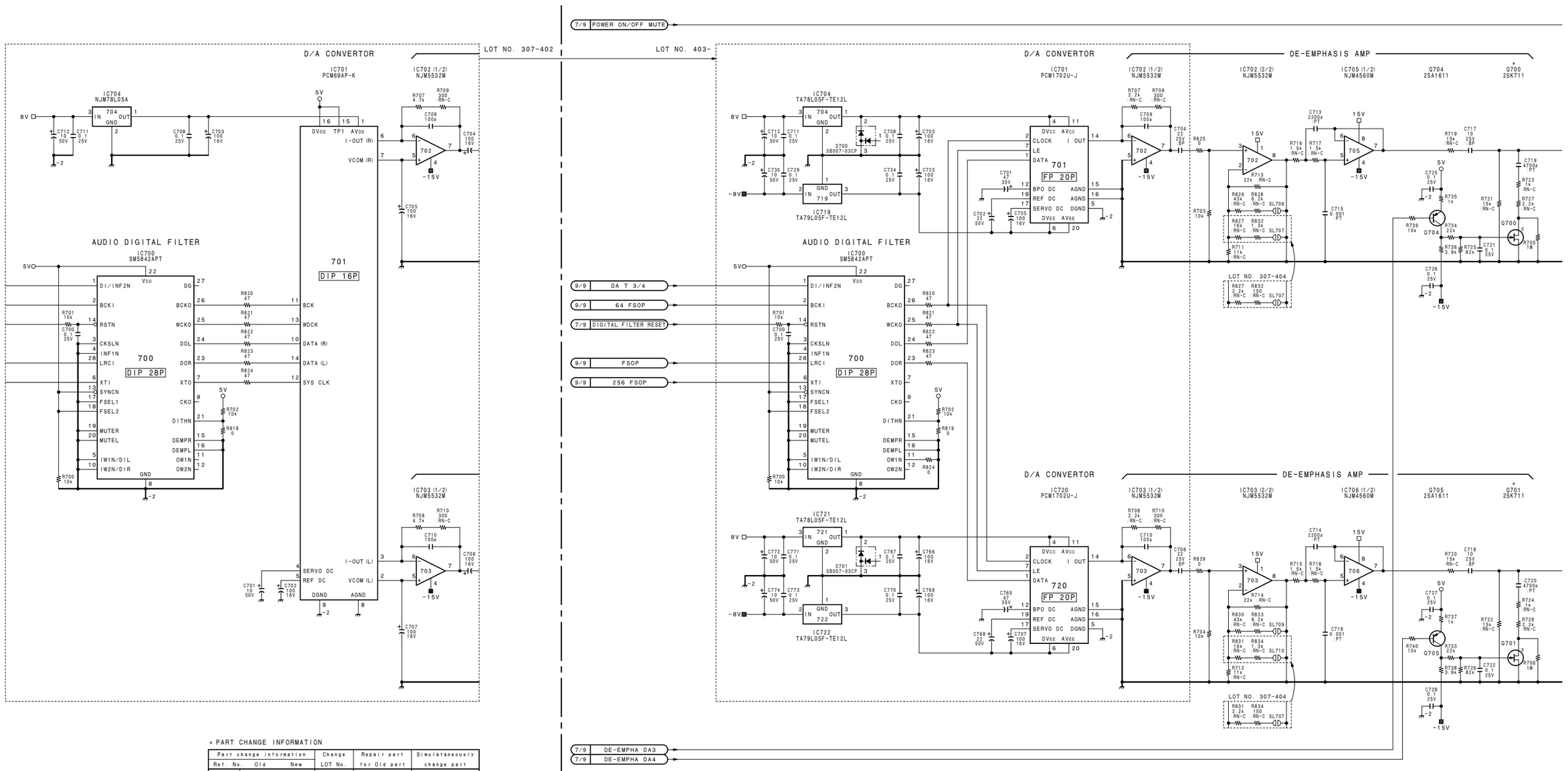
CH-1/CH-2 D/A Convert & Output Drive

APR-1BA/1B BOARD (3/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD'S LOT NO. 307-909
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BAP MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1BP MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BAP MCB

DVW-APR1-ALL-PLAY-S/M-03

APR-1BA/1B (4/9)

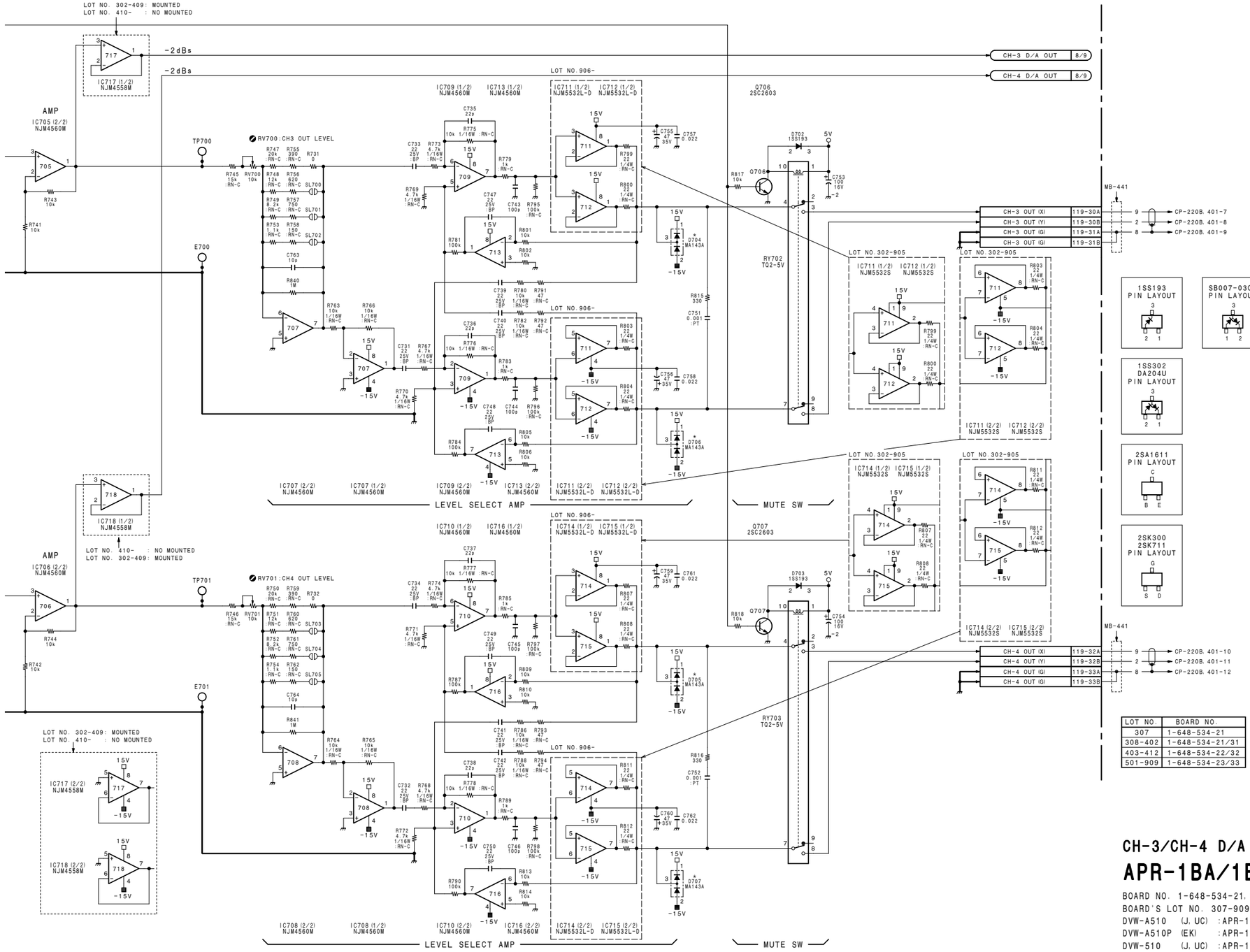


+ PART CHANGE INFORMATION

Part change information			Change	Repair part	Simultaneously
Ref. No.	Old	New	LOT No.	for Old part	change part
D704	DA204U → 1SS302 1SS302 → MA143A		311 806	MA143A	D504-507. D704-707. D907-910
D705					
D706					
D707					
Q700	2SK300 → 2SK711		405	2SK711	
Q701	2SK300 → 2SK711		405	2SK711	

NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

APR-1BA/1B (4/9)



LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

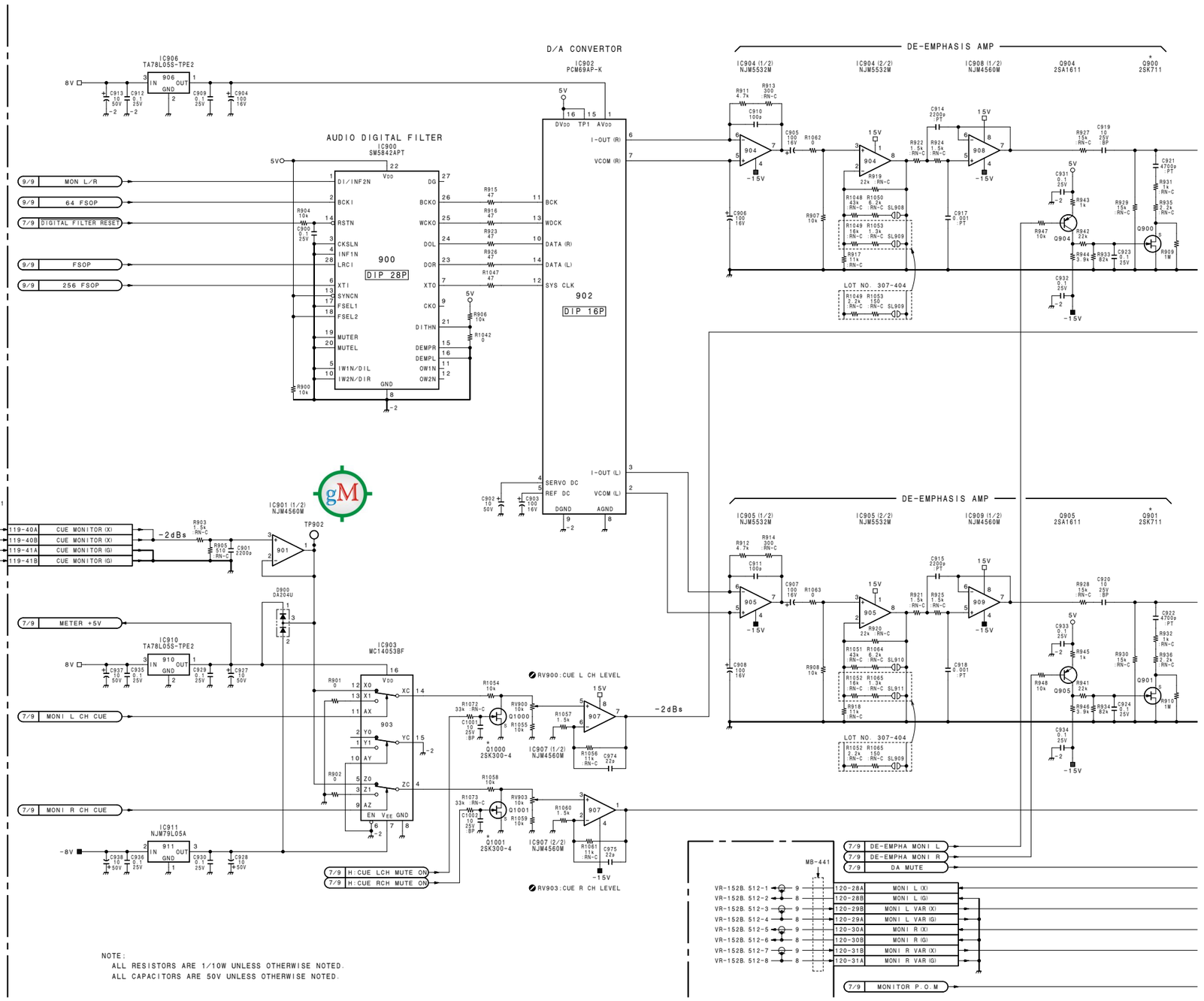
CH-3/CH-4 D/A Convert & Output Drive

APR-1BA/1B BOARD (4/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD'S LOT NO. 307-909
DVW-A510 (J, UC) :APR-1BA MCB
DVW-A510P (EK) :APR-1BAP MCB
DVW-510 (J, UC) :APR-1B MCB
DVW-510P (EK) :APR-1BP MCB
DVW-CA510 (J, UC) :APR-1BA MCB
DVW-CA510P (EK) :APR-1BAP MCB

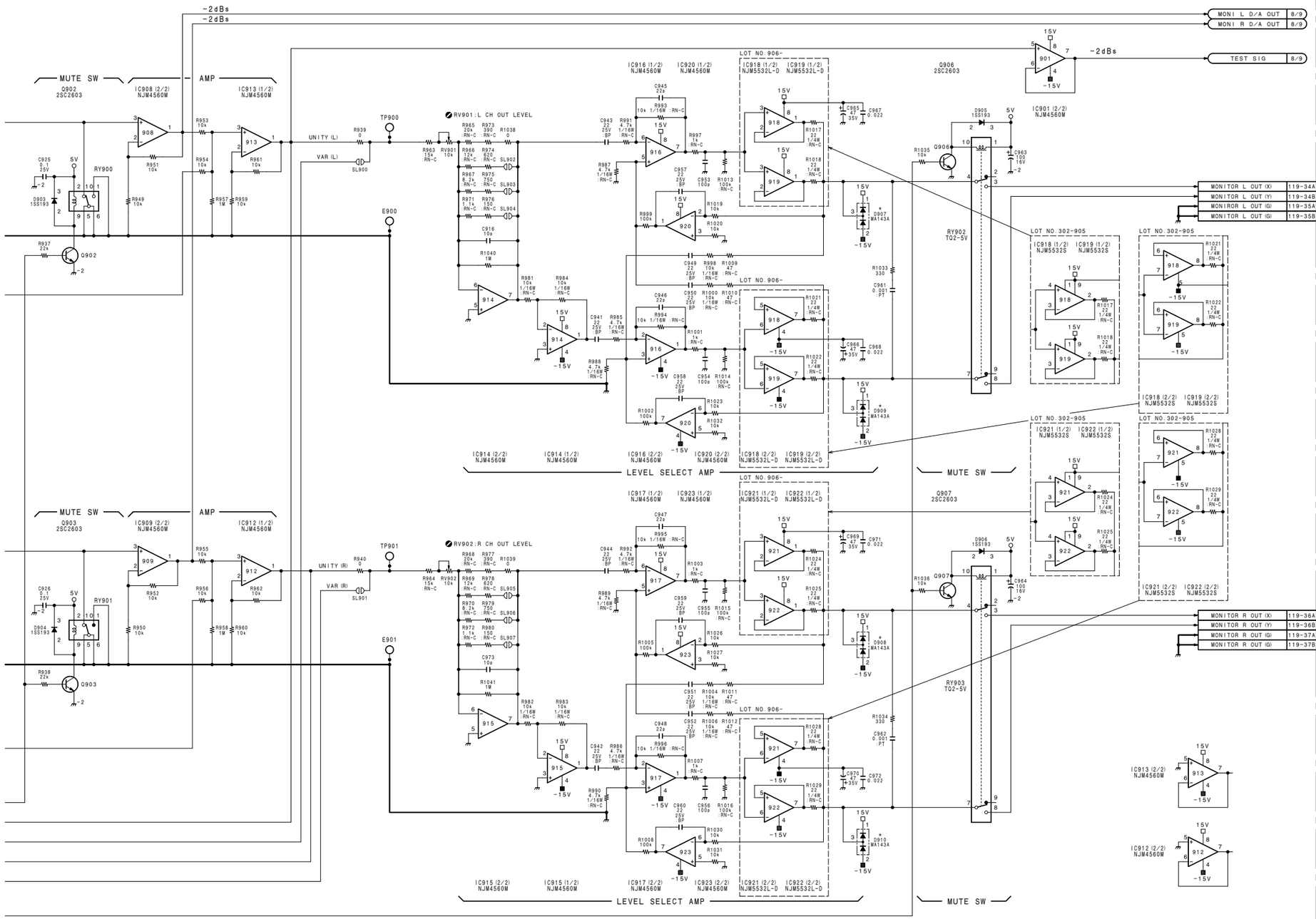
DVW-APR1-ALL-PLAY-S/M-03

APR-1BA/1B (5/9)



NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

1-26 (a)



* PART CHANGE INFORMATION

Part change information			Change	Repair part	Simultaneously
Ref. No.	Old	New	LOT No.	for Old part	change part
D907					
D908	DA204U → 1SS302		311		D504-507.
D909	1SS302 → MA143A		806	MA143A	D704-707.
D910					D907-910
Q900					
Q901					
Q1000	2SK300 → 2SK711		405	2SK711	
Q1001					

LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

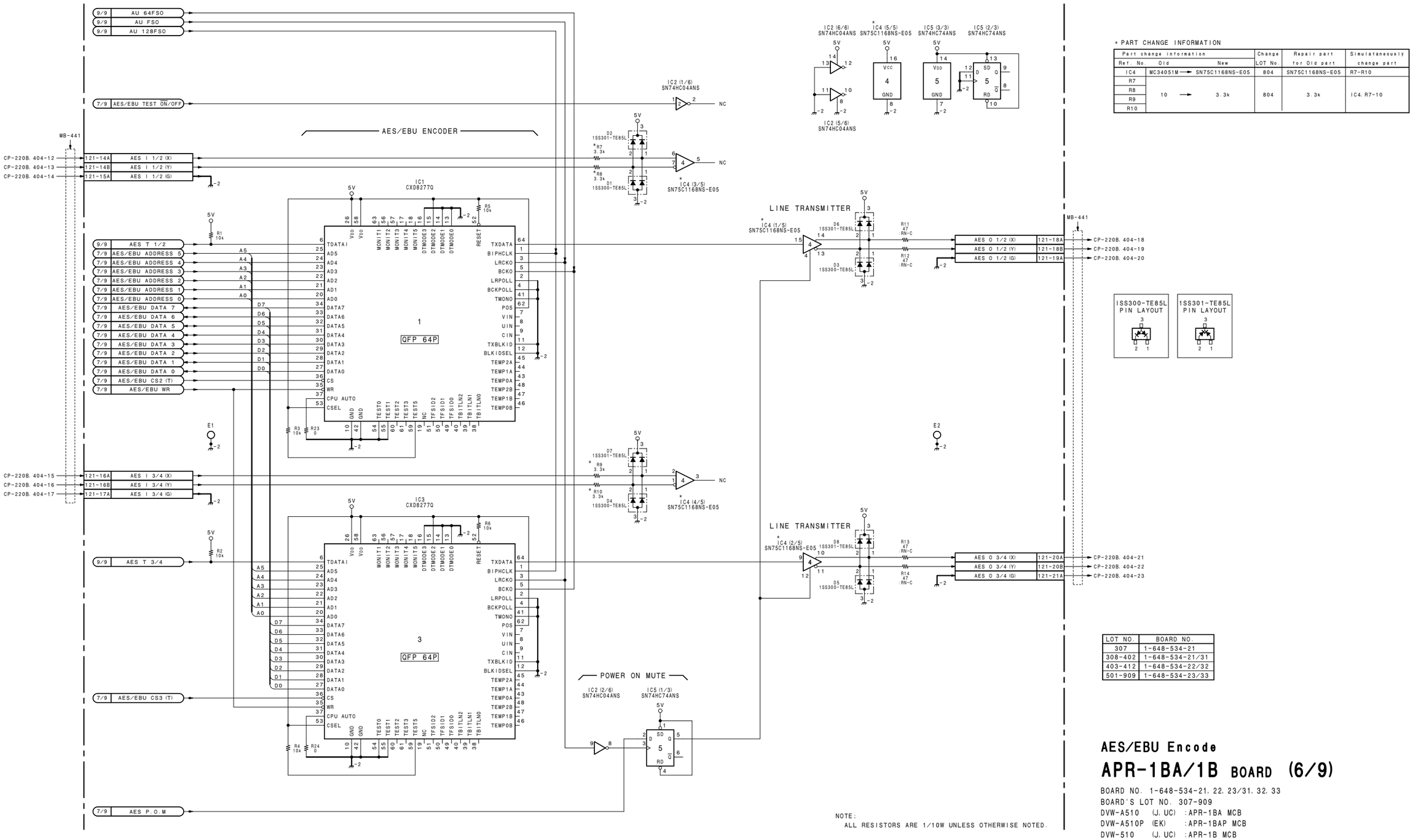
Monitor L/R D/A Convert & Output Drive

APR-1BA/1B BOARD (5/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD'S LOT NO. 307-909
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BAP MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1BP MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BAP MCB

DVW-APR1-ALL-PLAY-S/M-03

APR-1BA/1B (6/9)



* PART CHANGE INFORMATION

Part change information			Change	Repair part	Simultaneously
Ref. No.	Old	New	LOT No.	for Old part	change part
IC4	MC34051M	SN75C1168NS-E05	804	SN75C1168NS-E05	R7-R10
R7	10	3.3k	804	3.3k	IC4, R7-10
R8					
R9					
R10					

LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.

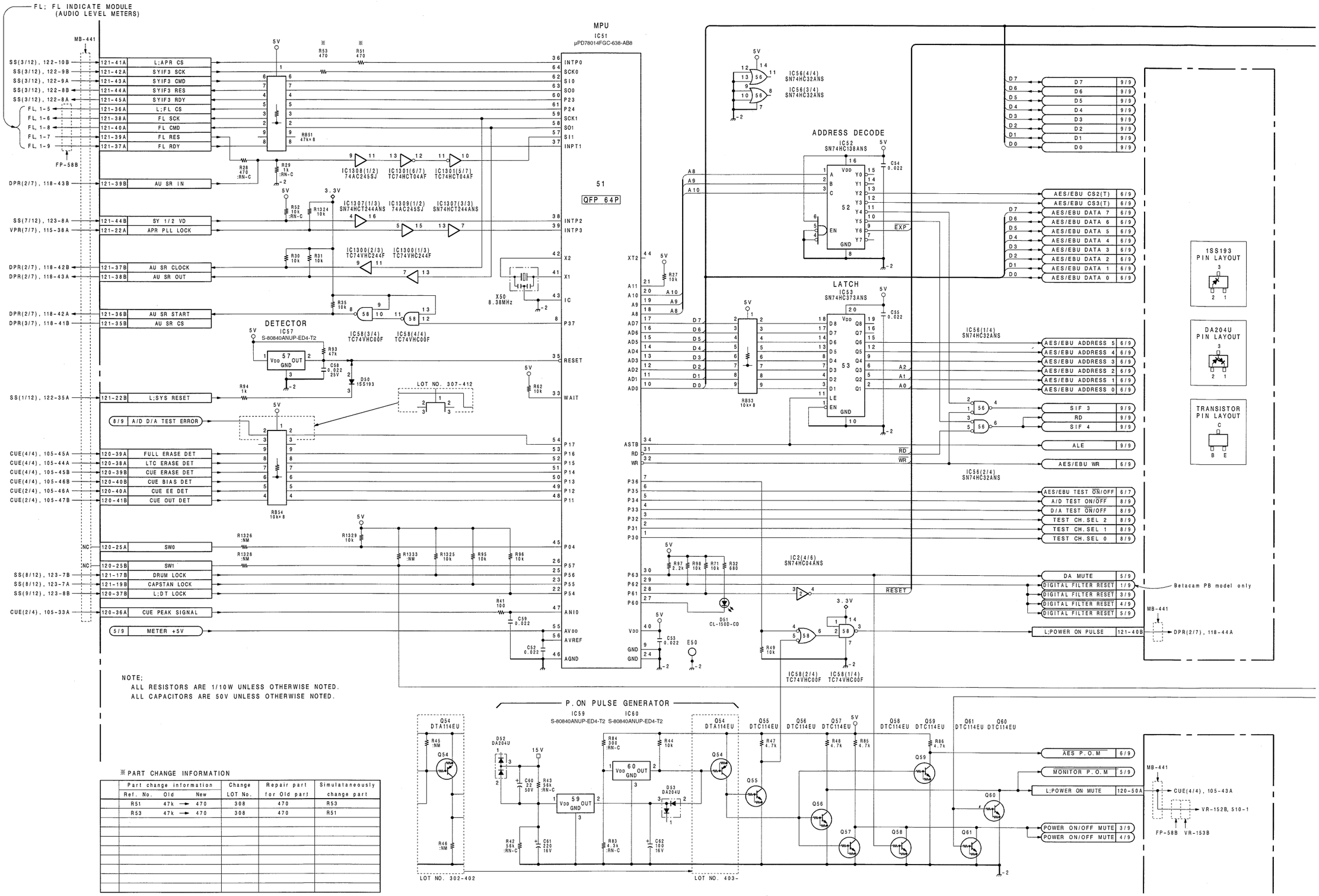
AES/EBU Encode

APR-1BA/1B BOARD (6/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD'S LOT NO. 307-909
DVW-A510 (J, UC) : APR-1BA MCB
DVW-A510P (EK) : APR-1BAP MCB
DVW-510 (J, UC) : APR-1B MCB
DVW-510P (EK) : APR-1BP MCB
DVW-CA510 (J, UC) : APR-1BA MCB
DVW-CA510P (EK) : APR-1BAP MCB

DVW-APR1-ALL-PLAY-S/M-03

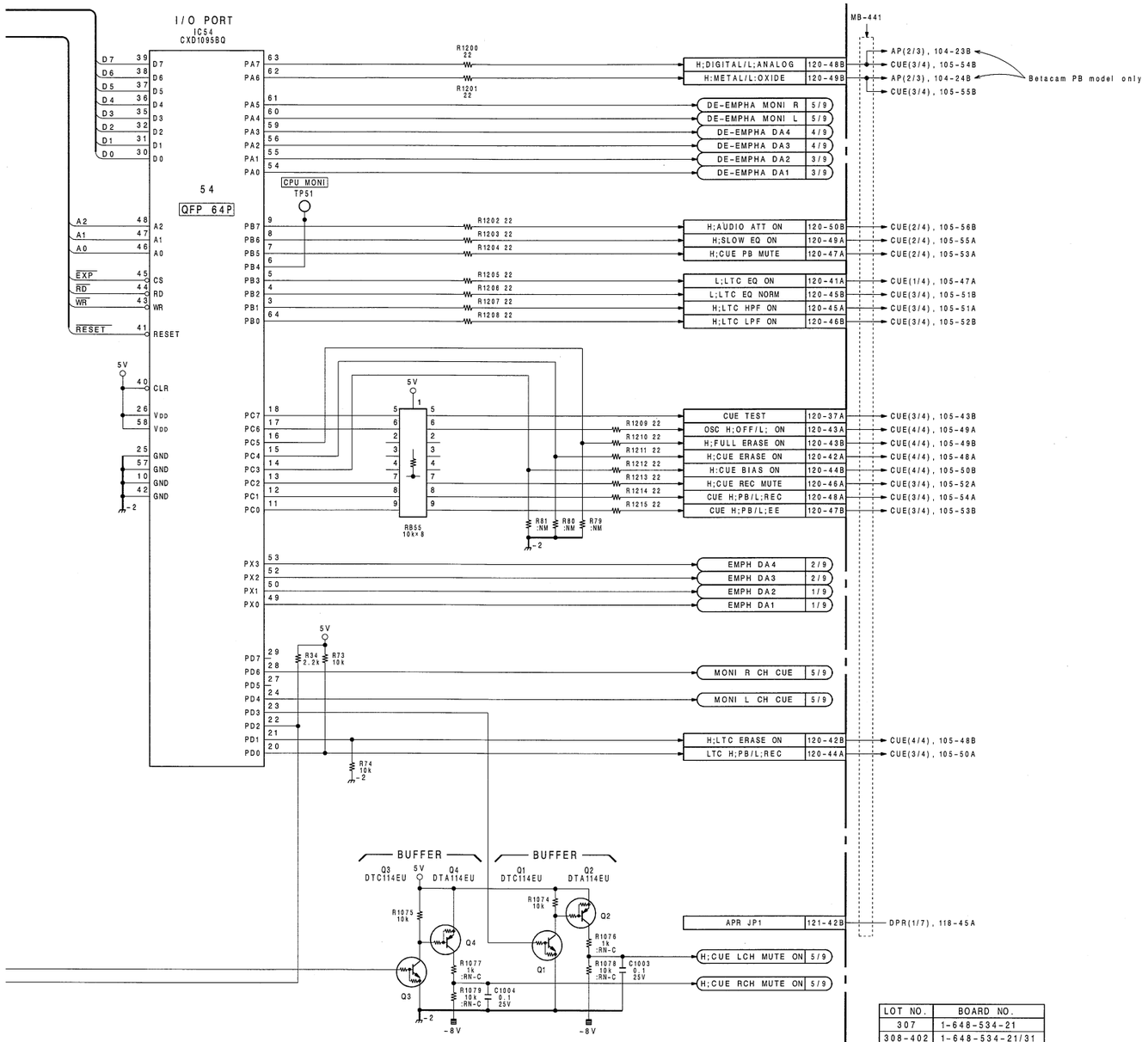
APR-1BA/1B (7/9)



※ PART CHANGE INFORMATION

Part change information			Change	Repair part	Simulataneously
Ref. No.	Old	New	LOT No.	for Old part	change part
R51	47k →	470	308	470	R53
R53	47k →	470	308	470	R51

APR-1BA/1B (7/9)



LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

Digital Audio System Control

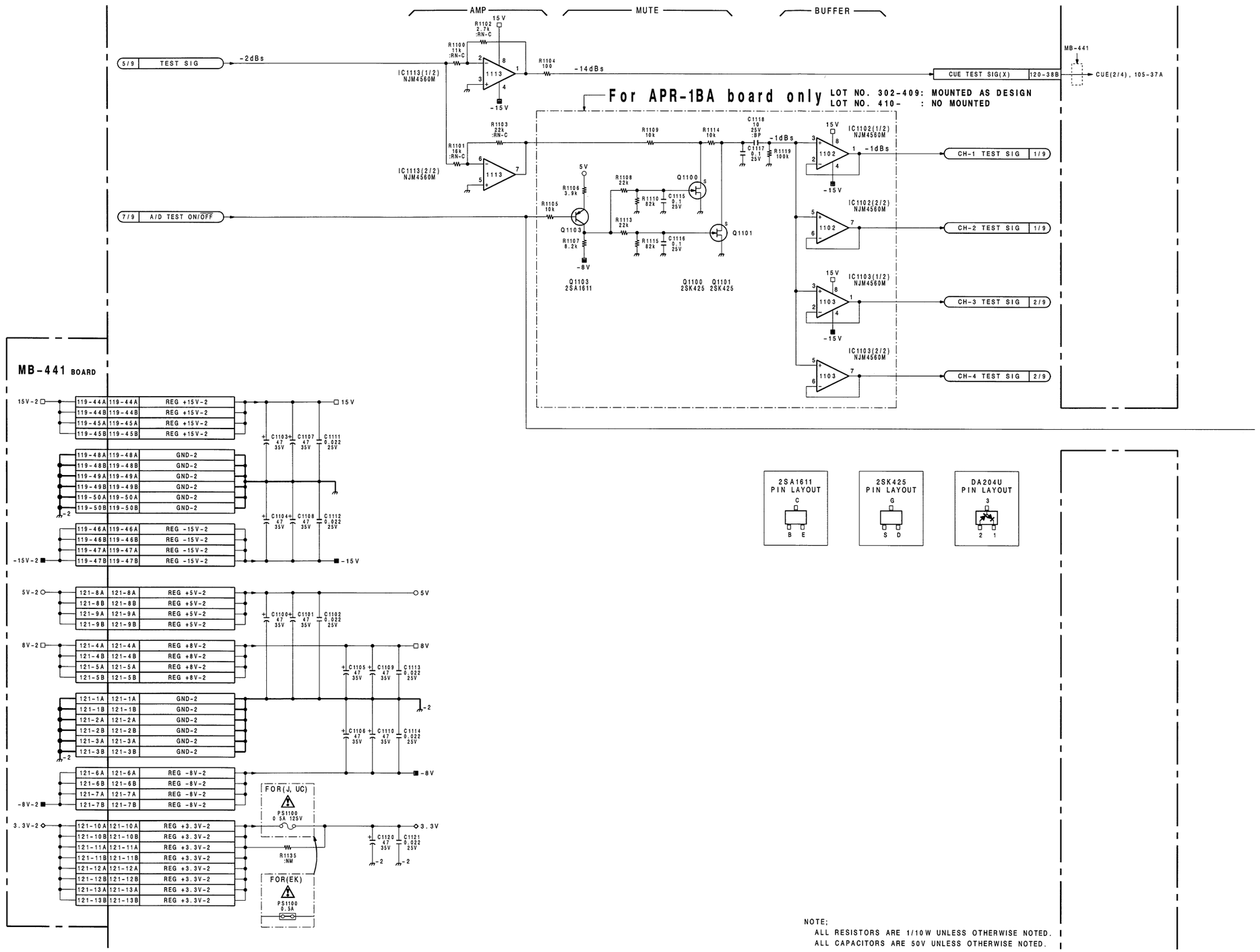
APR-1BA/1B BOARD (7/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD' S LOT NO. 307-909
DVW-A510 (J, UC) :APR-1BA MCB
DVW-A510P (EK) :APR-1BAP MCB
DVW-510 (J, UC) :APR-1B MCB
DVW-510P (EK) :APR-1BP MCB
DVW-CA510(J, UC) :APR-1BA MCB
DVW-CA510P(EK) :APR-1BAP MCB

DVW-APR1-ALL-PLAY-S/M-03

1-31 (a)

APR-1BA/1B (8/9)



1-32 (a)

LOT NO. 302-409: MOUNTED AS DESIGN
LOT NO. 410- : NO MOUNTED

For APR-1BA board only

BUFFER

1/9 CH-1 A/D IN -14dBs
1/9 CH-2 A/D IN
2/9 CH-3 A/D IN
2/9 CH-4 A/D IN
IC1104(1/2) NJM4560M
IC1104(2/2) NJM4560M
IC1105(1/2) NJM4560M
IC1105(2/2) NJM4560M
D1100 DA204U
D1102 DA204U
D1104 DA204U
D1106 DA204U
R1127 1.2k
R1128 1.2k
R1129 1.2k
R1130 1.2k
5V
15V
-15V
-5V

A/D TEST SIG SELECT
IC1100 MC14051BF
X0 X1 X2 X3 X4 X5 X6 X7 XC
VDD VEE GND EN A B C OPEN
R1111 1k

SIGNAL LEVEL DETECTOR
IC1109(2/2) μPC393G2
IC1110(3/5) SN74HC00ANS
IC1111(1/3) TC74HC123AF
R1123 15k
R1124 220k
R1044 18k
R1122 10k
R1125 4.7k
C1119 0.1 25V
R1126 220k
IC1110(1/5) SN74HC00ANS
R1116 10k
IC1112(1/2) NJM4560M
-2dBs
R1118 24k :RN-C
R1120 220k
R1043 18k
R1117 10k
R1121 3.3k
IC1109(1/2) μPC393G2
IC1110(2/5) SN74HC00ANS
IC1111(2/3) TC74HC123AF
R1045 220k
C1000 0.1 25V
IC1110(4/5) SN74HC00ANS

R2001 10k 1/4W :RD
LOT NO. 410-412
A/D D/A TEST ERROR 7/9

7/9 TEST CH.SEL 0
7/9 TEST CH.SEL 1
7/9 TEST CH.SEL 2

D/A TEST SIG SELECT
IC1101 MC14051BF
R1112 4.7k

BUFFER
3/9 CH-1 D/A OUT -2dBs
3/9 CH-2 D/A OUT
4/9 CH-3 D/A OUT
4/9 CH-4 D/A OUT
5/9 MONI L D/A OUT
5/9 MONI R D/A OUT
IC1106(1/2) NJM4560M
IC1106(2/2) NJM4560M
IC1107(1/2) NJM4560M
IC1107(2/2) NJM4560M
IC1108(1/2) NJM4560M
IC1108(2/2) NJM4560M
D1101 DA204U
D1103 DA204U
D1105 DA204U
D1107 DA204U
D1108 DA204U
D1109 DA204U
R1131 5.1k :RN-C
R1132 5.1k :RN-C
R1133 5.1k :RN-C
R1134 5.1k :RN-C
R1037 5.1k :RN-C
R1046 5.1k :RN-C

IC1112(2/2) NJM4560M
IC1110(5/5) SN74HC00ANS
IC1111(3/3) TC74HC123AF

7/9 D/A TEST ON/OFF

LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

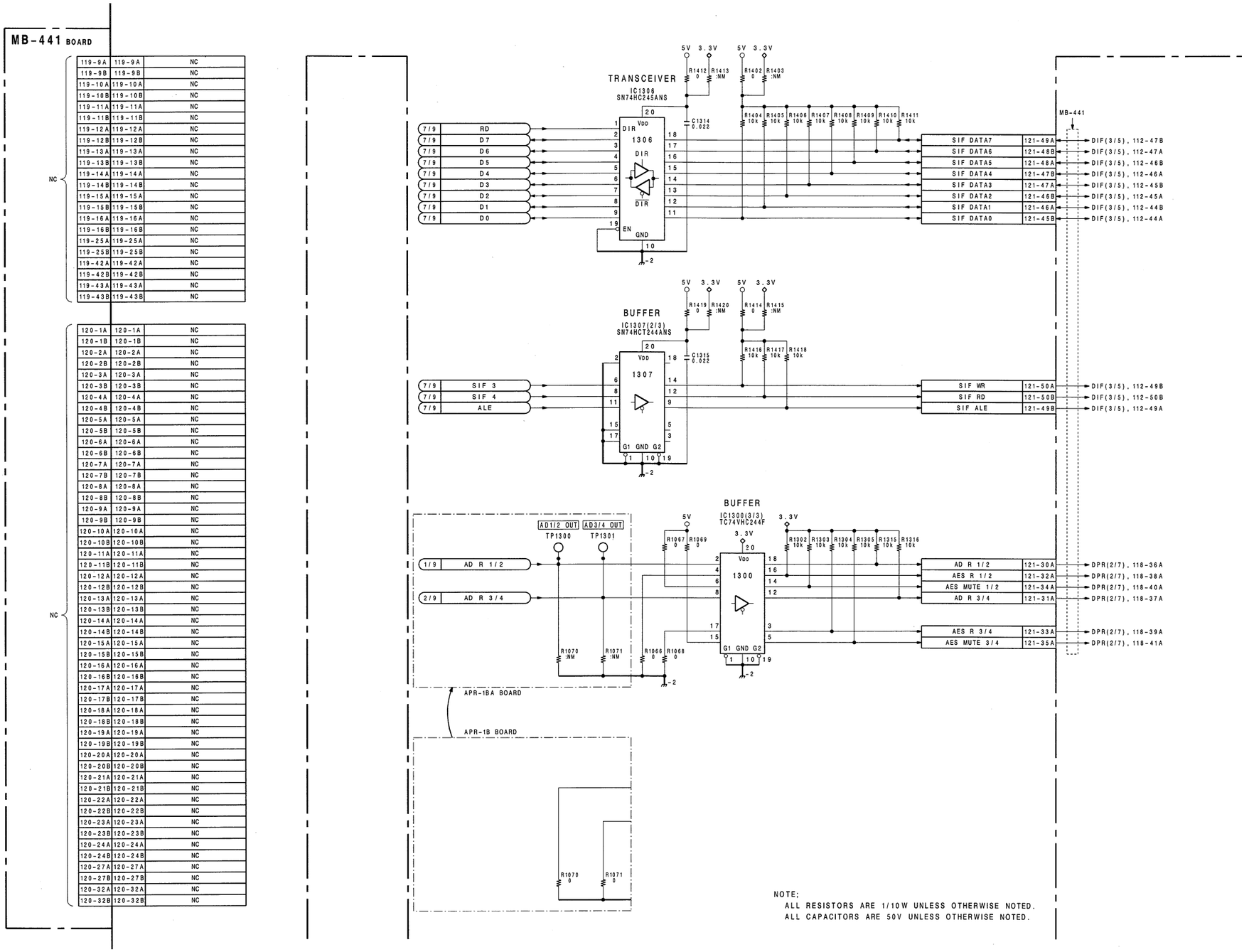
Digital Audio Self-Diagnosis

APR-1BA/1B BOARD (8/9)

BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD' S LOT NO. 307-909
DVW-A510 (J, UC) :APR-1BA MCB
DVW-A510P (EK) :APR-1BAP MCB
DVW-510 (J, UC) :APR-1B MCB
DVW-510P (EK) :APR-1BP MCB
DVW-CA510(J, UC) :APR-1BA MCB
DVW-CA510P(EK) :APR-1BAP MCB

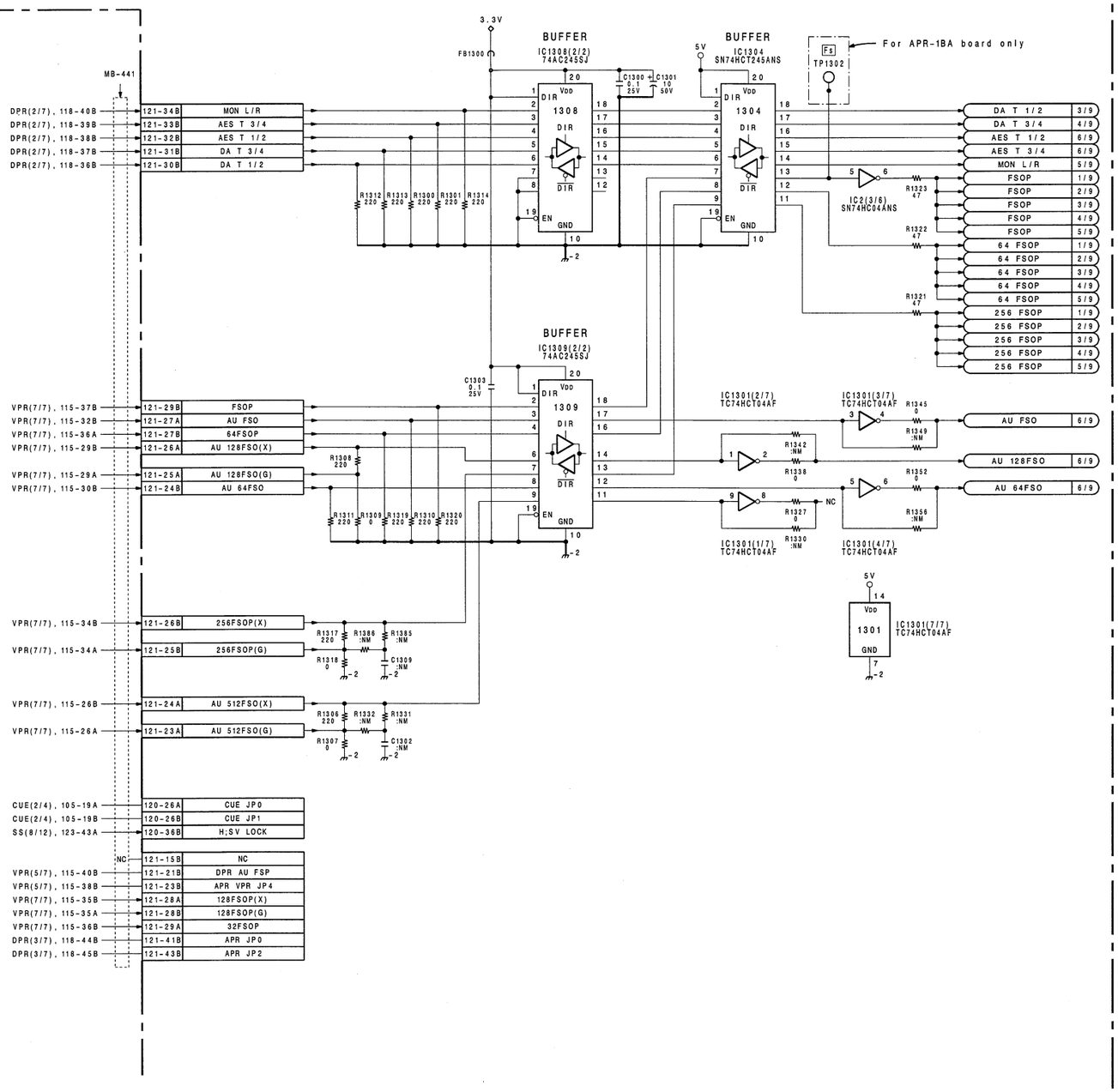
DVW-APR1-ALL-PLAY-S/M-03

APR-1BA/1B (9/9)



1-34 (a)

APR-1BA/1B (9/9)



LOT NO.	BOARD NO.
307	1-648-534-21
308-402	1-648-534-21/31
403-412	1-648-534-22/32
501-909	1-648-534-23/33

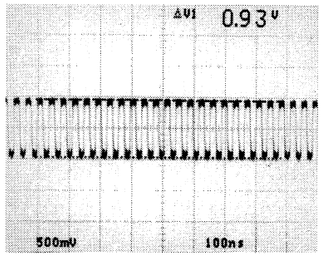
Bus Buffer

APR-1BA/1B BOARD (9/9)

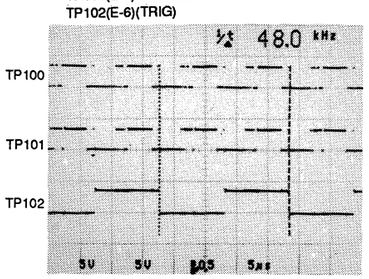
BOARD NO. 1-648-534-21, 22, 23/31, 32, 33
BOARD' S LOT NO. 307-909
DVW-A510 (J, UC) :APR-1BA MCB
DVW-A510P (EK) :APR-1BAP MCB
DVW-510 (J, UC) :APR-1B MCB
DVW-510P (EK) :APR-1BP MCB
DVW-CA510(J, UC) :APR-1BA MCB
DVW-CA510P(EK) :APR-1BAP MCB

DVW-APR1-ALL-PLAY-S/M-03

①TP108(M-3) PB mode
TP108(M-3)(TRIG)



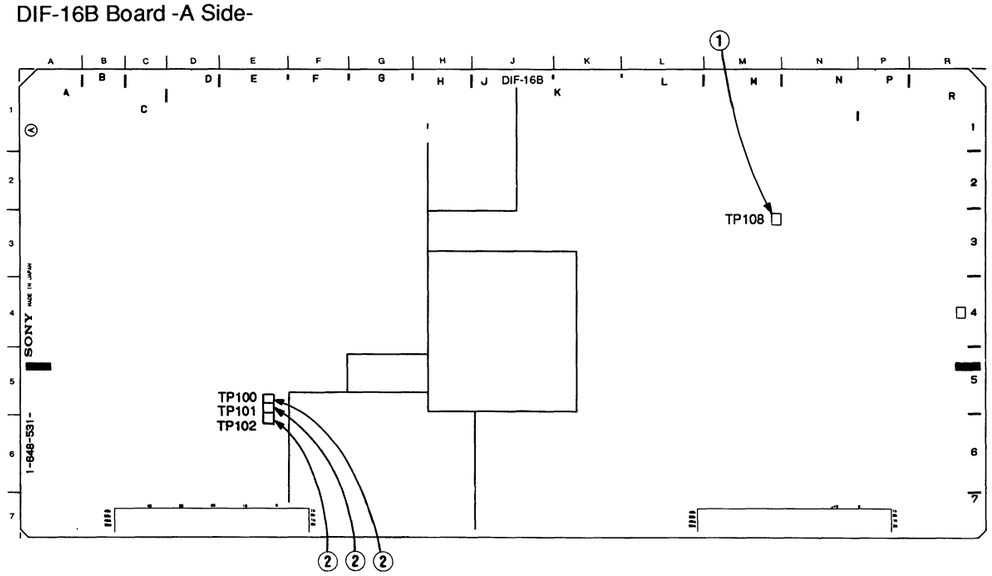
②TP100(E-5) PB mode
TP101(E-5) PB mode
TP102(E-6)(TRIG)

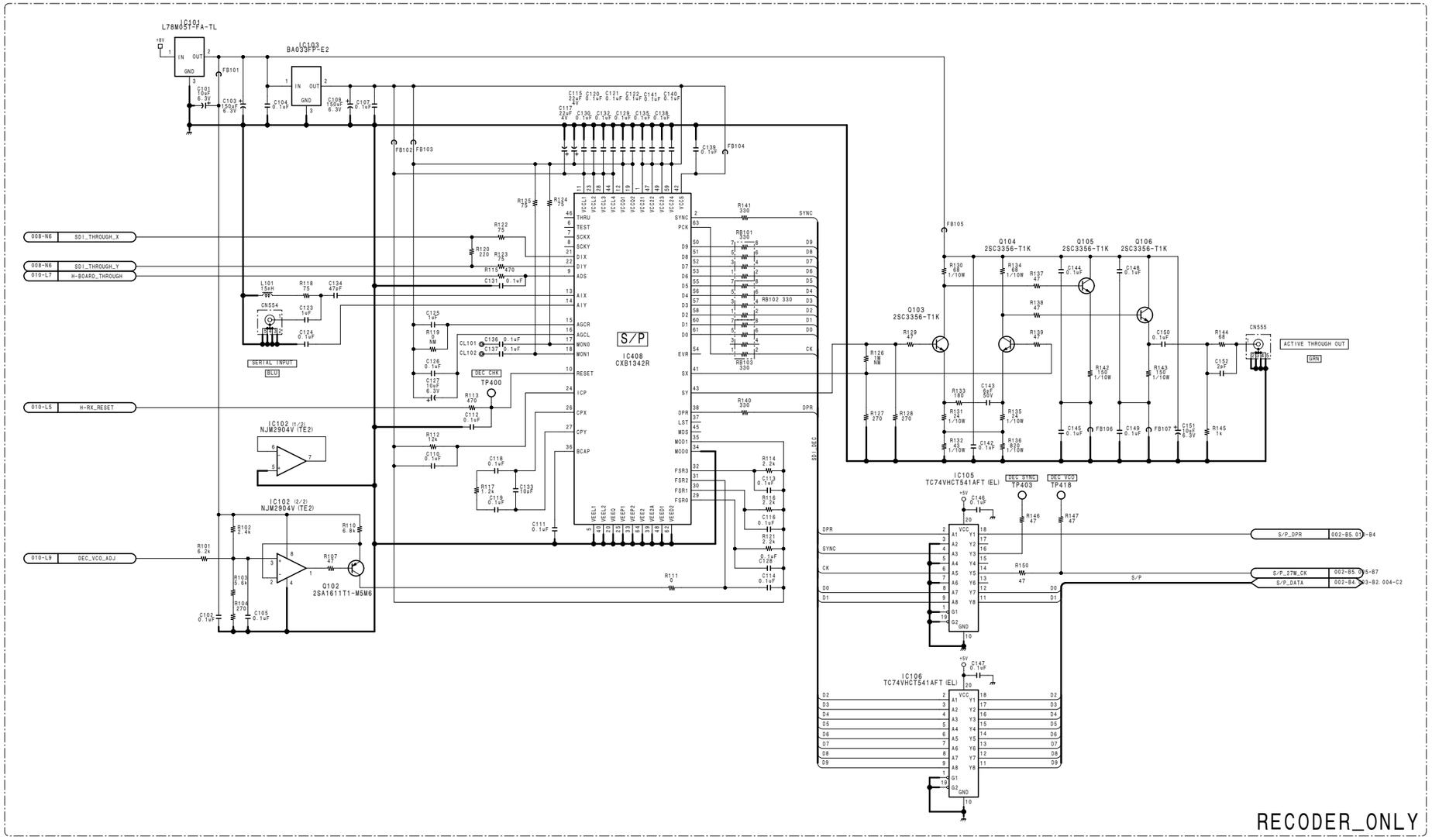


Measurement Condition

MODE : PB mode
TAPE : ZR5-1 ..... DVW-A510/510/CA510
ZR5-1P DVW-A510P/510P/CA510P

DIF-16B Board -A Side-





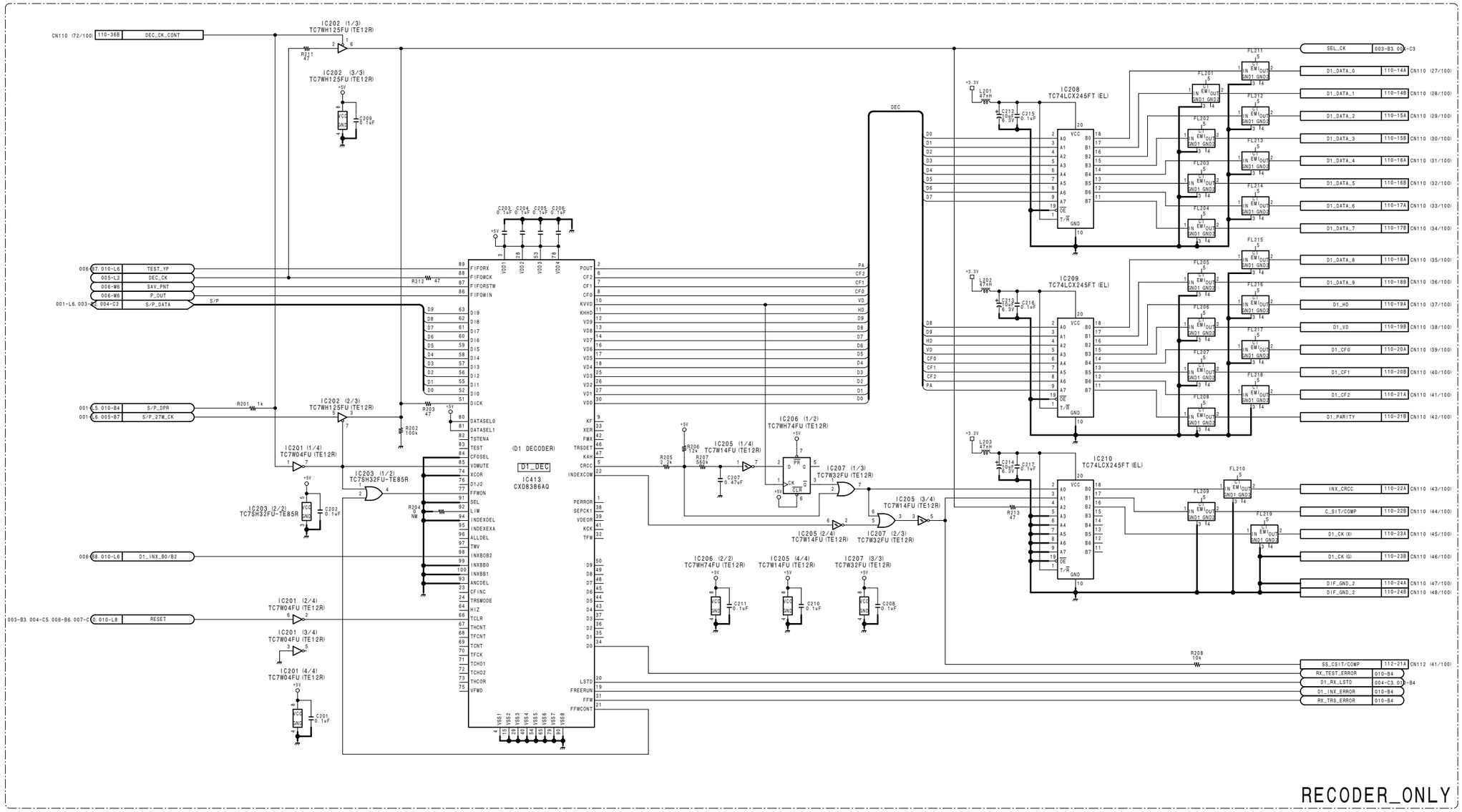
Serial to Parallel Converter of SDI Receiver

DIF-16 BOARD (1/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	: DIF-16 MCB	DVW-A510 (J, UC)	: DIF-16B MCB
DVW-A500P (EK)	: DIF-16 MCB	DVW-A510P (EK)	: DIF-16B MCB
DVW-A500P (UC)	: DIF-16 MCB	DVW-510 (J, UC)	: DIF-16B MCB
DVW-500 (J, UC)	: DIF-16 MCB	DVW-510P (EK)	: DIF-16B MCB
DVW-500P (EK)	: DIF-16 MCB	DVW-CA510 (J, UC)	: DIF-16B MCB
DVW-500P (UC)	: DIF-16 MCB	DVW-CA510P (EK)	: DIF-16B MCB

DVW-A500_DIF-16_006_1



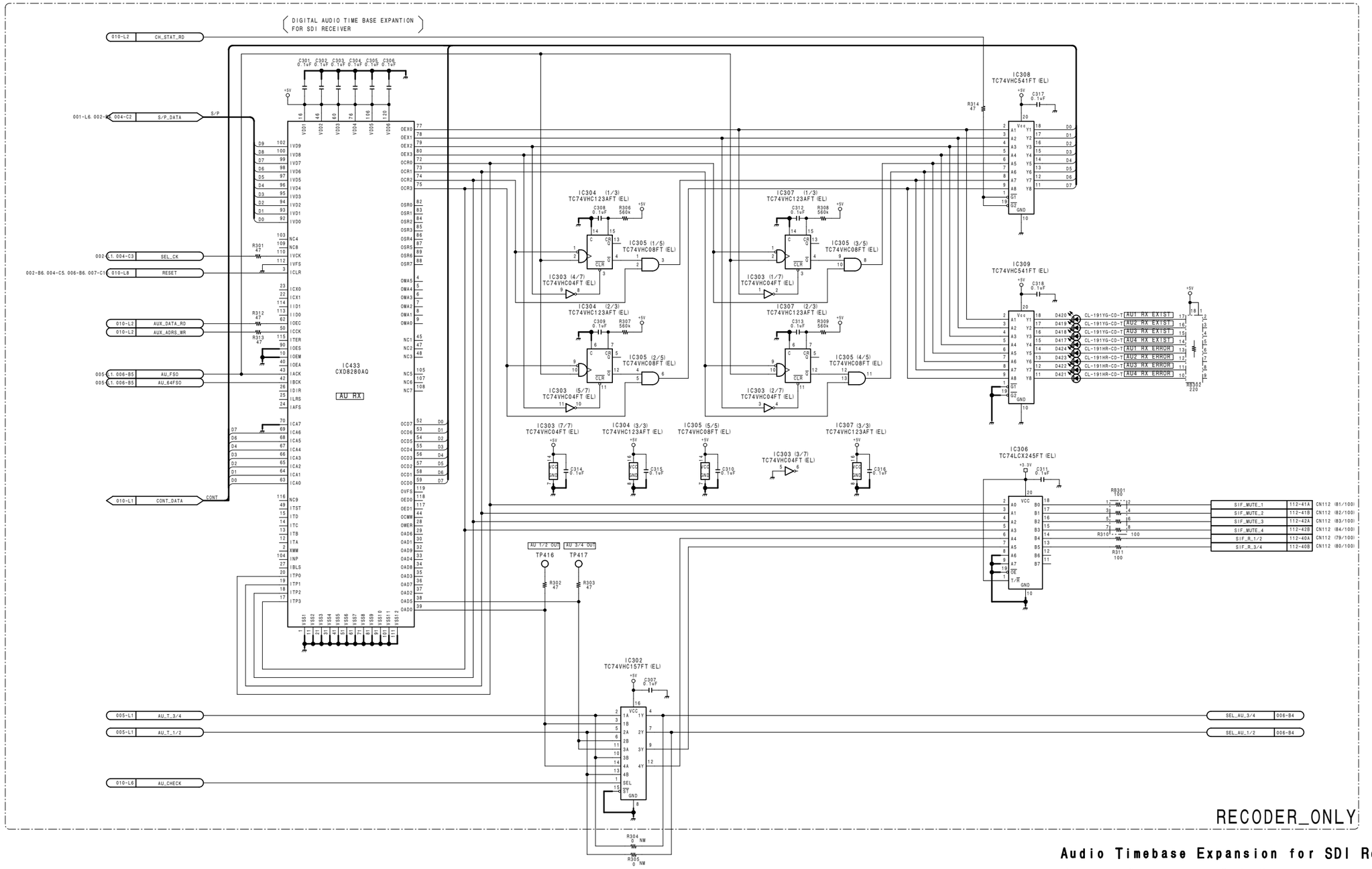
D1 Decoder of SDI Receiver

DIF-16 BOARD (2/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	: DIF-16 MCB	DVW-A510 (J, UC)	: DIF-16B MCB
DVW-A500P (EK)	: DIF-16 MCB	DVW-A510P (EK)	: DIF-16B MCB
DVW-A500P (UC)	: DIF-16 MCB	DVW-510 (J, UC)	: DIF-16B MCB
DVW-500 (J, UC)	: DIF-16 MCB	DVW-510P (EK)	: DIF-16B MCB
DVW-500P (EK)	: DIF-16 MCB	DVW-CA510 (J, UC)	: DIF-16B MCB
DVW-500P (UC)	: DIF-16 MCB	DVW-CA510P (EK)	: DIF-16B MCB

DVW-A500_DIF-16_006_2



Audio Timebase Expansion for SDI Receiver

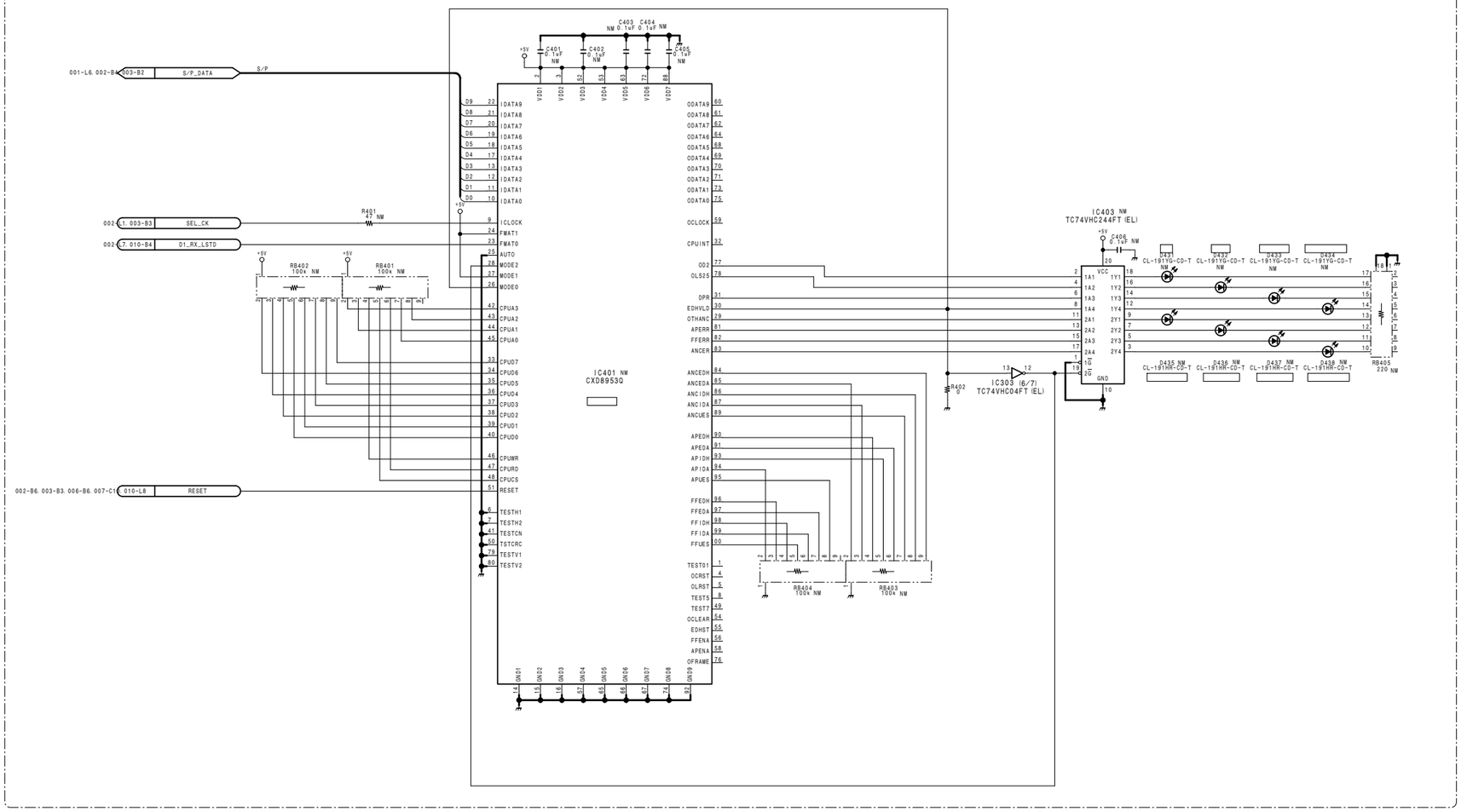
DIF-16 BOARD (3/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	:DIF-16 MCB	DVW-A510 (J, UC)	:DIF-16B MCB
DVW-A500P (EK)	:DIF-16 MCB	DVW-A510P (EK)	:DIF-16B MCB
DVW-A500P (UC)	:DIF-16 MCB	DVW-510 (J, UC)	:DIF-16B MCB
DVW-500 (J, UC)	:DIF-16 MCB	DVW-510P (EK)	:DIF-16B MCB
DVW-500P (EK)	:DIF-16 MCB	DVW-CA510 (J, UC)	:DIF-16B MCB
DVW-500P (UC)	:DIF-16 MCB	DVW-CA510P (EK)	:DIF-16B MCB

DVW-A500_DIF-16_006_3

DIF-16 (4/10)



EDH Decoder of SDI Receiver

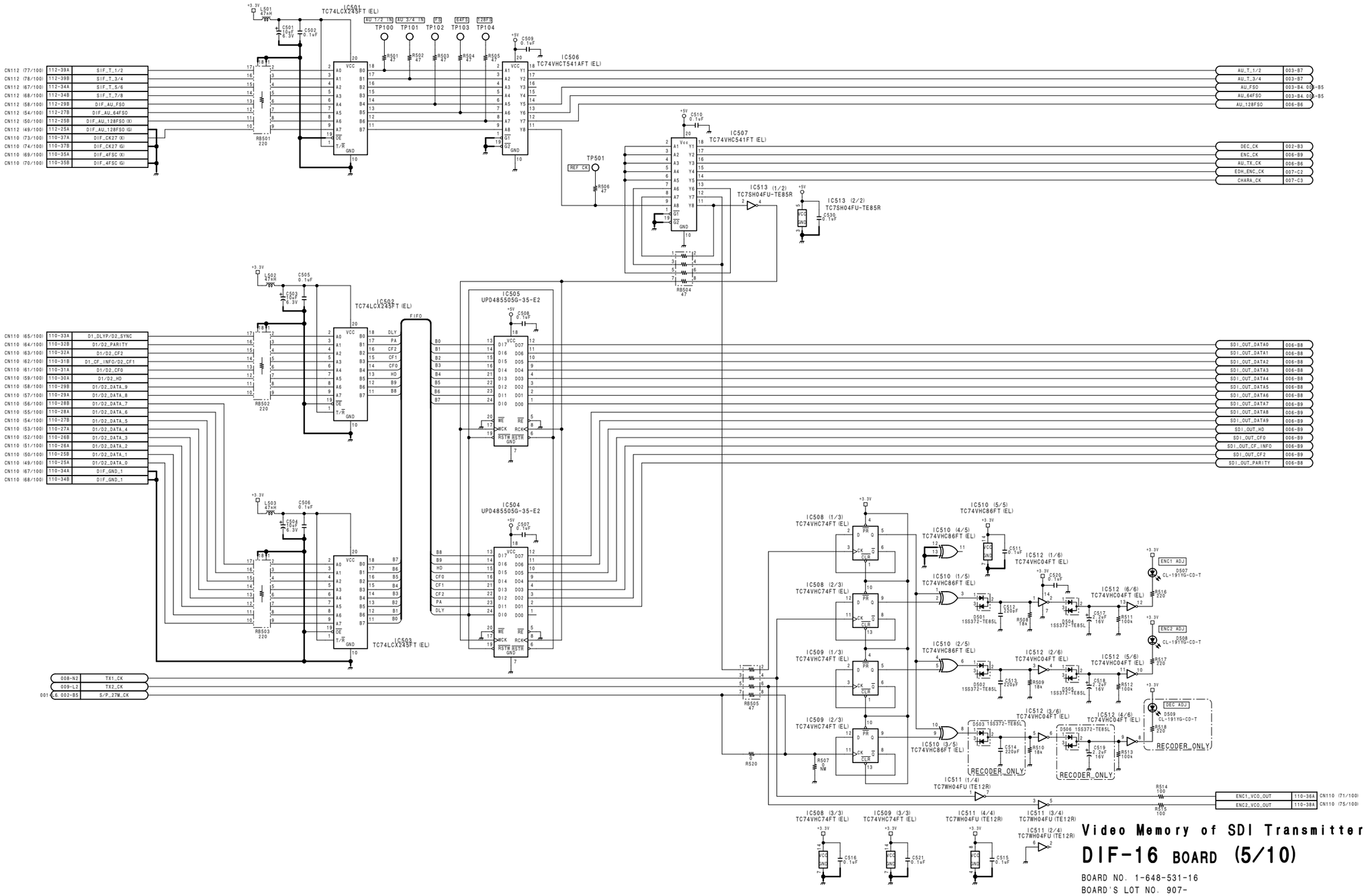
DIF-16 BOARD (4/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	: DIF-16 MCB	DVW-A510 (J, UC)	: DIF-16B MCB
DVW-A500P (EK)	: DIF-16 MCB	DVW-A510P (EK)	: DIF-16B MCB
DVW-A500P (UC)	: DIF-16 MCB	DVW-510 (J, UC)	: DIF-16B MCB
DVW-500 (J, UC)	: DIF-16 MCB	DVW-510P (EK)	: DIF-16B MCB
DVW-500P (EK)	: DIF-16 MCB	DVW-CA510 (J, UC)	: DIF-16B MCB
DVW-500P (UC)	: DIF-16 MCB	DVW-CA510P (EK)	: DIF-16B MCB

DVW-A500_DIF-16_006_4

1-41 (c)



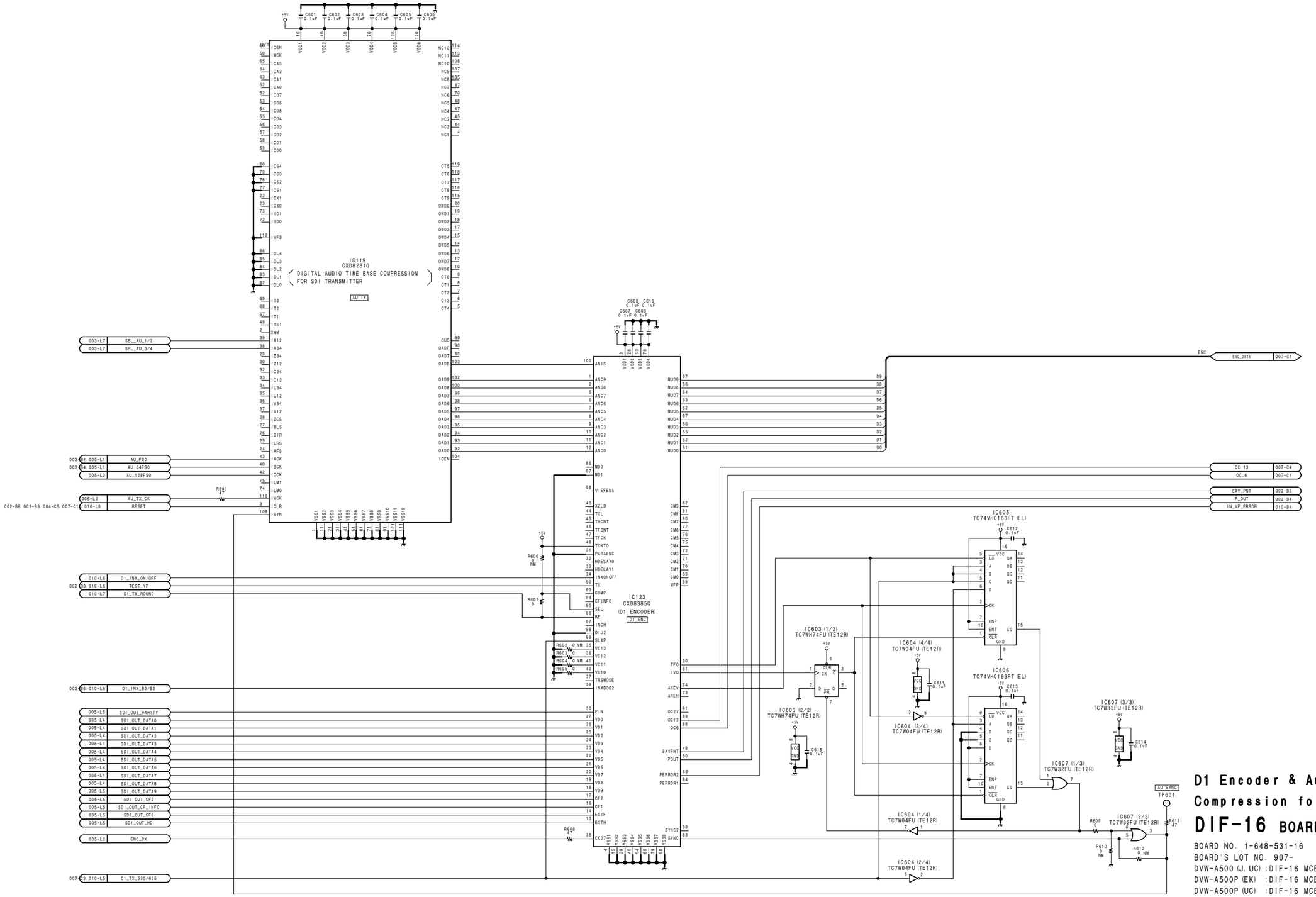
Video Memory of SDI Transmitter & Clock Driver

DIF-16 BOARD (5/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	:DIF-16 MCB	DVW-A510 (J, UC)	:DIF-16B MCB
DVW-A500P (EK)	:DIF-16 MCB	DVW-A510P (EK)	:DIF-16B MCB
DVW-A500P (UC)	:DIF-16 MCB	DVW-510 (J, UC)	:DIF-16B MCB
DVW-500 (J, UC)	:DIF-16 MCB	DVW-510P (EK)	:DIF-16B MCB
DVW-500P (EK)	:DIF-16 MCB	DVW-CA510 (J, UC)	:DIF-16B MCB
DVW-500P (UC)	:DIF-16 MCB	DVW-CA510P (EK)	:DIF-16B MCB

DVW-A500_DIF-16_006_5



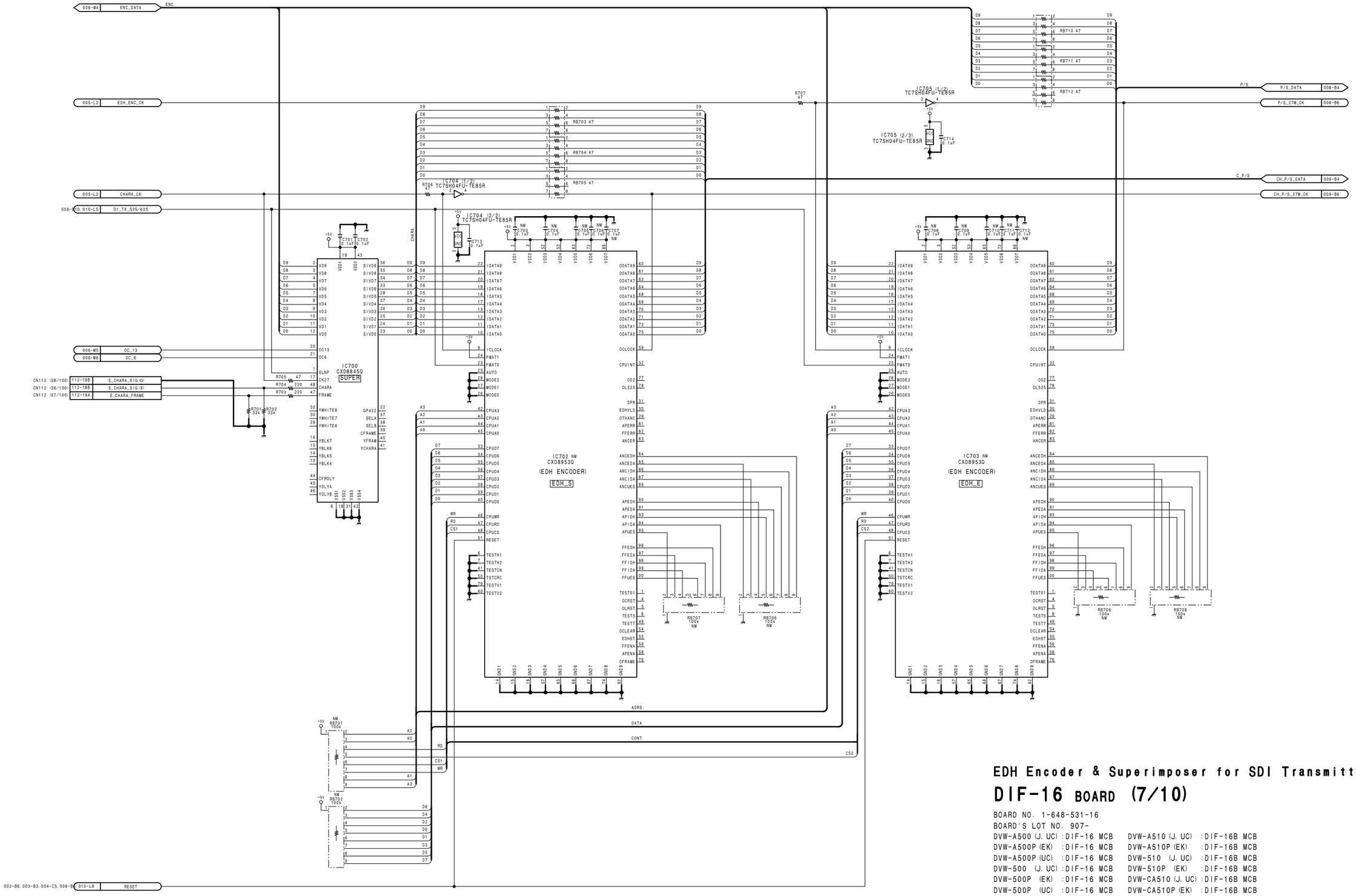
D1 Encoder & Audio Timebase Compression for SDI Transmitter

DIF-16 BOARD (6/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	:DIF-16 MCB	DVW-A510 (J, UC)	:DIF-16B MCB
DVW-A500P (EK)	:DIF-16 MCB	DVW-A510P (EK)	:DIF-16B MCB
DVW-A500P (UC)	:DIF-16 MCB	DVW-510 (J, UC)	:DIF-16B MCB
DVW-500 (J, UC)	:DIF-16 MCB	DVW-510P (EK)	:DIF-16B MCB
DVW-500P (EK)	:DIF-16 MCB	DVW-CA510 (J, UC)	:DIF-16B MCB
DVW-500P (UC)	:DIF-16 MCB	DVW-CA510P (EK)	:DIF-16B MCB

DVW-A500_DIF-16_006_6



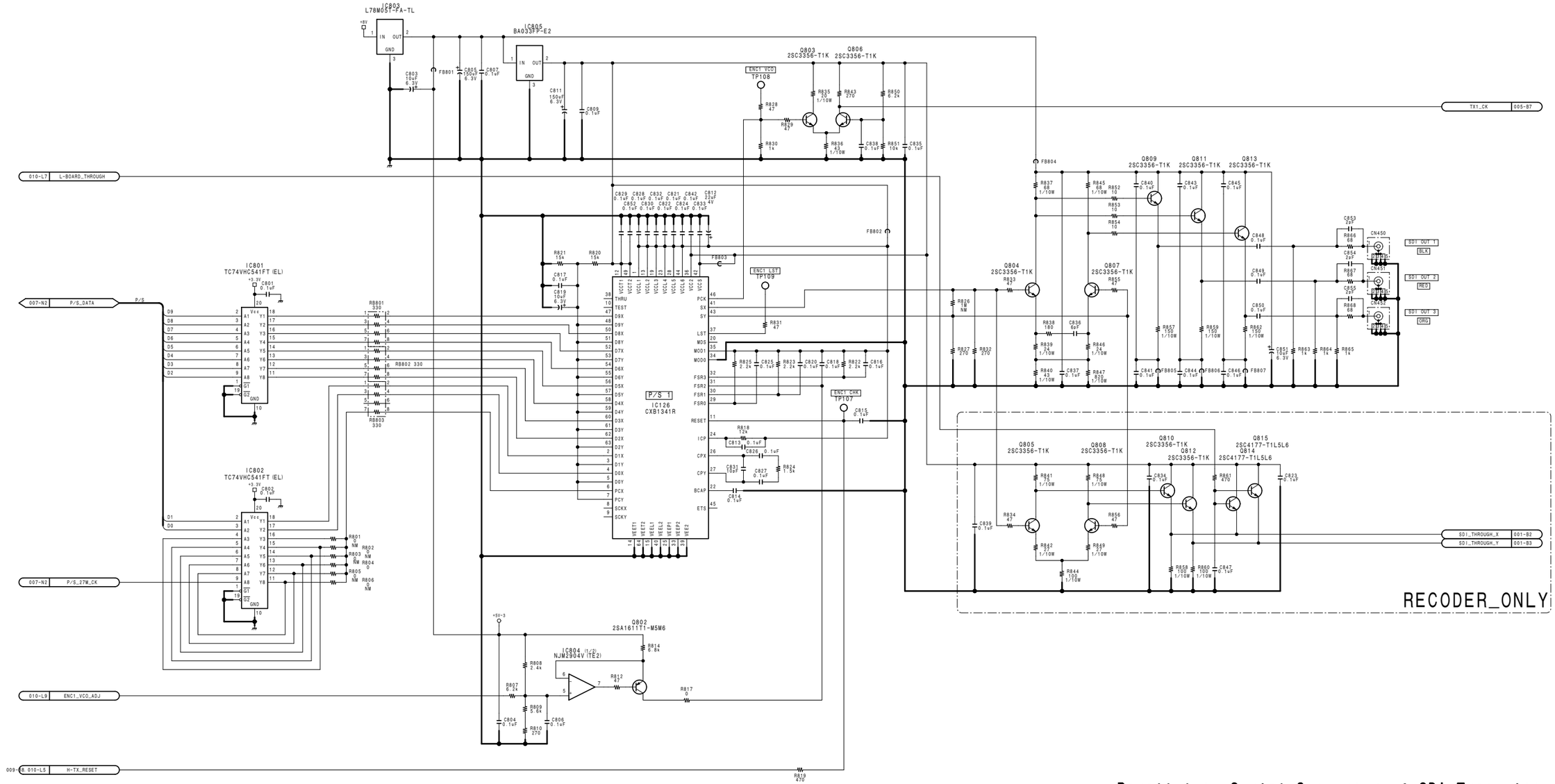
EDH Encoder & Superimposer for SDI Transmitter

DIF-16 BOARD (7/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	: DIF-16 MCB	DVW-A510 (J, UC)	: DIF-16B MCB
DVW-A500P (EK)	: DIF-16 MCB	DVW-A510P (EK)	: DIF-16B MCB
DVW-A500P (UC)	: DIF-16 MCB	DVW-510 (J, UC)	: DIF-16B MCB
DVW-500 (J, UC)	: DIF-16 MCB	DVW-510P (EK)	: DIF-16B MCB
DVW-500P (EK)	: DIF-16 MCB	DVW-CA510 (J, UC)	: DIF-16B MCB
DVW-500P (UC)	: DIF-16 MCB	DVW-CA510P (EK)	: DIF-16B MCB

DVW-A500_DIF-16_006_7



Parallel to Serial Converter of SDI Transmitter

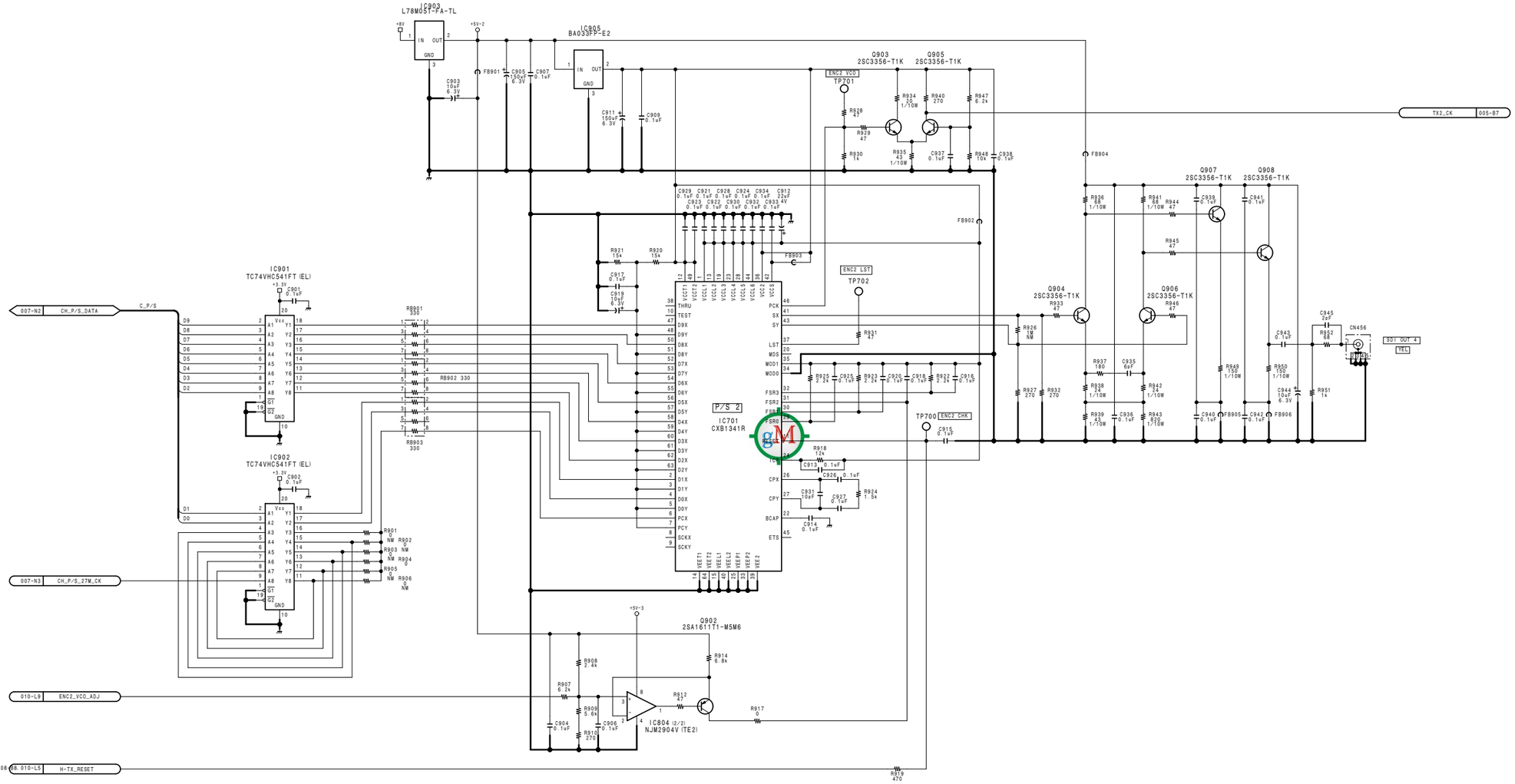
DIF-16 BOARD (8/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	:DIF-16 MCB	DVW-A510 (J, UC)	:DIF-16B MCB
DVW-A500P (EK)	:DIF-16 MCB	DVW-A510P (EK)	:DIF-16B MCB
DVW-A500P (UC)	:DIF-16 MCB	DVW-510 (J, UC)	:DIF-16B MCB
DVW-500 (J, UC)	:DIF-16 MCB	DVW-510P (EK)	:DIF-16B MCB
DVW-500P (EK)	:DIF-16 MCB	DVW-CA510 (J, UC)	:DIF-16B MCB
DVW-500P (UC)	:DIF-16 MCB	DVW-CA510P (EK)	:DIF-16B MCB

DVW-A500_DIF-16_006_8

DIF-16 (9/10)



Parallel to Serial Converter with Superimpose of SDI Transmitter

DIF-16 BOARD (9/10)

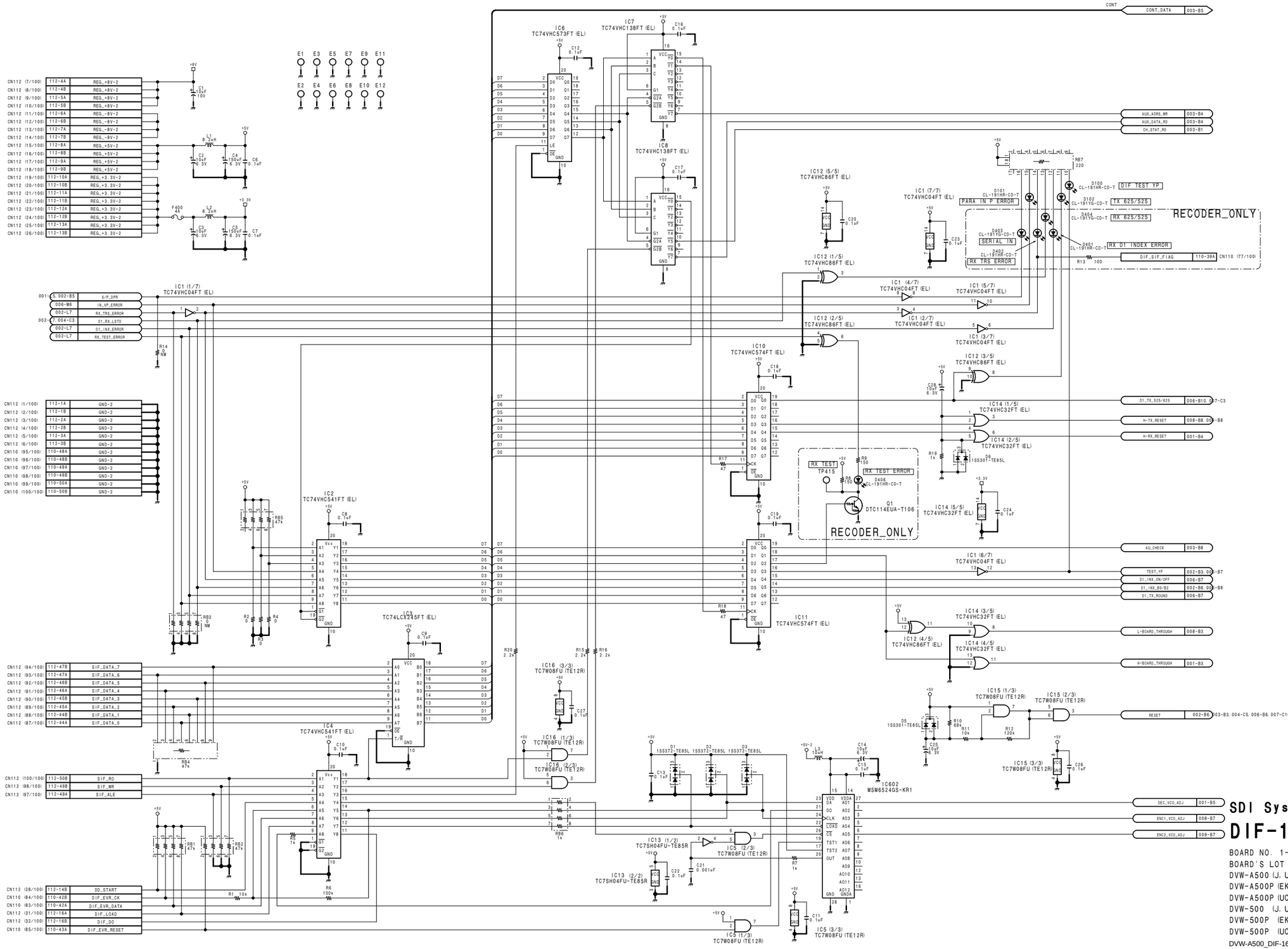
BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

DVW-A500 (J, UC)	:DIF-16 MCB	DVW-A510 (J, UC)	:DIF-16B MCB
DVW-A500P (EK)	:DIF-16 MCB	DVW-A510P (EK)	:DIF-16B MCB
DVW-A500P (UC)	:DIF-16 MCB	DVW-510 (J, UC)	:DIF-16B MCB
DVW-500 (J, UC)	:DIF-16 MCB	DVW-510P (EK)	:DIF-16B MCB
DVW-500P (EK)	:DIF-16 MCB	DVW-CA510 (J, UC)	:DIF-16B MCB
DVW-500P (UC)	:DIF-16 MCB	DVW-CA510P (EK)	:DIF-16B MCB

DVW-A500_DIF-16_006_9

1-46 (c)

DIF-16 (10/10)



SDI System Control

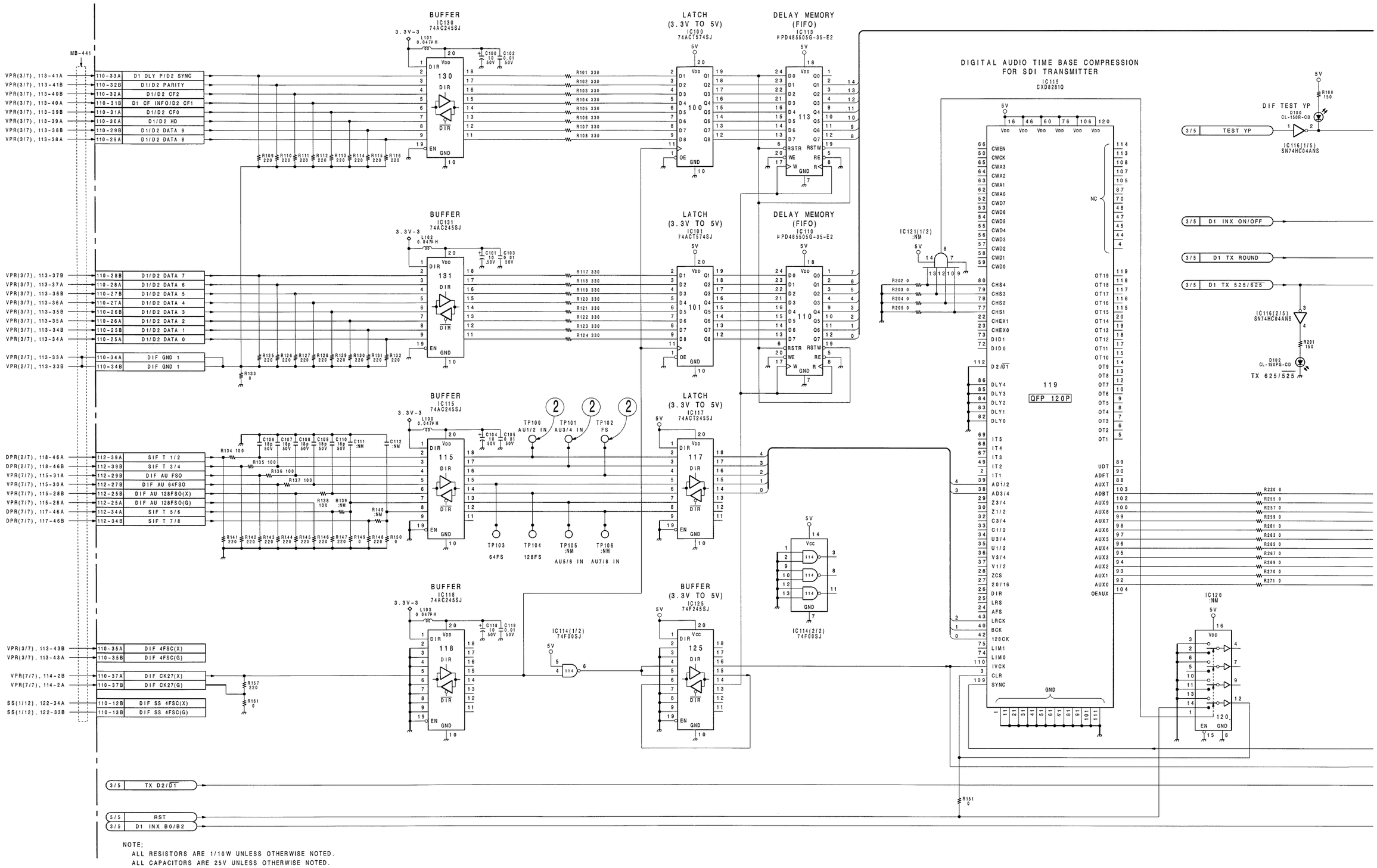
DIF-16 BOARD (10/10)

BOARD NO. 1-648-531-16
BOARD'S LOT NO. 907-

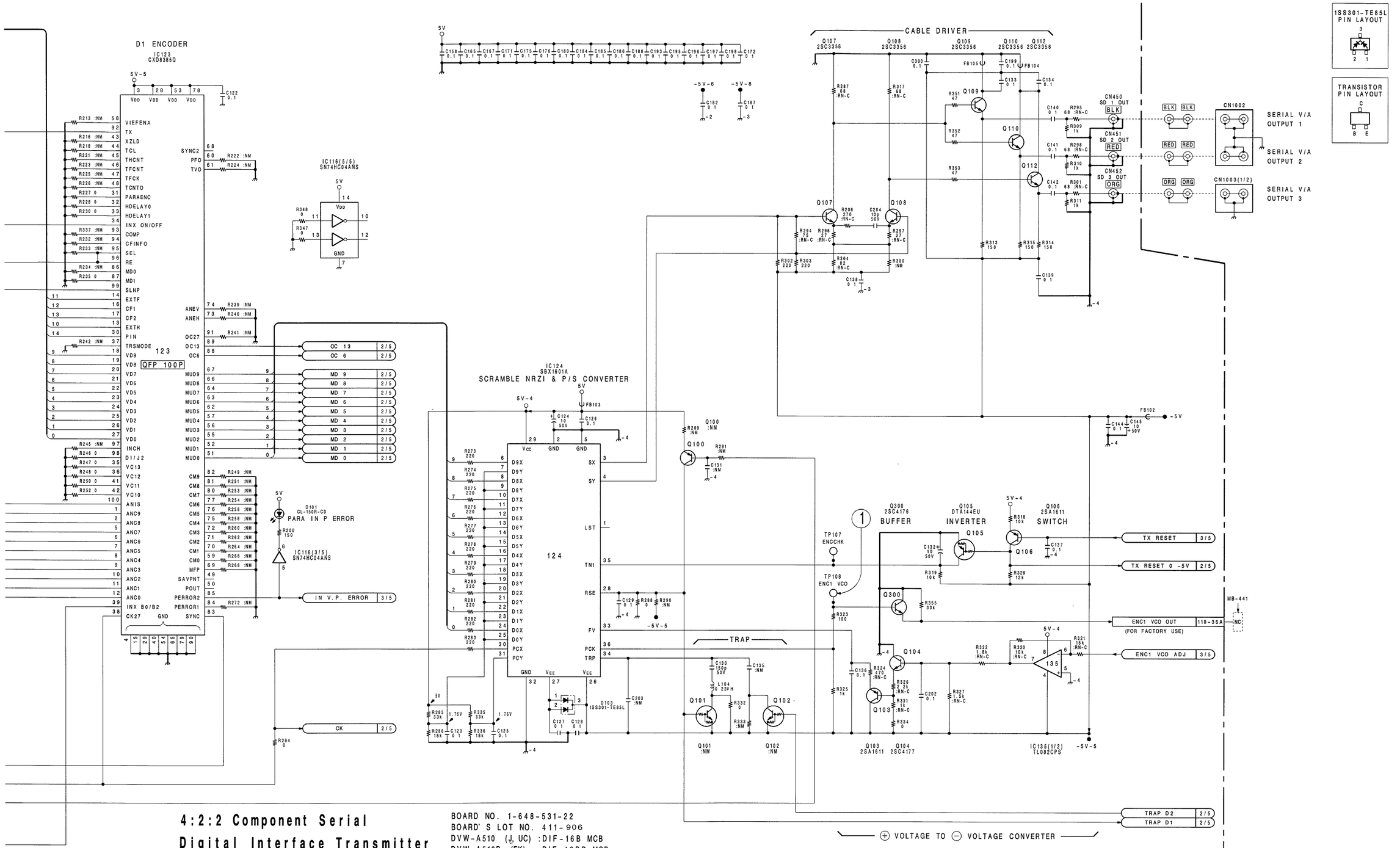
DVW-A500 (J. UC)	: DIF-16 MCB	DVW-A510 (J. UC)	: DIF-16B MCB
DVW-A500P (EK)	: DIF-16 MCB	DVW-A510P (EK)	: DIF-16B MCB
DVW-A500P (UC)	: DIF-16 MCB	DVW-510 (J. UC)	: DIF-16B MCB
DVW-500 (J. UC)	: DIF-16 MCB	DVW-510P (EK)	: DIF-16B MCB
DVW-500P (EK)	: DIF-16 MCB	DVW-CA510 (J. UC)	: DIF-16B MCB
DVW-500P (UC)	: DIF-16 MCB	DVW-CA510P (EK)	: DIF-16B MCB

DVW-A500_DIF-16_006_10

DIF-16B (1/5)



1-38 (b)

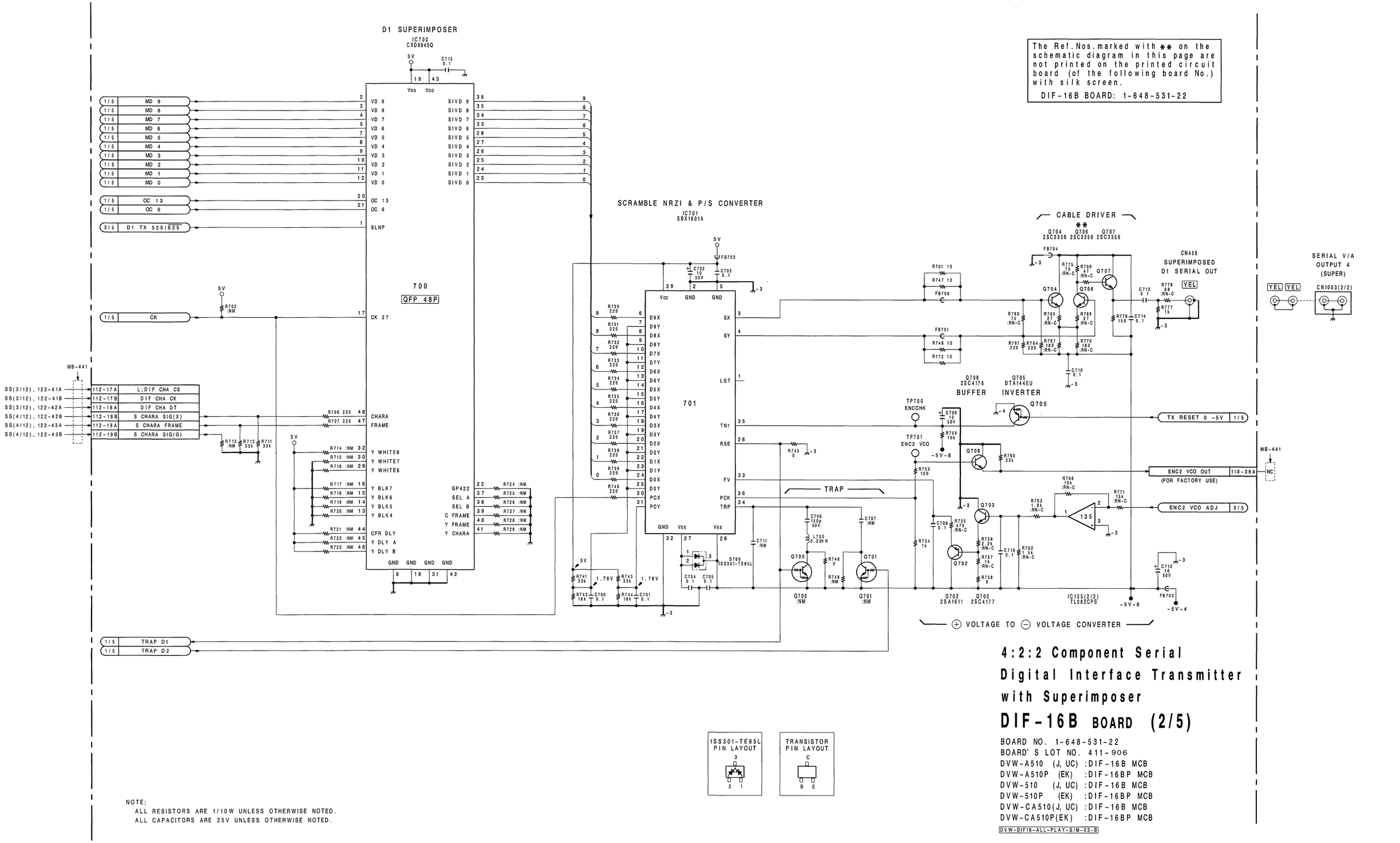


4:2:2 Component Serial Digital Interface Transmitter

DIF-16B BOARD (1/5)

BOARD NO. 1-648-531-22
BOARD' S LOT NO. 411-906
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510(J, UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-B



The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

DIF-16B BOARD: 1-648-531-22

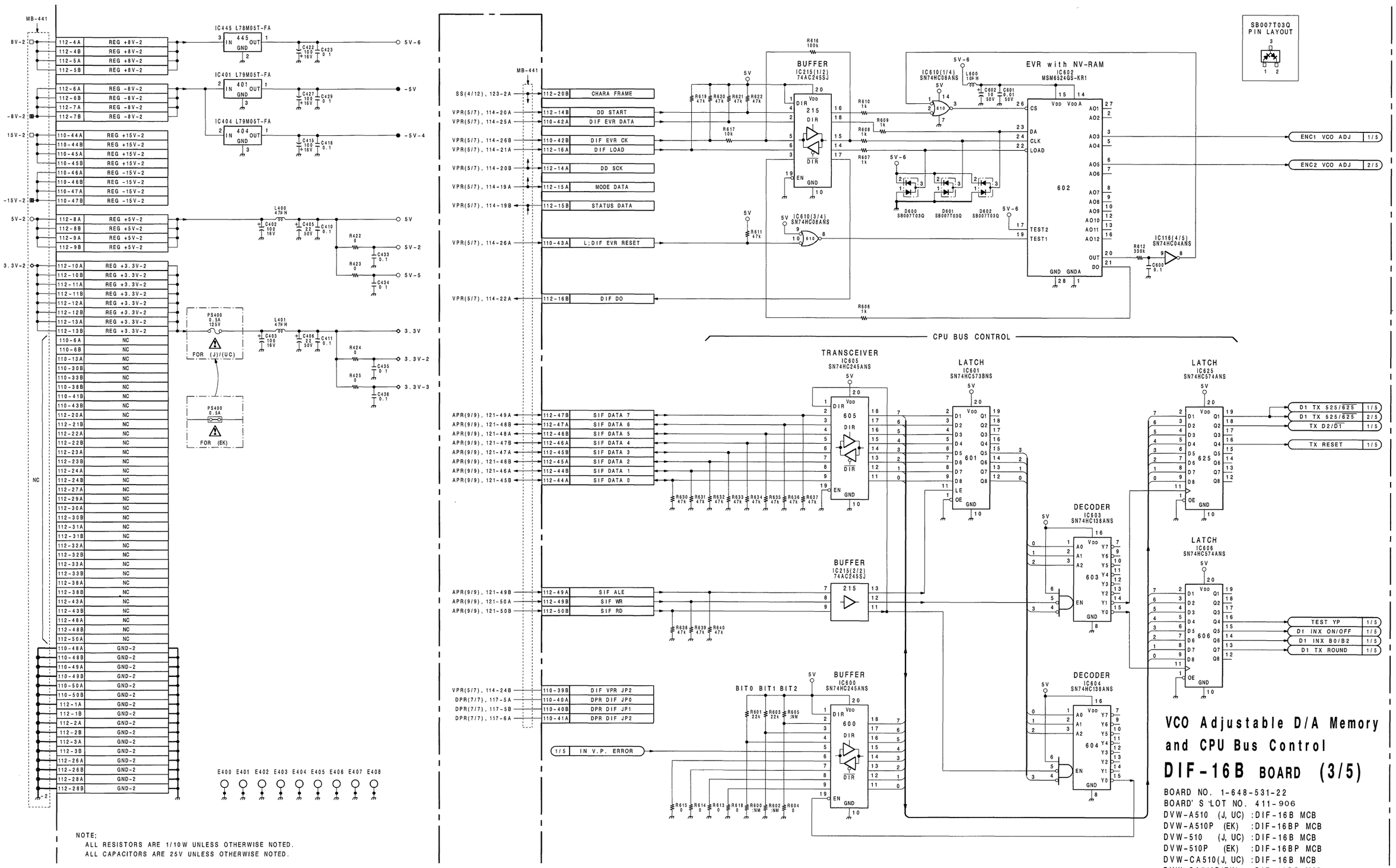
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

4:2:2 Component Serial Digital Interface Transmitter with Superimposer

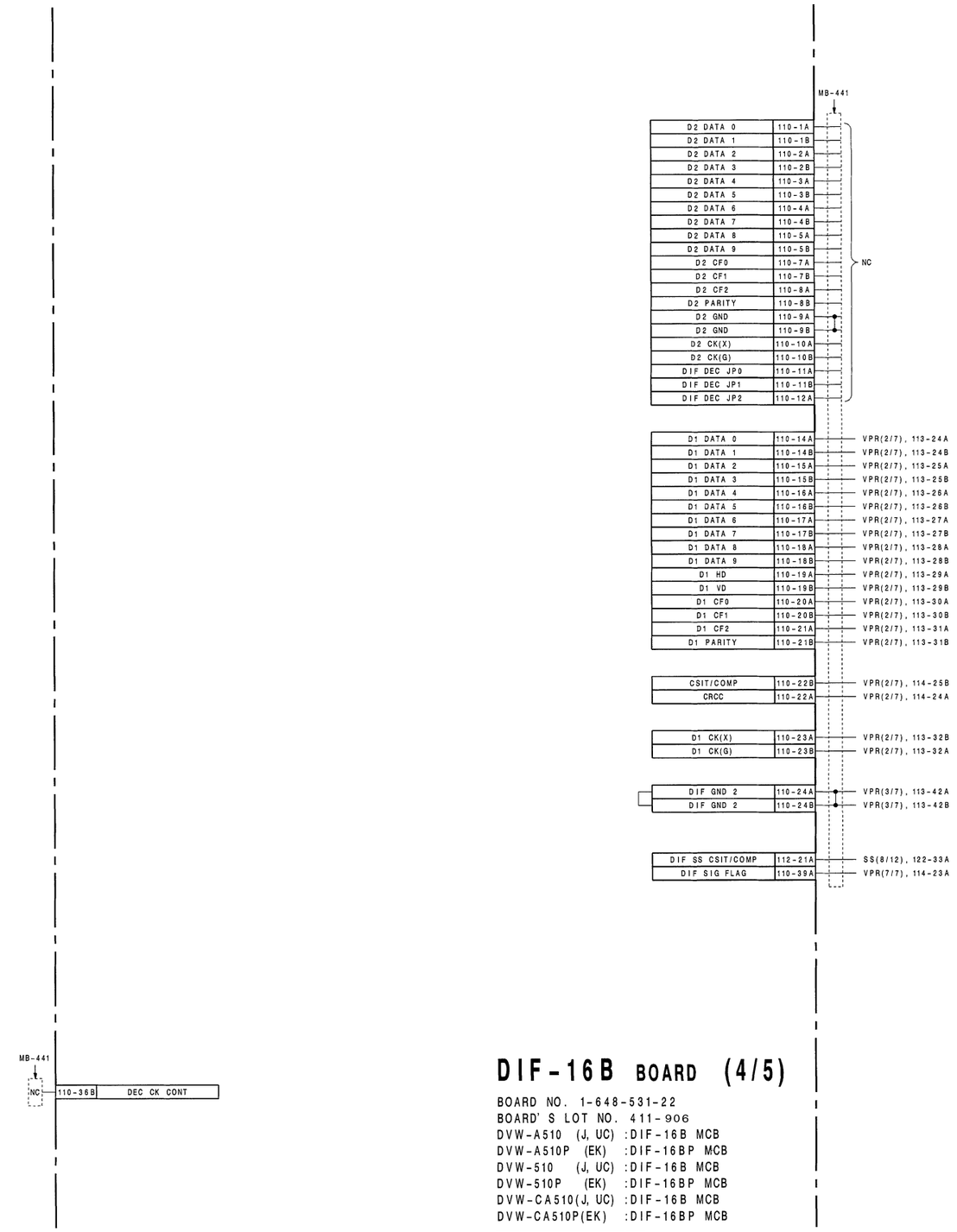
DIF-16B BOARD (2/5)

BOARD NO. 1-648-531-22
BOARD' S LOT NO. 411-906
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510(J, UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-B


MB-441
8V-2
112-4A REG +8V-2
112-4B REG +8V-2
112-5A REG +8V-2
112-5B REG +8V-2
112-6A REG -8V-2
112-6B REG -8V-2
112-7A REG -8V-2
112-7B REG -8V-2
-8V-2
15V-2
110-44A REG +15V-2
110-44B REG +15V-2
110-45A REG +15V-2
110-45B REG +15V-2
110-46A REG -15V-2
110-46B REG -15V-2
110-47A REG -15V-2
110-47B REG -15V-2
-15V-2
5V-2
112-8A REG +5V-2
112-8B REG +5V-2
112-9A REG +5V-2
112-9B REG +5V-2
3.3V-2
112-10A REG +3.3V-2
112-10B REG +3.3V-2
112-11A REG +3.3V-2
112-11B REG +3.3V-2
112-12A REG +3.3V-2
112-12B REG +3.3V-2
112-13A REG +3.3V-2
112-13B REG +3.3V-2
110-6A NC
110-6B NC
110-13A NC
110-30B NC
110-33B NC
110-38B NC
110-41B NC
110-43B NC
112-20A NC
112-21B NC
112-22A NC
112-22B NC
112-23A NC
112-23B NC
112-24A NC
112-24B NC
112-27A NC
112-29A NC
112-30A NC
112-30B NC
112-31A NC
112-31B NC
112-32A NC
112-32B NC
112-33A NC
112-33B NC
112-38A NC
112-38B NC
112-43A NC
112-43B NC
112-48A NC
112-48B NC
112-50A NC
NC
110-48A GND-2
110-48B GND-2
110-49A GND-2
110-49B GND-2
110-50A GND-2
110-50B GND-2
112-1A GND-2
112-1B GND-2
112-2A GND-2
112-2B GND-2
112-3A GND-2
112-3B GND-2
112-26A GND-2
112-26B GND-2
112-28A GND-2
112-28B GND-2
-2
IC445 L78M05T-FA
IC401 L79M05T-FA
IC404 L79M05T-FA
5V-6
-5V
-5V-4
L400 47µH
L401 47µH
5V
5V-2
5V-5
3.3V
3.3V-2
3.3V-3
PS400 0.5A 125V
FOR (J)/(UC)
PS400 0.5A
FOR (EK)
E400 E401 E402 E403 E404 E405 E406 E407 E408
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.
SS(4/12), 123-2A
VPR(5/7), 114-20A
VPR(5/7), 114-25A
VPR(5/7), 114-26B
VPR(5/7), 114-21A
VPR(5/7), 114-20B
VPR(5/7), 114-19A
VPR(5/7), 114-19B
VPR(5/7), 114-26A
VPR(5/7), 114-22A
112-20B CHARA FRAME
112-14B DD START
110-42A DIF EVR DATA
110-42B DIF EVR CK
112-16A DIF LOAD
112-14A DD SCK
112-15A MODE DATA
112-15B STATUS DATA
110-43A L;DIF EVR RESET
112-16B DIF DO
BUFFER IC215(1/2) 74AC245SJ
IC610(1/4) SN74HC08ANS
IC610(3/4) SN74HC08ANS
EVR with NV-RAM IC602 MSM6524GS-KR1
602
D600 SB007T03Q
D601 SB007T03Q
D602 SB007T03Q
IC116(4/5) SN74HC04ANS
SB007T03Q PIN LAYOUT
ENC1 VCO ADJ 1/5
ENC2 VCO ADJ 2/5
CPU BUS CONTROL
TRANSCEIVER IC605 SN74HC245ANS
LATCH IC601 SN74HC573BNS
LATCH IC625 SN74HC574ANS
APR(9/9), 121-49A
APR(9/9), 121-48B
APR(9/9), 121-48A
APR(9/9), 121-47B
APR(9/9), 121-47A
APR(9/9), 121-46B
APR(9/9), 121-46A
APR(9/9), 121-45B
112-47B SIF DATA 7
112-47A SIF DATA 6
112-46B SIF DATA 5
112-46A SIF DATA 4
112-45B SIF DATA 3
112-45A SIF DATA 2
112-44B SIF DATA 1
112-44A SIF DATA 0
DECODER IC603 SN74HC138ANS
LATCH IC606 SN74HC574ANS
D1 TX 525/625 1/5
D1 TX 525/625 2/5
TX D2/D1 1/5
TX RESET 1/5
TEST YP 1/5
D1 INX ON/OFF 1/5
D1 INX B0/B2 1/5
D1 TX ROUND 1/5
APR(9/9), 121-49B
APR(9/9), 121-50A
APR(9/9), 121-50B
112-49A SIF ALE
112-49B SIF WR
112-50B SIF RD
BUFFER IC215(2/2) 74AC245SJ
DECODER IC604 SN74HC138ANS
VPR(5/7), 114-24B
DPR(7/7), 117-5A
DPR(7/7), 117-5B
DPR(7/7), 117-6A
110-39B DIF VPR JP2
110-40A DPR DIF JP0
110-40B DPR DIF JP1
110-41A DPR DIF JP2
BIT0 BIT1 BIT2
BUFFER IC600 SN74HC245ANS
1/5 IN V.P. ERROR
VCO Adjustable D/A Memory and CPU Bus Control
DIF-16B BOARD (3/5)
BOARD NO. 1-648-531-22
BOARD'S LOT NO. 411-906
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510(J, UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB
DVW-DIF16-ALL-PLAY-S/M-03-B

DIF-16B (4/5)

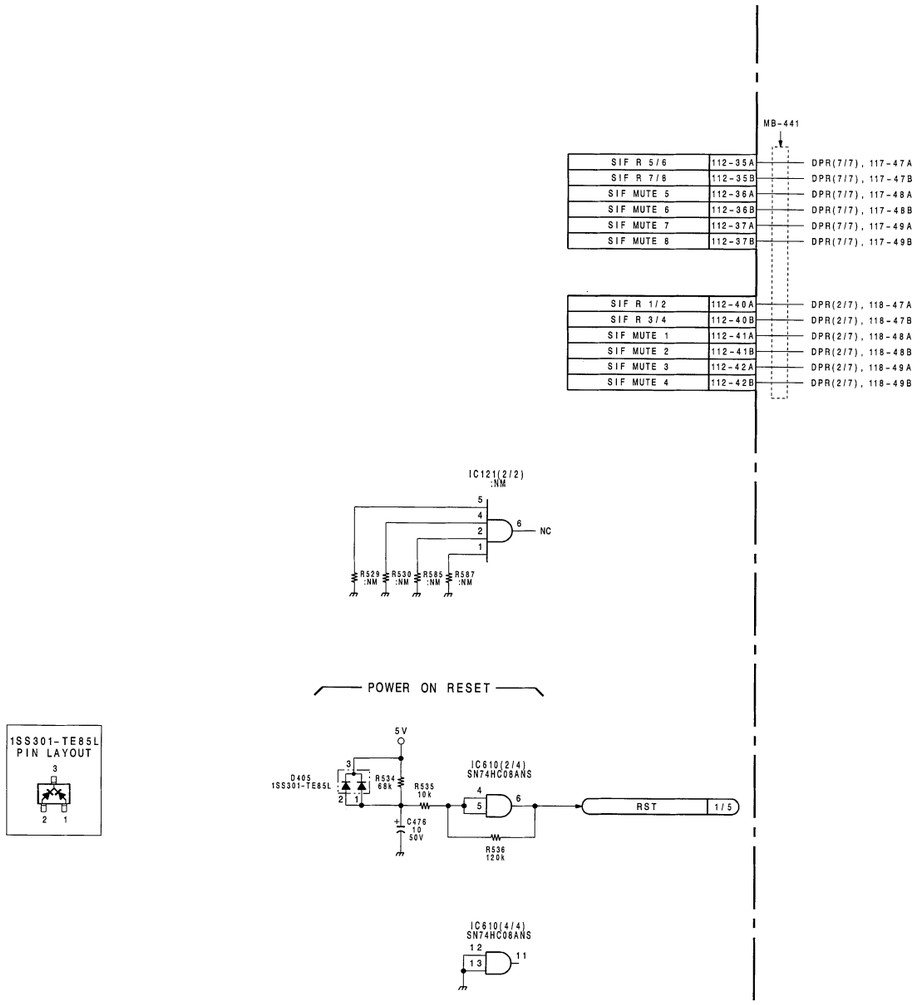


DIF-16B BOARD (4/5)

BOARD NO. 1-648-531-22
BOARD' S LOT NO. 411-906
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510(J, UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-B

1-42 (b)



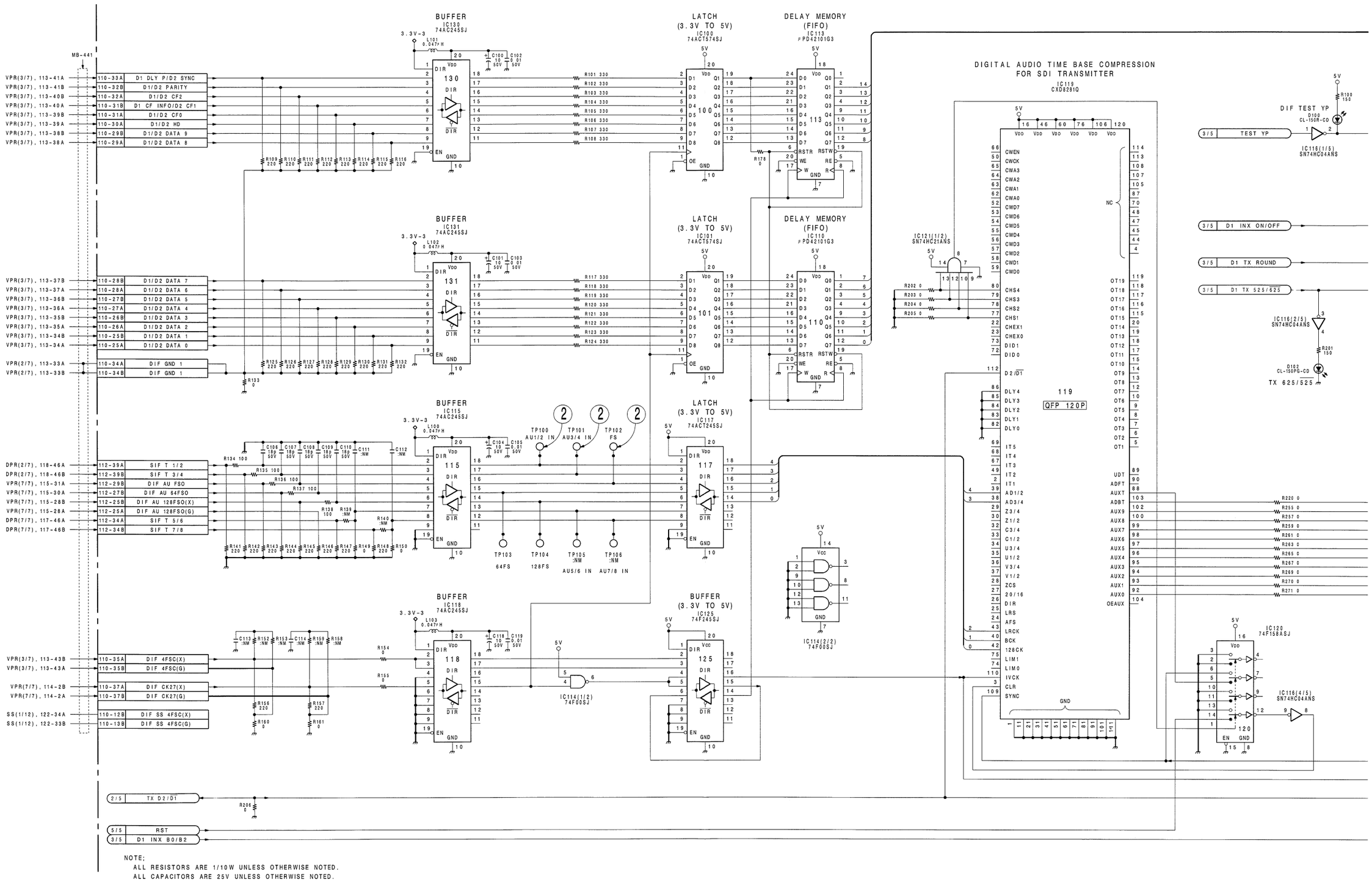
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.

Power ON Reset

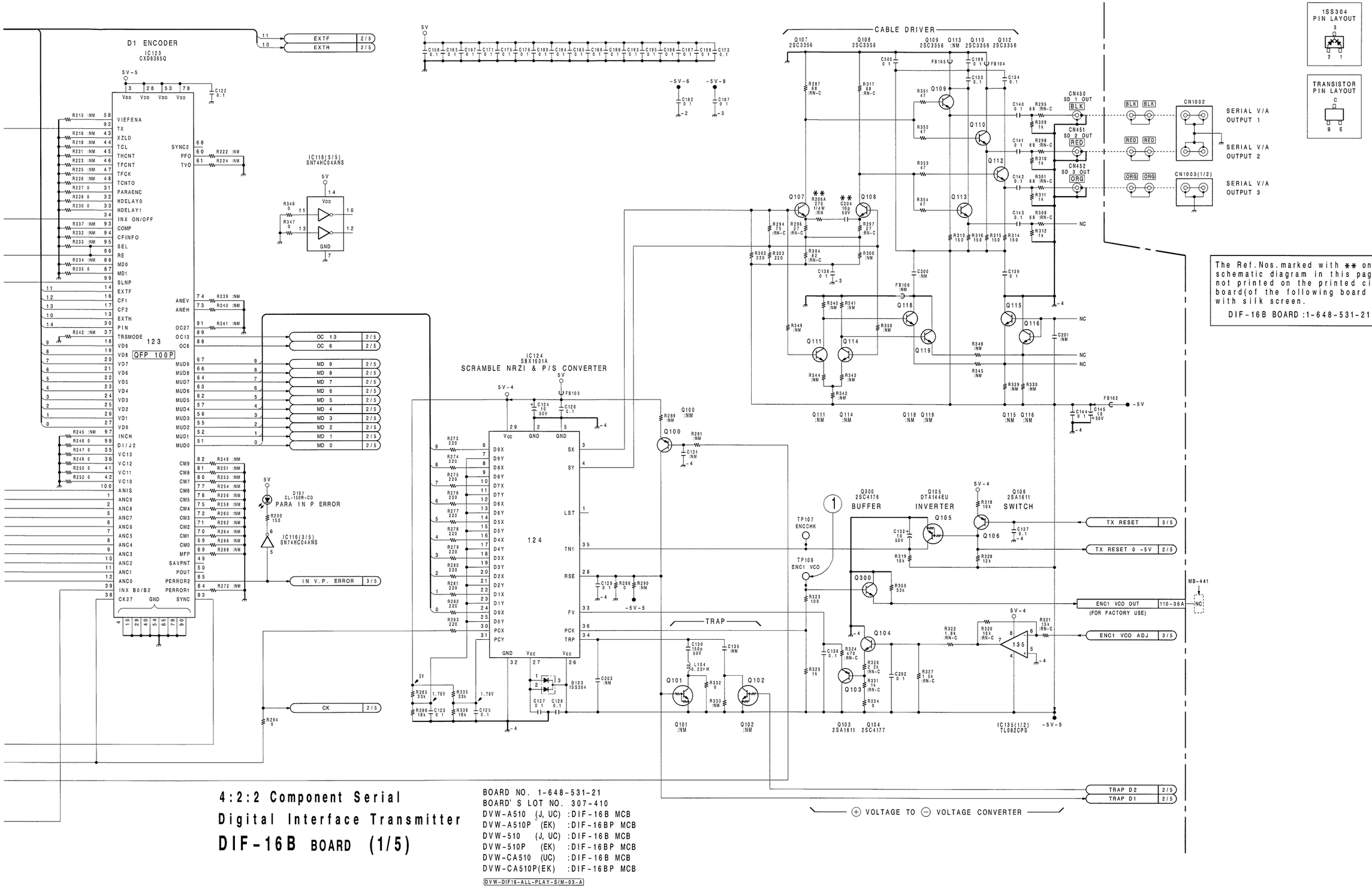
DIF-16B BOARD (5/5)

BOARD NO. 1-648-531-22
BOARD' S LOT NO. 411-906
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510(J, UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-B


BUFFER
IC130
74AC245SJ
BUFFER
IC131
74AC245SJ
BUFFER
IC115
74AC245SJ
BUFFER
IC118
74AC245SJ
LATCH
(3.3V TO 5V)
IC100
74ACT574SJ
LATCH
(3.3V TO 5V)
IC101
74ACT574SJ
LATCH
(3.3V TO 5V)
IC117
74ACT245SJ
BUFFER
(3.3V TO 5V)
IC125
74F245SJ
DELAY MEMORY
(FIFO)
IC113
μPD42101G3
DELAY MEMORY
(FIFO)
IC110
μPD42101G3
DIGITAL AUDIO TIME BASE COMPRESSION
FOR SDI TRANSMITTER
IC119
CXD8281Q
QFP 120P
IC121(1/2)
SN74HC21ANS
IC114(1/2)
74F00SJ
IC114(2/2)
74F00SJ
IC120
74F158ASJ
IC116(1/5)
SN74HC04ANS
IC116(2/5)
SN74HC04ANS
IC116(4/5)
SN74HC04ANS
DIF TEST YP
D100
CL-150R-CD
D101
CL-150PG-CD
TX 625/525
TP100 AU1/2 IN
TP101 AU3/4 IN
TP102 FS
TP103 64FS
TP104 128FS
TP105 :NM AU5/6 IN
TP106 :NM AU7/8 IN
MB-441
VPR(3/7), 113-41A
VPR(3/7), 113-41B
VPR(3/7), 113-40B
VPR(3/7), 113-40A
VPR(3/7), 113-39B
VPR(3/7), 113-39A
VPR(3/7), 113-38B
VPR(3/7), 113-38A
D1 DLY P/D2 SYNC
D1/D2 PARITY
D1/D2 CF2
D1 CF INFO/D2 CF1
D1/D2 CF0
D1/D2 HD
D1/D2 DATA 9
D1/D2 DATA 8
VPR(3/7), 113-37B
VPR(3/7), 113-37A
VPR(3/7), 113-36B
VPR(3/7), 113-36A
VPR(3/7), 113-35B
VPR(3/7), 113-35A
VPR(3/7), 113-34B
VPR(3/7), 113-34A
D1/D2 DATA 7
D1/D2 DATA 6
D1/D2 DATA 5
D1/D2 DATA 4
D1/D2 DATA 3
D1/D2 DATA 2
D1/D2 DATA 1
D1/D2 DATA 0
VPR(2/7), 113-33A
VPR(2/7), 113-33B
DIF GND 1
DIF GND 1
DPR(2/7), 118-46A
DPR(2/7), 118-46B
VPR(7/7), 115-31A
VPR(7/7), 115-30A
VPR(7/7), 115-28B
VPR(7/7), 115-28A
DPR(7/7), 117-46A
DPR(7/7), 117-46B
SIF T 1/2
SIF T 3/4
DIF AU FSO
DIF AU 64FSO
DIF AU 128FSO(X)
DIF AU 128FSO(G)
SIF T 5/6
SIF T 7/8
VPR(3/7), 113-43B
VPR(3/7), 113-43A
VPR(7/7), 114-2B
VPR(7/7), 114-2A
SS(1/12), 122-34A
SS(1/12), 122-33B
DIF 4FSC(X)
DIF 4FSC(G)
DIF CK27(X)
DIF CK27(G)
DIF SS 4FSC(X)
DIF SS 4FSC(G)
2/5 TX D2/D1
5/5 RST
3/5 D1 INX B0/B2
3/5 TEST YP
3/5 D1 INX ON/OFF
3/5 D1 TX ROUND
3/5 D1 TX 525/625
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

DIF-16B (1/5)



The Ref.Nos. marked with ** on the schematic diagram in this page are not printed on the printed circuit board(of the following board No.) with silk screen.

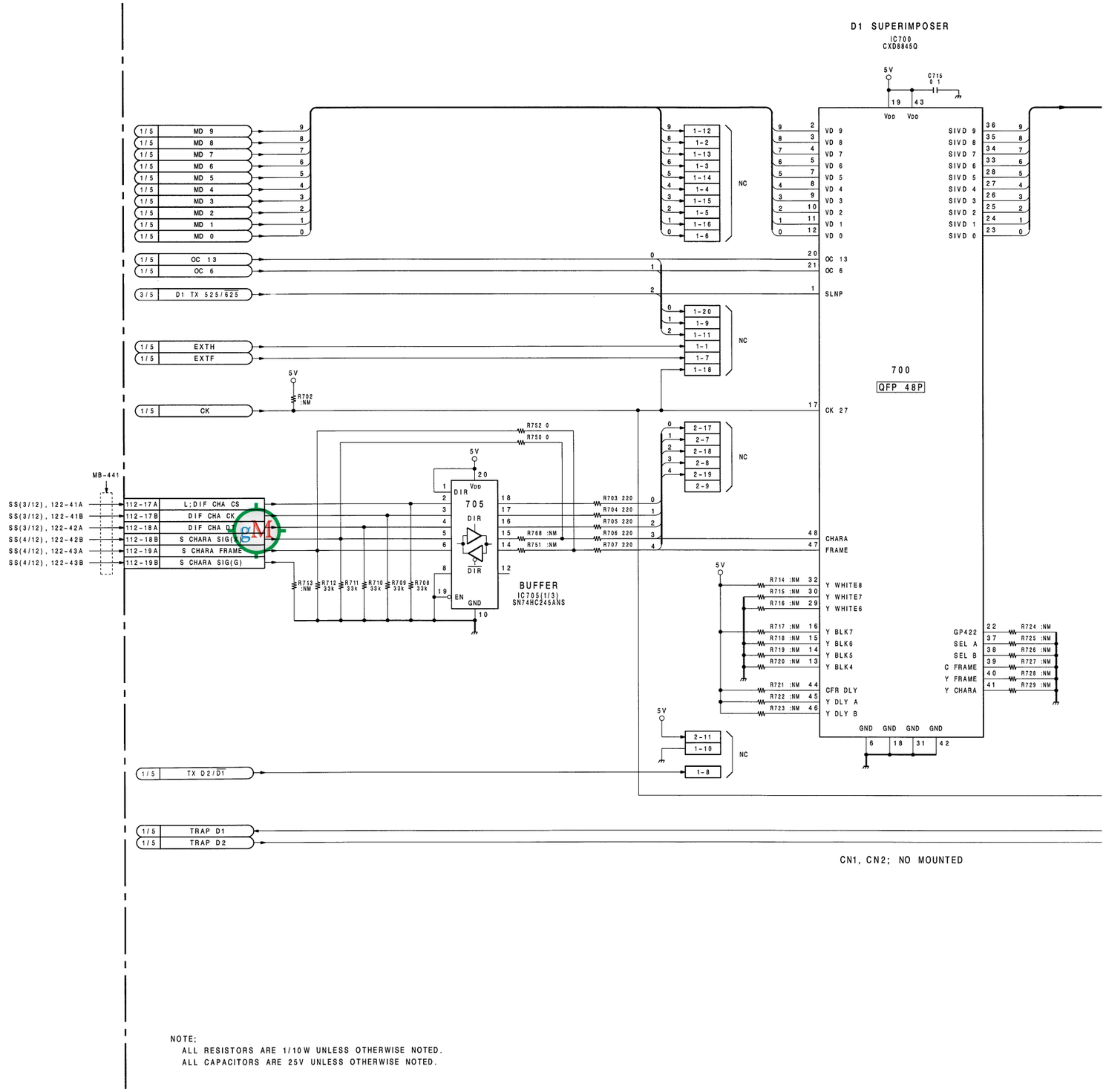
DIF-16B BOARD :1-648-531-21

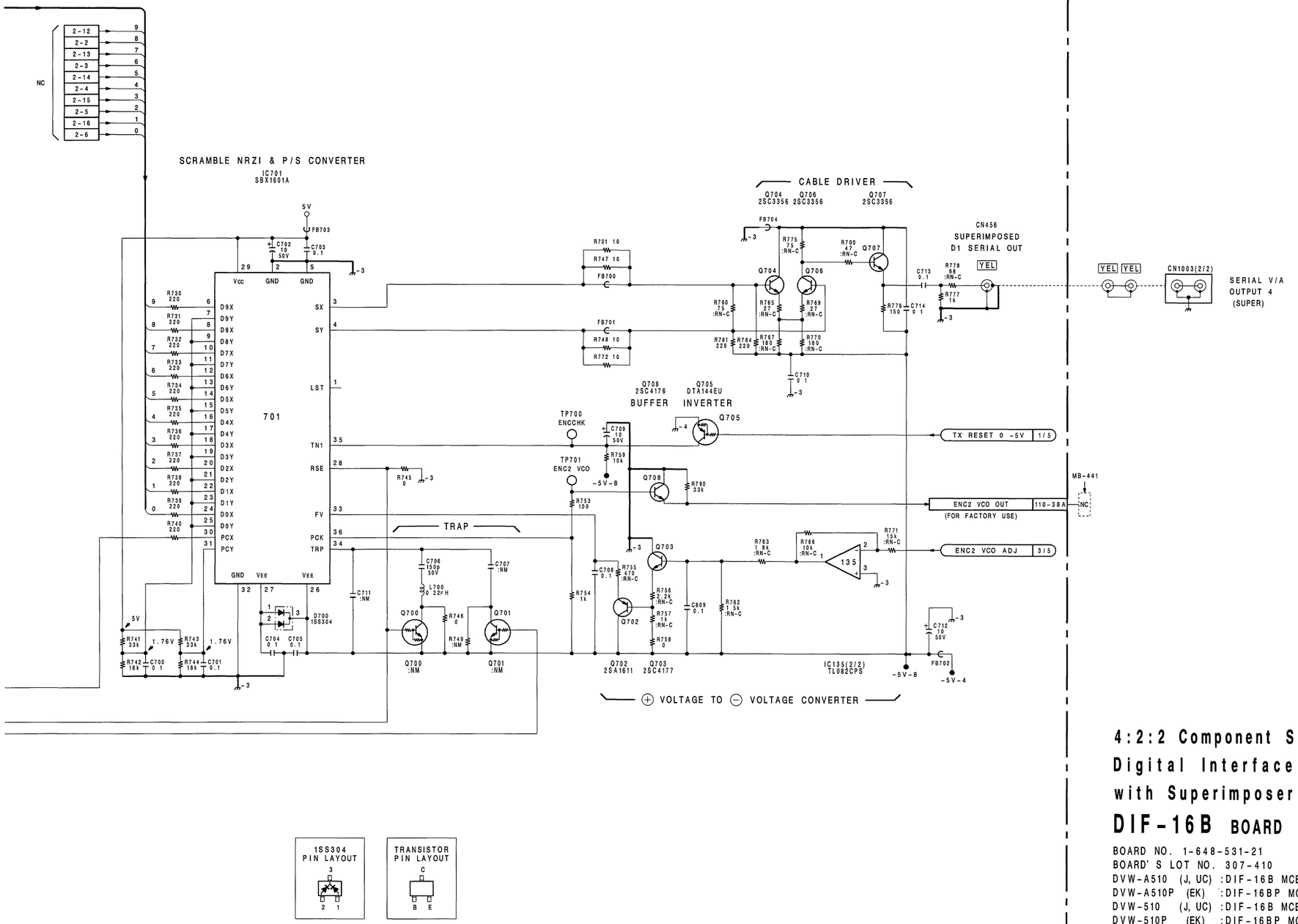
4:2:2 Component Serial Digital Interface Transmitter

DIF-16B BOARD (1/5)

BOARD NO. 1-648-531-21
BOARD' S LOT NO. 307-410
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510 (UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-A


D1 SUPERIMPOSER
IC700
CXD8845Q
5V
C715
0.1
19
43
VDD VDD
MD 9
MD 8
MD 7
MD 6
MD 5
MD 4
MD 3
MD 2
MD 1
MD 0
OC 13
OC 6
D1 TX 525/625
EXTH
EXTF
CK
R702 :NM
NC
VD 9
VD 8
VD 7
VD 6
VD 5
VD 4
VD 3
VD 2
VD 1
VD 0
SIVD 9
SIVD 8
SIVD 7
SIVD 6
SIVD 5
SIVD 4
SIVD 3
SIVD 2
SIVD 1
SIVD 0
OC 13
OC 6
SLNP
CK 27
700
QFP 48P
R752 0
R750 0
R703 220
R704 220
R705 220
R706 220
R707 220
R768 :NM
R751 :NM
CHARA
FRAME
MB-441
SS(3/12), 122-41A
SS(3/12), 122-41B
SS(3/12), 122-42A
SS(4/12), 122-42B
SS(4/12), 122-43A
SS(4/12), 122-43B
112-17A L;DIF CHA CS
112-17B DIF CHA CK
112-18A DIF CHA DT
112-18B S CHARA SIG(G)
112-19A S CHARA FRAME
112-19B S CHARA SIG(G)
705
DIR
VDD
GND
EN
BUFFER
IC705(1/3)
SN74HC245ANS
R713 :NM
R712 33k
R711 33k
R710 33k
R709 33k
R708 33k
Y WHITE8
Y WHITE7
Y WHITE6
Y BLK7
Y BLK6
Y BLK5
Y BLK4
CFR DLY
Y DLY A
Y DLY B
GND GND GND GND
GP422
SEL A
SEL B
C FRAME
Y FRAME
Y CHARA
TX D2/D1
TRAP D1
TRAP D2
CN1, CN2; NO MOUNTED
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

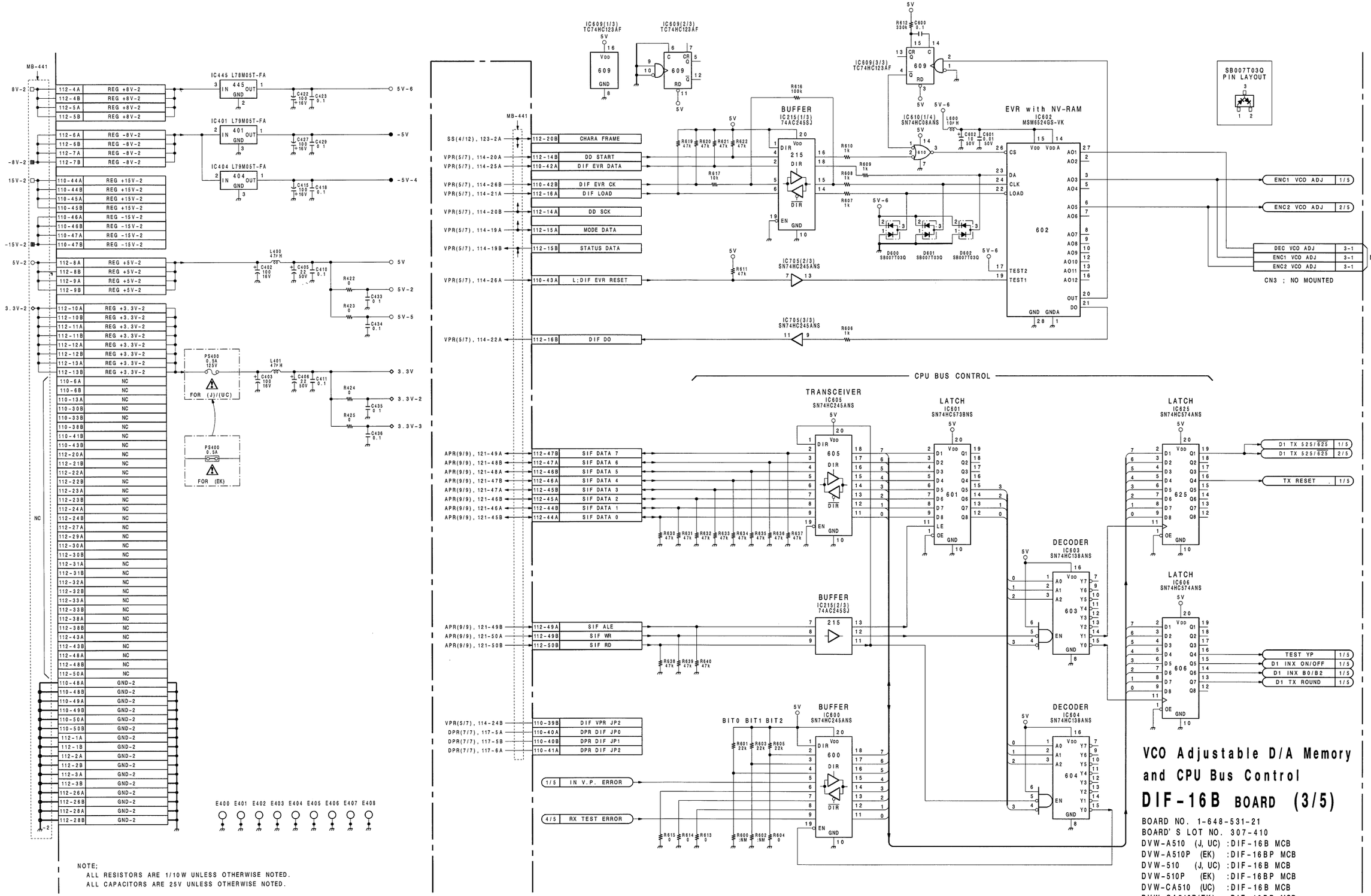


4:2:2 Component Serial Digital Interface Transmitter with Superimposer

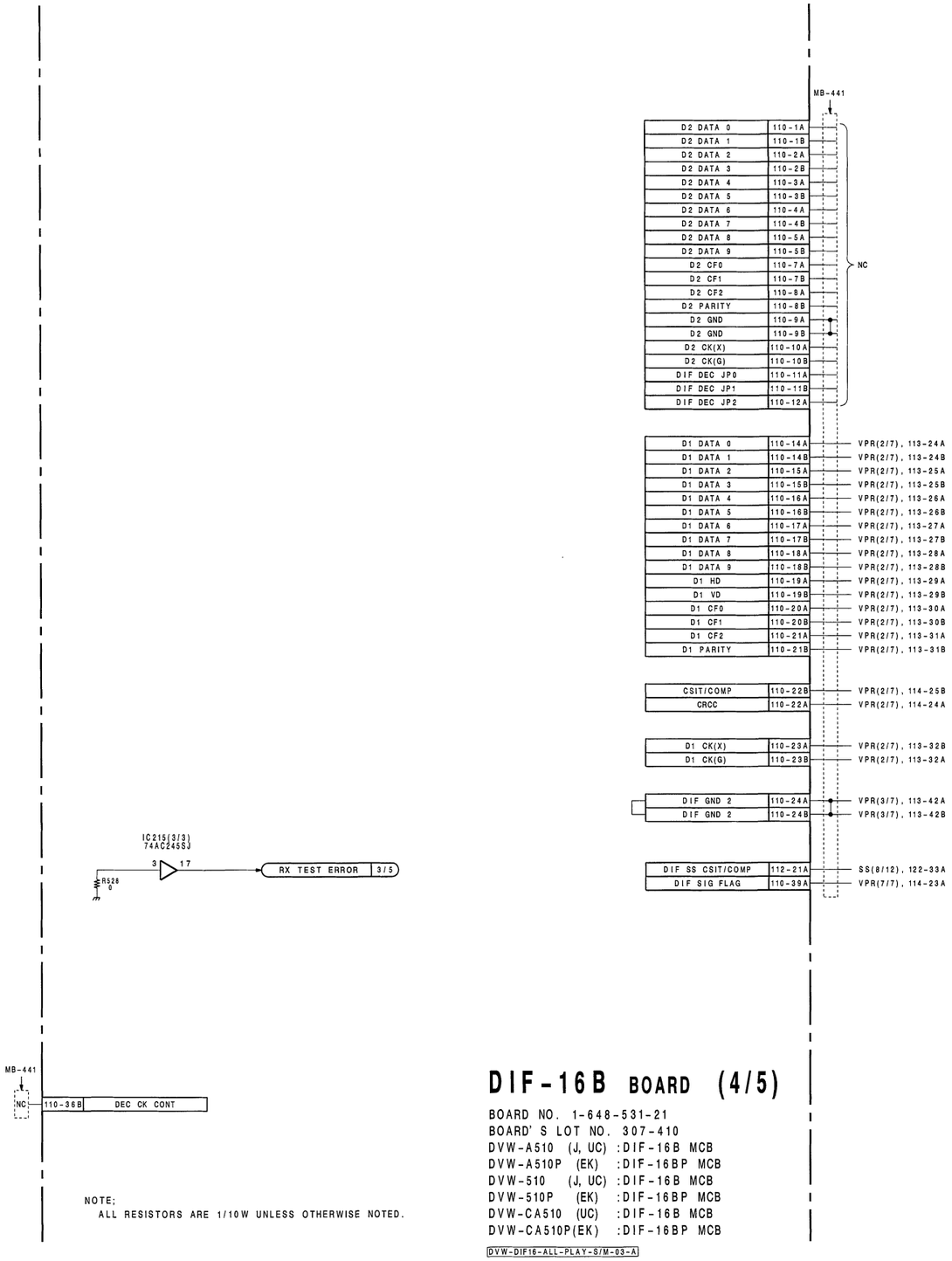
DIF-16B BOARD (2/5)

BOARD NO. 1-648-531-21
BOARD' S LOT NO. 307-410
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510 (UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-A


MB-441
8V-2
15V-2
-15V-2
5V-2
3.3V-2
NC
GND-2
REG +8V-2
REG -8V-2
REG +15V-2
REG -15V-2
REG +5V-2
REG +3.3V-2
NC
GND-2
IC445 L78M05T-FA
IC401 L79M05T-FA
IC404 L79M05T-FA
5V-6
-5V
-5V-4
L400 47μH
L401 47μH
5V
5V-2
5V-5
3.3V
3.3V-2
3.3V-3
PS400 0.5A 125V
FOR (J)/(UC)
PS400 0.5A
FOR (EK)
E400 E401 E402 E403 E404 E405 E406 E407 E408
IC609(1/3) TC74HC123AF
IC609(2/3) TC74HC123AF
IC609(3/3) TC74HC123AF
BUFFER IC215(1/3) 74AC245SJ
IC610(1/4) SN74HC08ANS
EVR with NV-RAM
IC602 MSM5524GS-VK
SB007T03Q PIN LAYOUT
ENC1 VCO ADJ 1/5
ENC2 VCO ADJ 2/5
DEC VCO ADJ 3-1
ENC1 VCO ADJ 3-1
ENC2 VCO ADJ 3-1
NC
CN3 ; NO MOUNTED
D600 SB007T03Q
D601 SB007T03Q
D602 SB007T03Q
SS(4/12), 123-2A
VPR(5/7), 114-20A
VPR(5/7), 114-25A
VPR(5/7), 114-26B
VPR(5/7), 114-21A
VPR(5/7), 114-20B
VPR(5/7), 114-19A
VPR(5/7), 114-19B
VPR(5/7), 114-26A
VPR(5/7), 114-22A
CHARA FRAME
DD START
DIF EVR DATA
DIF EVR CK
DIF LOAD
DD SCK
MODE DATA
STATUS DATA
L;DIF EVR RESET
DIF DO
IC705(2/3) SN74HC245ANS
IC705(3/3) SN74HC245ANS
CPU BUS CONTROL
TRANSCEIVER IC605 SN74HC245ANS
LATCH IC601 SN74HC573BNS
LATCH IC625 SN74HC574ANS
APR(9/9), 121-49A
APR(9/9), 121-48B
APR(9/9), 121-48A
APR(9/9), 121-47B
APR(9/9), 121-47A
APR(9/9), 121-46B
APR(9/9), 121-46A
APR(9/9), 121-45B
SIF DATA 7
SIF DATA 6
SIF DATA 5
SIF DATA 4
SIF DATA 3
SIF DATA 2
SIF DATA 1
SIF DATA 0
D1 TX 525/625 1/5
D1 TX 525/625 2/5
TX RESET 1/5
DECODER IC603 SN74HC138ANS
DECODER IC604 SN74HC138ANS
LATCH IC606 SN74HC574ANS
TEST YP 1/5
D1 INX ON/OFF 1/5
D1 INX B0/B2 1/5
D1 TX ROUND 1/5
APR(9/9), 121-49B
APR(9/9), 121-50A
APR(9/9), 121-50B
SIF ALE
SIF WR
SIF RD
BUFFER IC215(2/3) 74AC245SJ
VPR(5/7), 114-24B
DPR(7/7), 117-5A
DPR(7/7), 117-5B
DPR(7/7), 117-6A
DIF VPR JP2
DPR DIF JP0
DPR DIF JP1
DPR DIF JP2
BUFFER IC600 SN74HC245ANS
BIT0 BIT1 BIT2
1/5 IN V.P. ERROR
4/5 RX TEST ERROR
VCO Adjustable D/A Memory and CPU Bus Control
DIF-16B BOARD (3/5)
BOARD NO. 1-648-531-21
BOARD' S LOT NO. 307-410
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510 (UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB
DVW-DIF16-ALL-PLAY-S/M-03-A
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

DIF-16B (4/5)



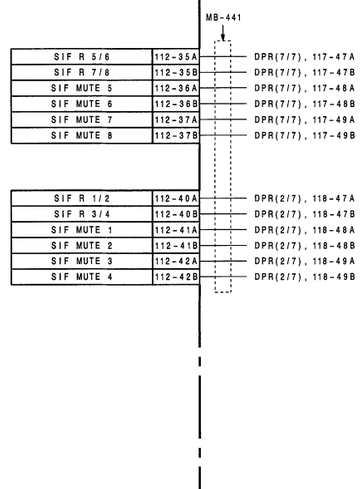
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.

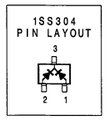
DIF-16B BOARD (4/5)

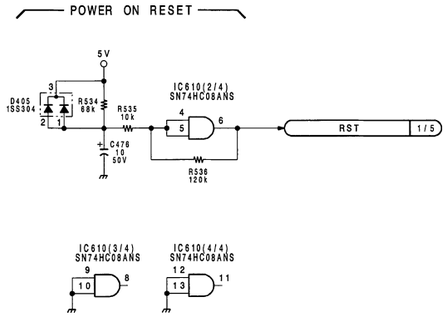
BOARD NO. 1-648-531-21
BOARD' S LOT NO. 307-410
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510 (UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-A

1-43 (a)







LOT NO.	BOARD NO.
307-	1-648-531-21

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.

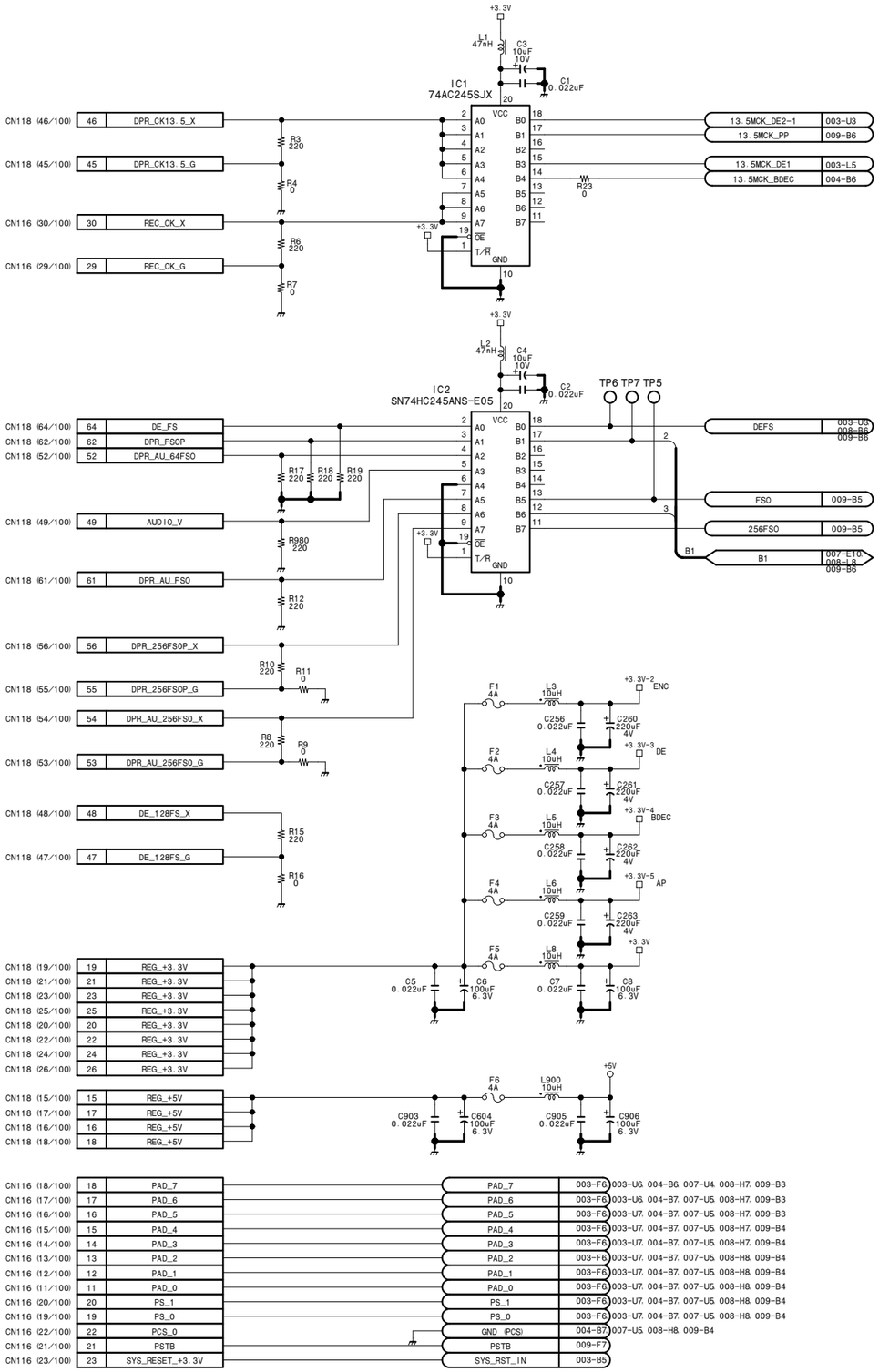
Power ON Reset

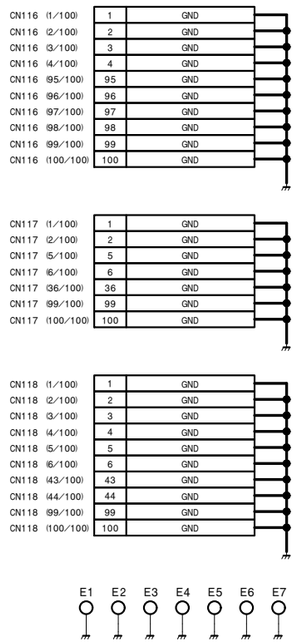
DIF-16B BOARD (5/5)

BOARD NO. 1-648-531-21
BOARD' S'LOT NO. 307-410
DVW-A510 (J, UC) :DIF-16B MCB
DVW-A510P (EK) :DIF-16BP MCB
DVW-510 (J, UC) :DIF-16B MCB
DVW-510P (EK) :DIF-16BP MCB
DVW-CA510 (UC) :DIF-16B MCB
DVW-CA510P(EK) :DIF-16BP MCB

DVW-DIF16-ALL-PLAY-S/M-03-A

DPR-36H (1/9)



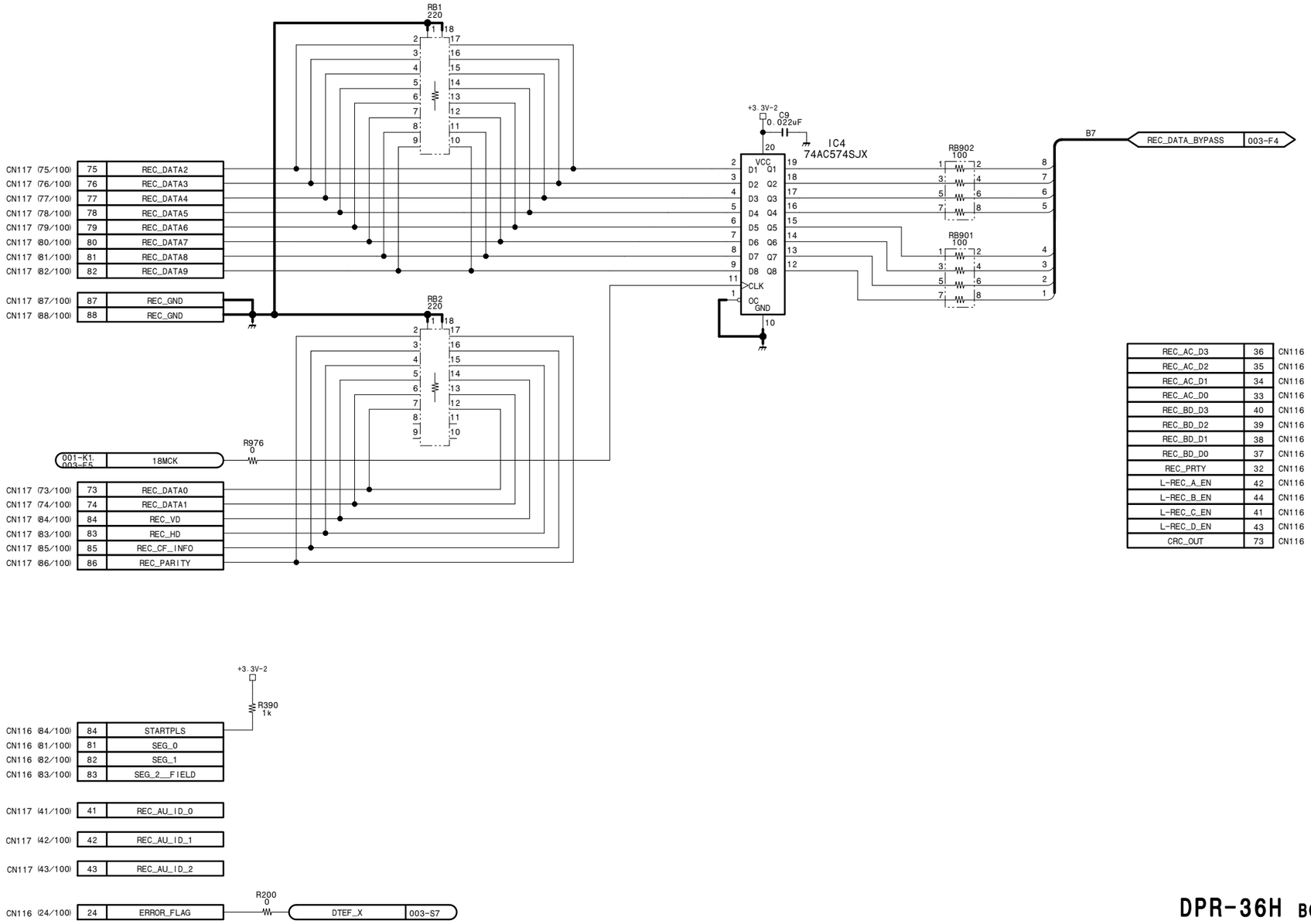


Digital Process System Control

DPR-36H BOARD (1/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36H MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36H MCB
DVW-CA510 (J, UC) :DPR-36H MCB
DVW-CA510P (EK) :DPR-36H MCB
DVW-A500_DPR-36B_001_1

1-48 (c)

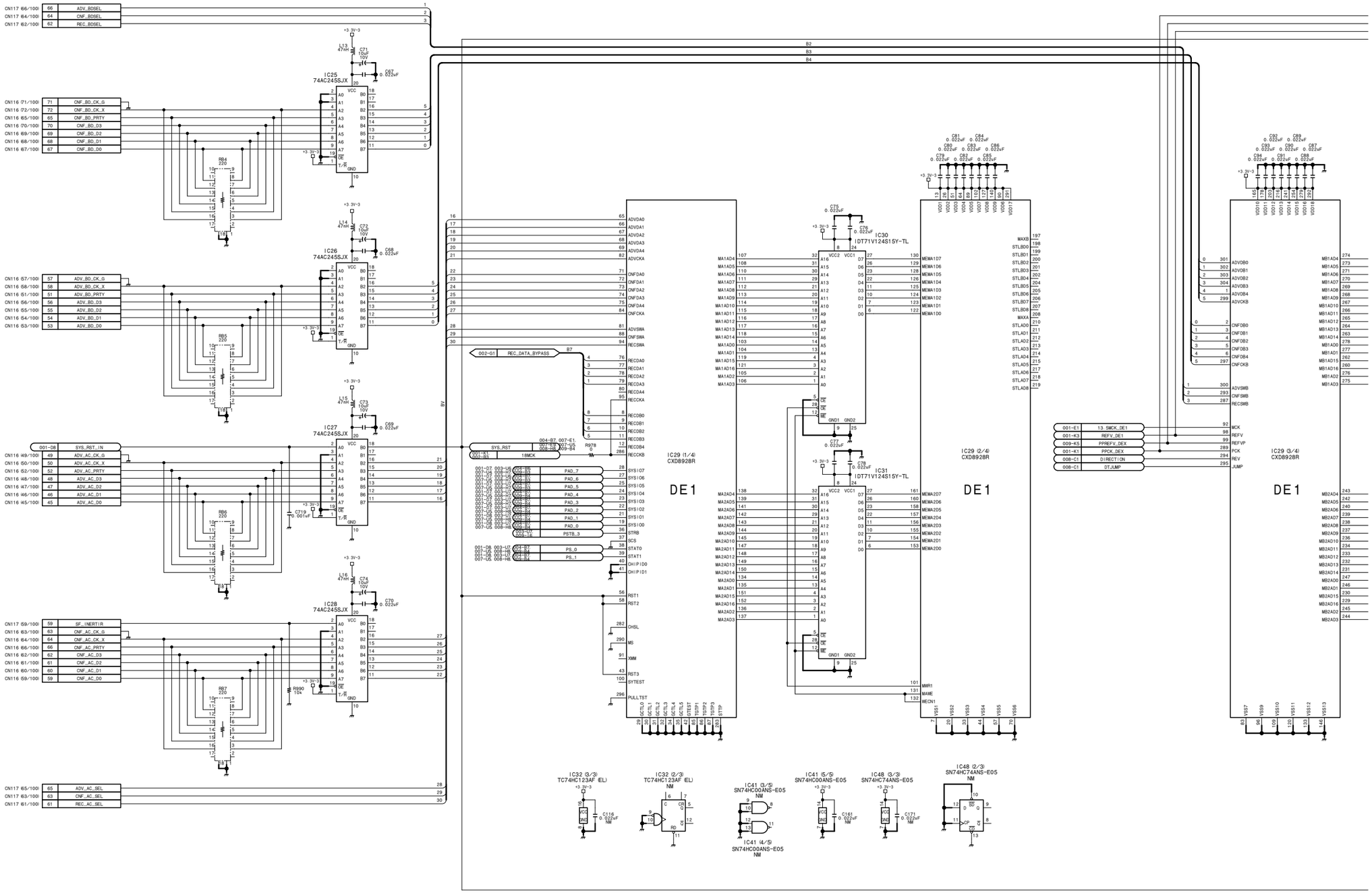


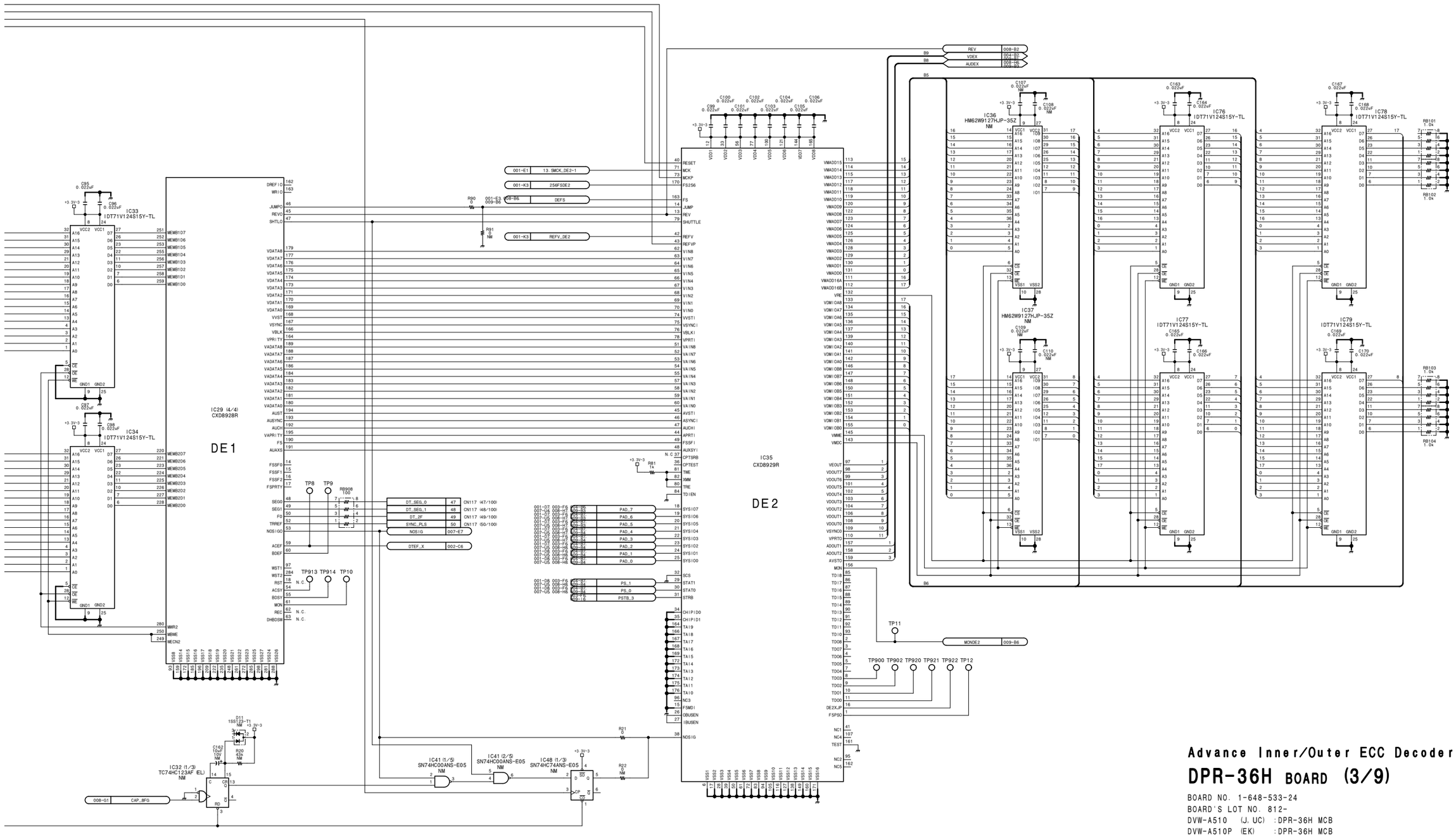
REC_AC_D3	36	CN116 (36/100)
REC_AC_D2	35	CN116 (35/100)
REC_AC_D1	34	CN116 (34/100)
REC_AC_D0	33	CN116 (33/100)
REC_BD_D3	40	CN116 (40/100)
REC_BD_D2	39	CN116 (39/100)
REC_BD_D1	38	CN116 (38/100)
REC_BD_D0	37	CN116 (37/100)
REC_PRTY	32	CN116 (32/100)
L-REC_A_EN	42	CN116 (42/100)
L-REC_B_EN	44	CN116 (44/100)
L-REC_C_EN	41	CN116 (41/100)
L-REC_D_EN	43	CN116 (43/100)
CRC_OUT	73	CN116 (73/100)

DPR-36H BOARD (2/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) : DPR-36H MCB
DVW-A510P (EK) : DPR-36H MCB
DVW-510 (J, UC) : DPR-36H MCB
DVW-510P (EK) : DPR-36H MCB
DVW-CA510 (J, UC) : DPR-36H MCB
DVW-CA510P (EK) : DPR-36H MCB
DVW-A500_DPR-36B_001_2

DPR-36H (3/9)


CN117 66/100
66 ADV_BDSEL
CN117 64/100
64 CNF_BDSEL
CN117 62/100
62 REC_BDSEL
IC25 74AC245SJX
IC26 74AC245SJX
IC27 74AC245SJX
IC28 74AC245SJX
CN116 71/100
71 CNF_BD_CK_G
CN116 72/100
72 CNF_BD_CK_X
CN116 65/100
65 CNF_BD_PRTY
CN116 70/100
70 CNF_BD_D3
CN116 69/100
69 CNF_BD_D2
CN116 68/100
68 CNF_BD_D1
CN116 67/100
67 CNF_BD_D0
CN116 57/100
57 ADV_BD_CK_G
CN116 58/100
58 ADV_BD_CK_X
CN116 51/100
51 ADV_BD_PRTY
CN116 56/100
56 ADV_BD_D3
CN116 55/100
55 ADV_BD_D2
CN116 54/100
54 ADV_BD_D1
CN116 53/100
53 ADV_BD_D0
001-D8 SYS_RST_IN
CN116 49/100
49 ADV_AC_CK_G
CN116 50/100
50 ADV_AC_CK_X
CN116 52/100
52 ADV_AC_PRTY
CN116 48/100
48 ADV_AC_D3
CN116 47/100
47 ADV_AC_D2
CN116 46/100
46 ADV_AC_D1
CN116 45/100
45 ADV_AC_D0
CN116 59/100
59 SF_INERTIR
CN116 63/100
63 CNF_AC_CK_G
CN116 64/100
64 CNF_AC_CK_X
CN116 66/100
66 CNF_AC_PRTY
CN116 62/100
62 CNF_AC_D3
CN116 61/100
61 CNF_AC_D2
CN116 60/100
60 CNF_AC_D1
CN116 59/100
59 CNF_AC_D0
CN117 65/100
65 ADV_AC_SEL
CN117 63/100
63 CNF_AC_SEL
CN117 61/100
61 REC_AC_SEL
002-G1 REC_DATA_BYPASS
SYS_RST
18MCK
IC29 (1/4) CXD8928R
DE1
IC29 (2/4) CXD8928R
DE1
IC29 (3/4) CXD8928R
DE1
IC30 IDT71V124S15Y-TL
IC31 IDT71V124S15Y-TL
001-E1 13.5MCK_DE1
001-K3 REFV_DE1
009-K5 PPREFV_DEX
001-K1 PPCK_DEX
008-C1 DIRECTION
008-C1 DT_JUMP
IC32 (3/3) TC74HC123AF (EL)
IC32 (2/3) TC74HC123AF (EL)
NM
IC41 (3/5) SN74HC00ANS-E05
NM
IC41 (4/5) SN74HC00ANS-E05
NM
IC41 (5/5) SN74HC00ANS-E05
IC48 (3/3) SN74HC74ANS-E05
IC48 (2/3) SN74HC74ANS-E05
NM



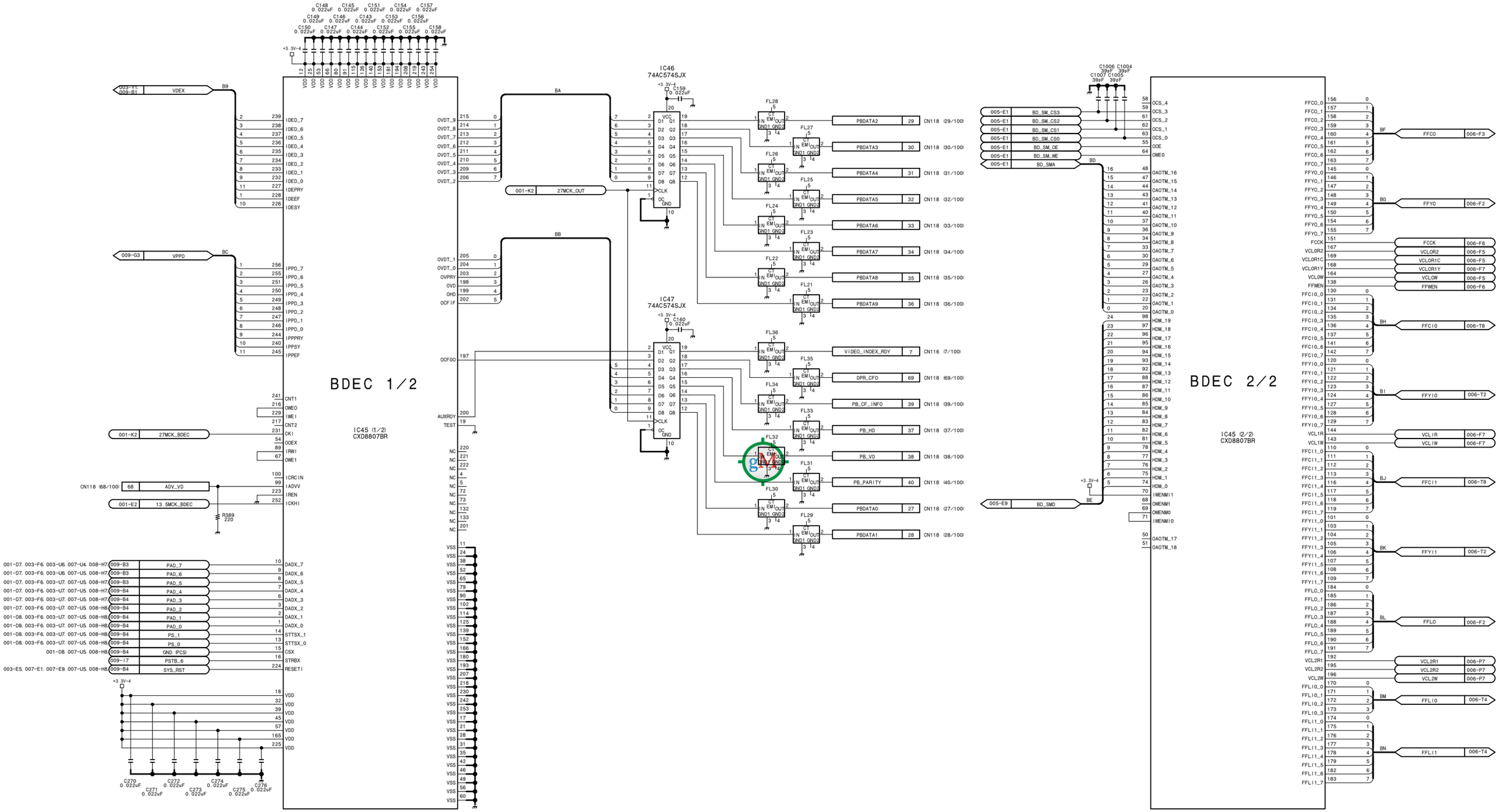
Advance Inner/Outer ECC Decoder

DPR-36H BOARD (3/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) : DPR-36H MCB
DVW-A510P (EK) : DPR-36H MCB
DVW-510 (J, UC) : DPR-36H MCB
DVW-510P (EK) : DPR-36H MCB
DVW-CA510 (J, UC) : DPR-36H MCB
DVW-CA510P (EK) : DPR-36H MCB

DVW-A500_DPR-36B_001_3

DPR-36H (4/9)



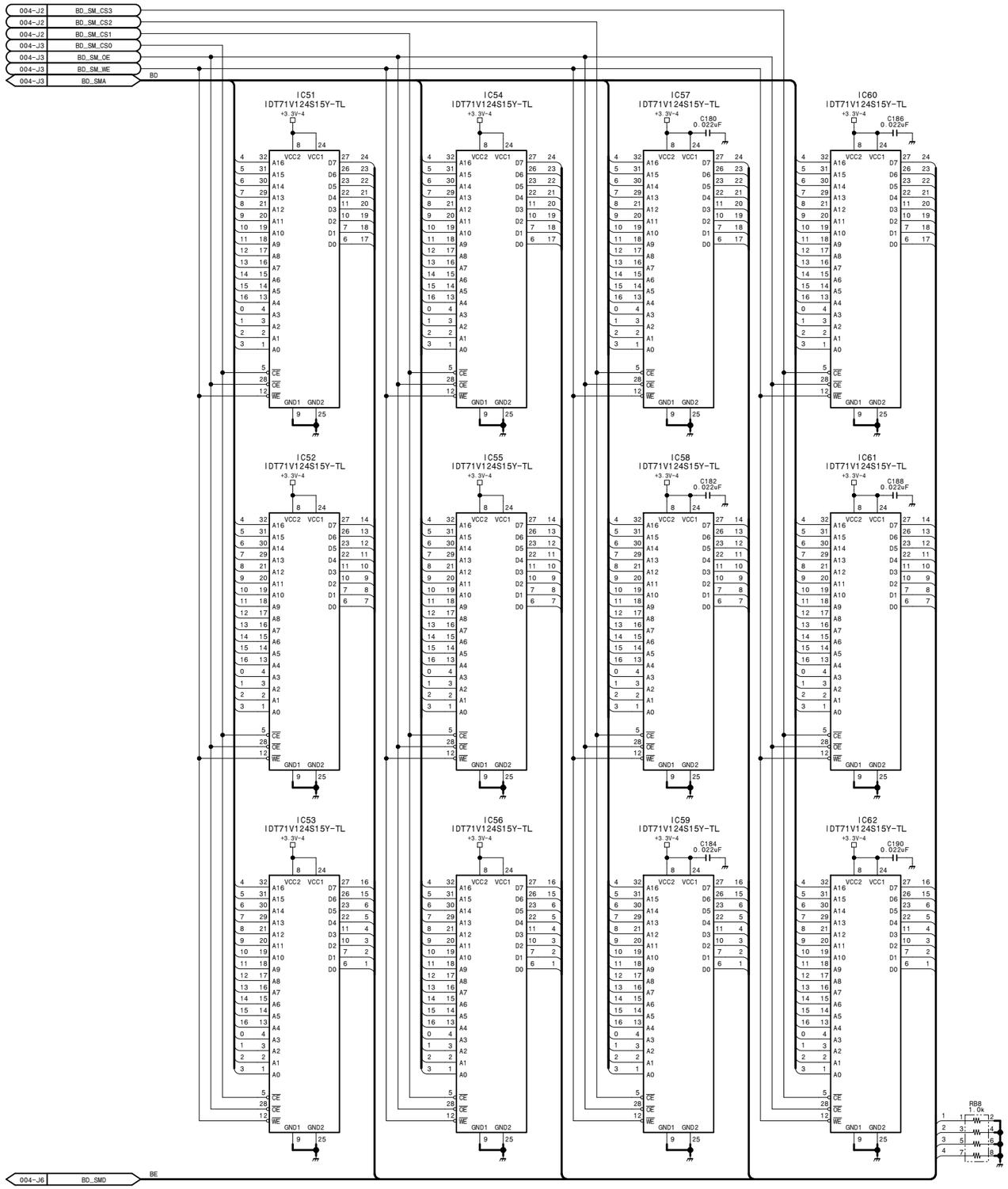
Bit Rate Reduction Decoder & Concealment Circuit

DPR-36H BOARD (4/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) : DPR-36H MCB
DVW-A510P (EK) : DPR-36H MCB
DVW-510 (J, UC) : DPR-36H MCB
DVW-510P (EK) : DPR-36H MCB
DVW-CA510 (J, UC) : DPR-36H MCB
DVW-CA510P (EK) : DPR-36H MCB
DVW-A500_DPR-36B_001_4

1-52 (c)

DPR-36H (5/9)

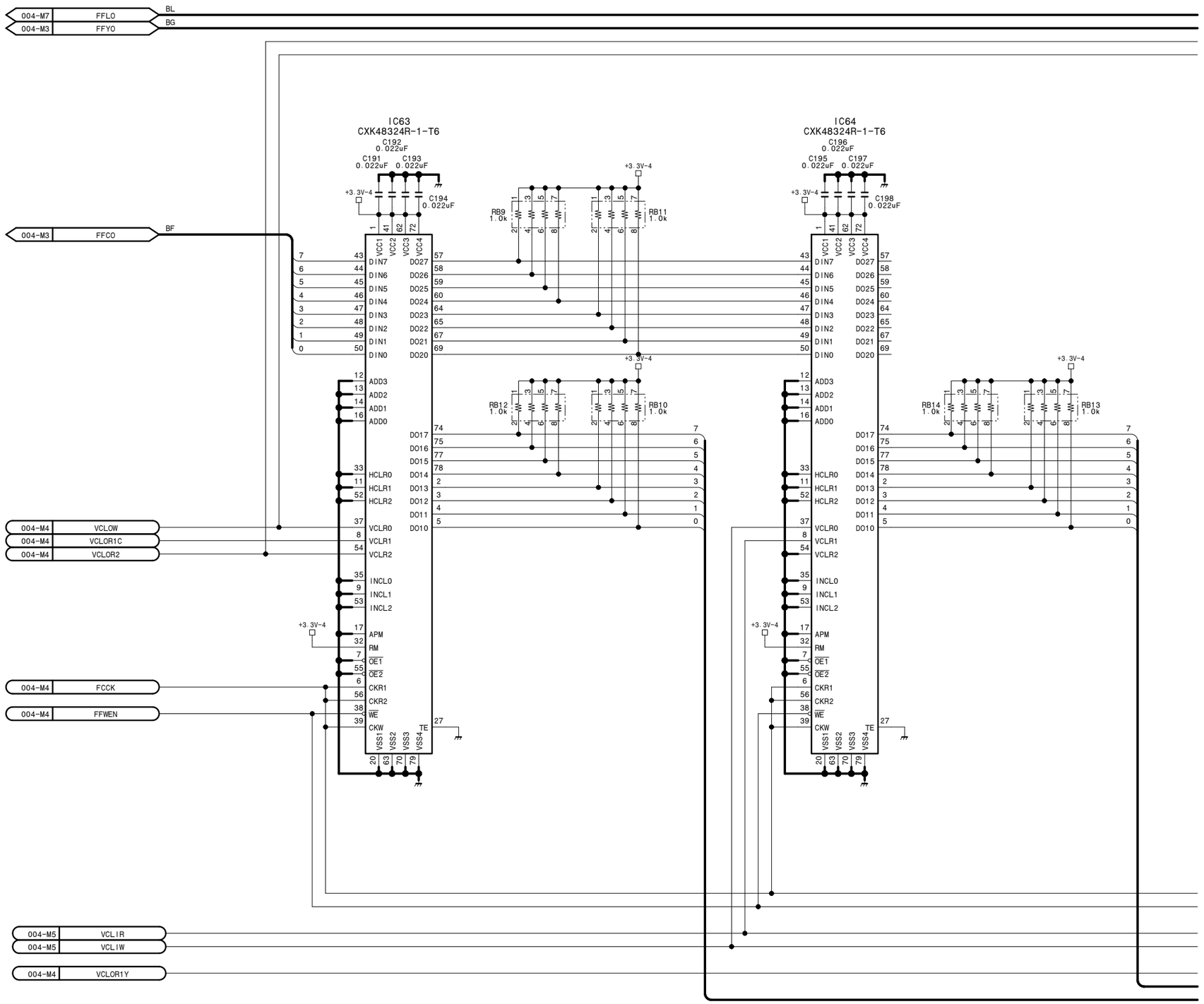


DE-Shuffling Memory

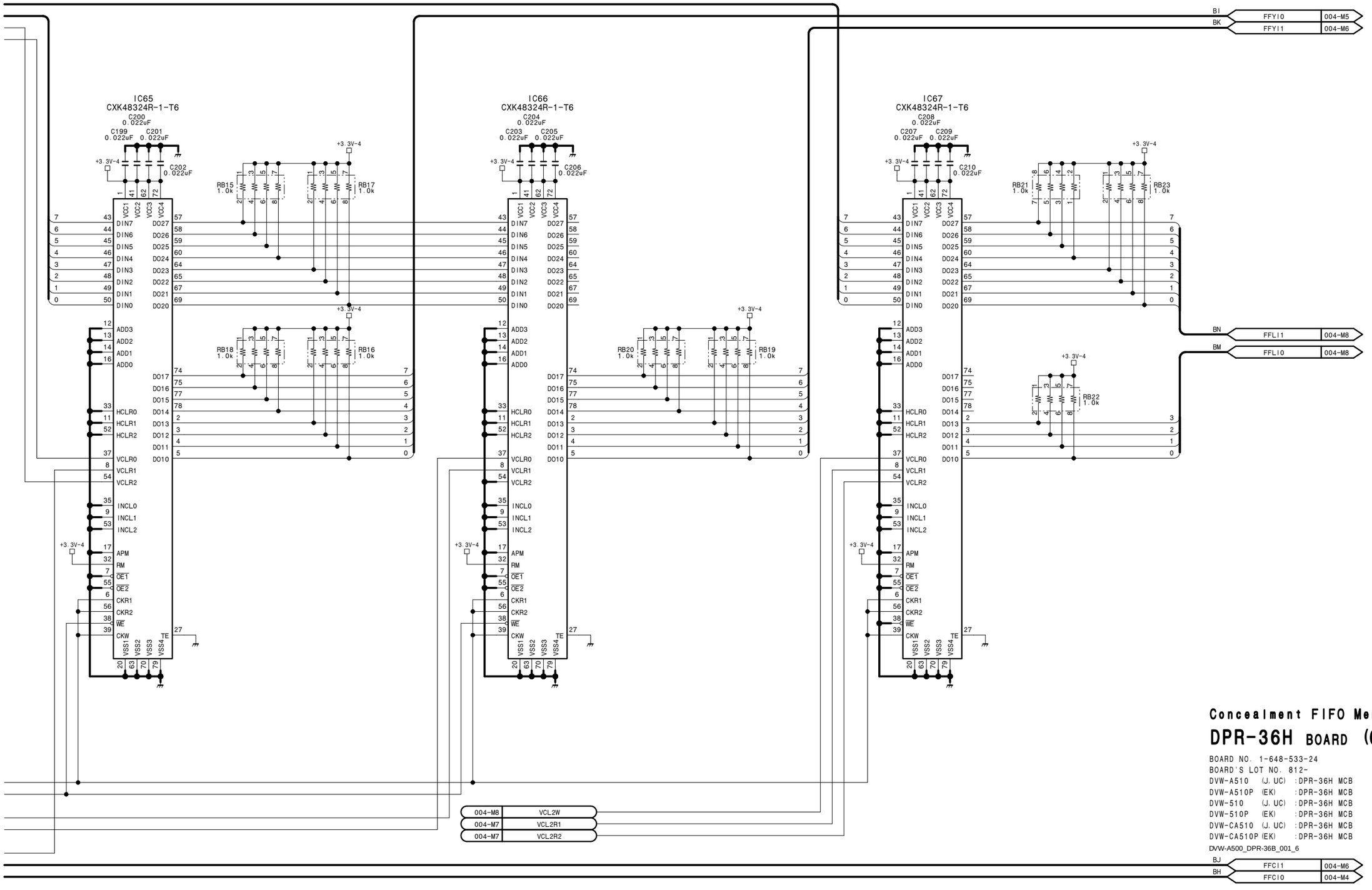
DPR-36H BOARD (5/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36H MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36H MCB
DVW-CA510 (J, UC) :DPR-36H MCB
DVW-CA510P (EK) :DPR-36H MCB
DVW-A500_DPR-36B_001_5

DPR-36H (6/9)



1-54 (c)

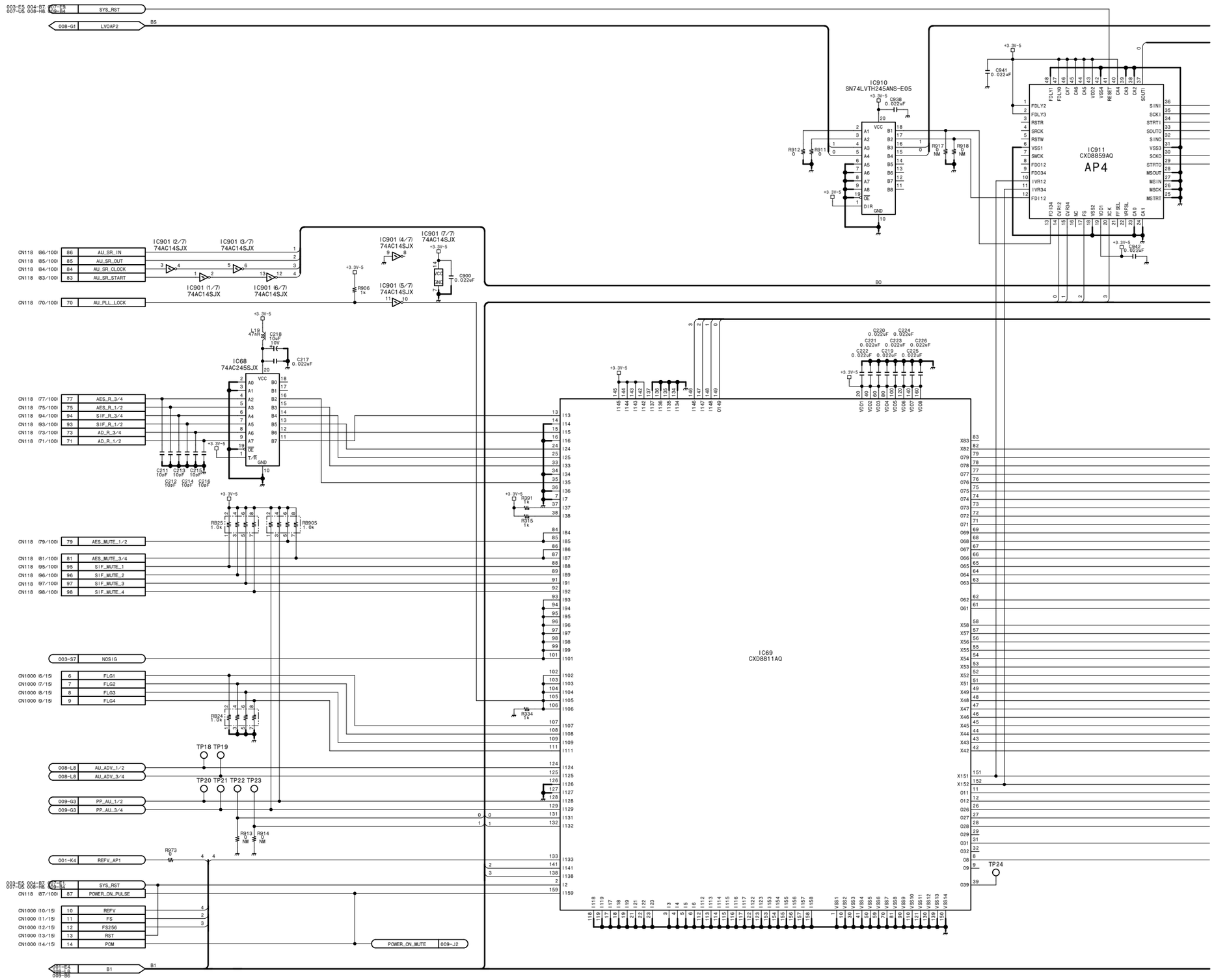


Concealment FIFO Memory

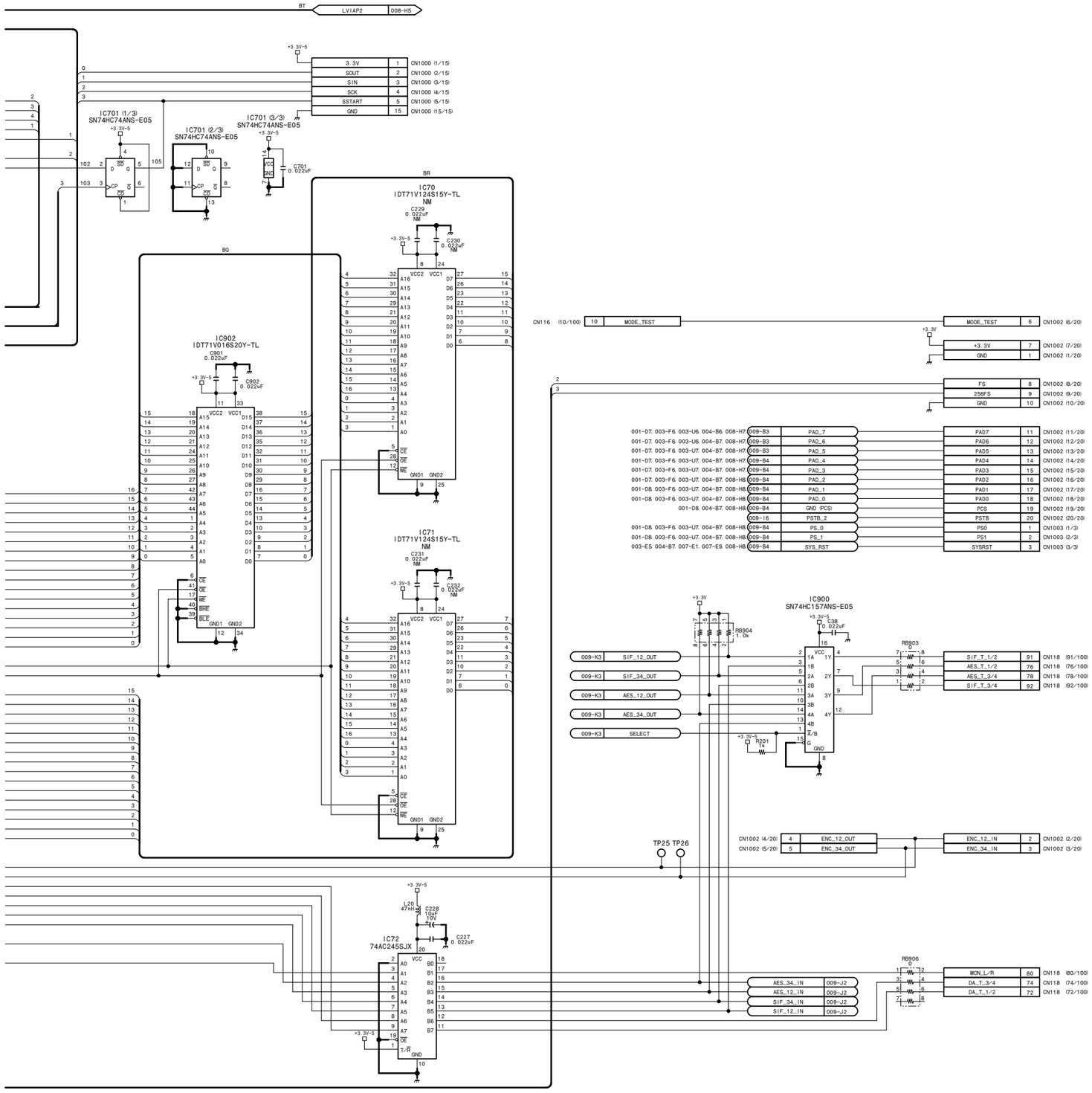
DPR-36H BOARD (6/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) : DPR-36H MCB
DVW-A510P (EK) : DPR-36H MCB
DVW-510 (J, UC) : DPR-36H MCB
DVW-510P (EK) : DPR-36H MCB
DVW-CA510 (J, UC) : DPR-36H MCB
DVW-CA510P (EK) : DPR-36H MCB
DVW-A500_DPR-36B_001_6

DPR-36H (7/9)



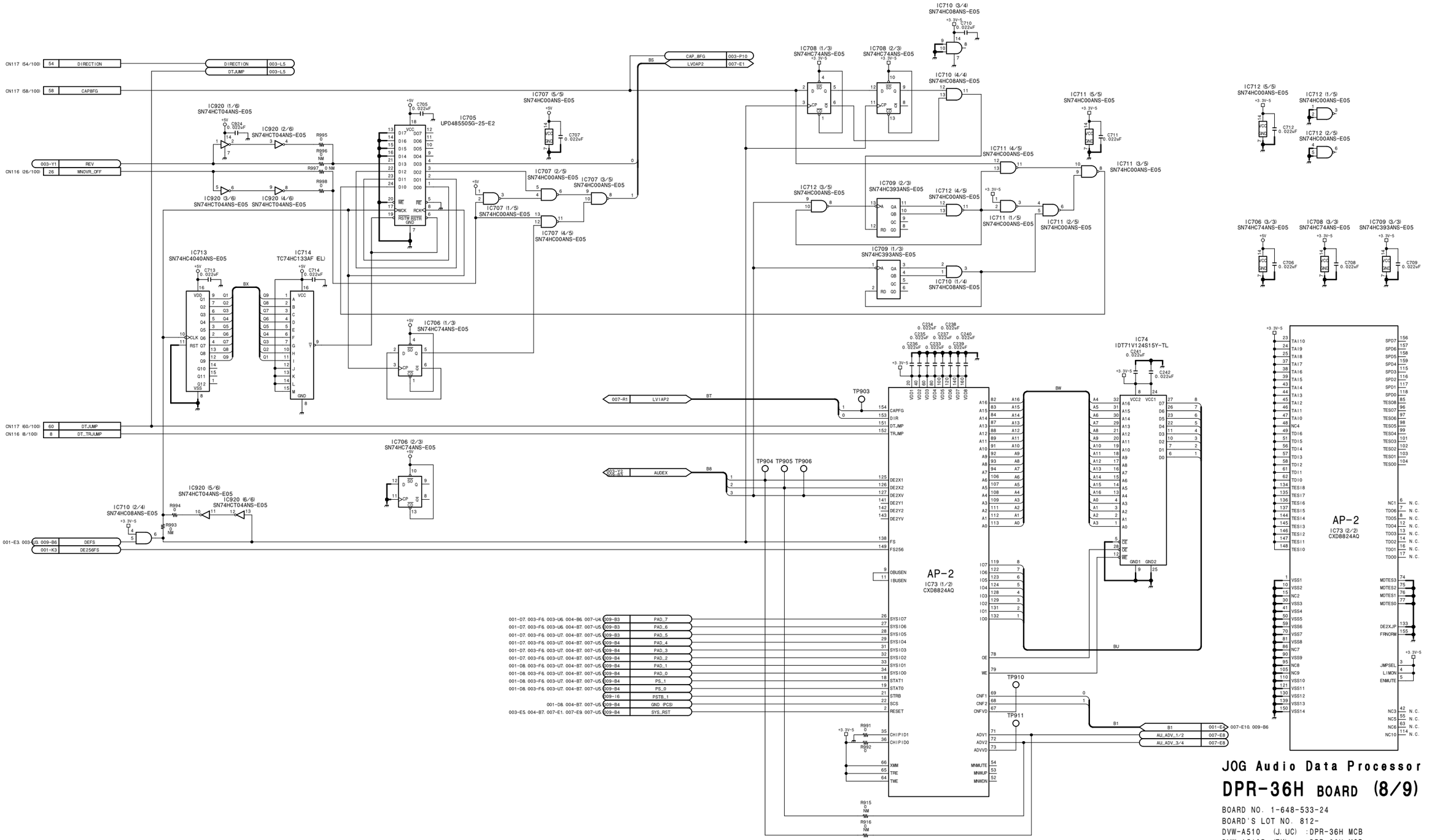
1-56 (c)



Audio Data Processor

DPR-36H BOARD (7/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) : DPR-36H MCB
DVW-A510P (EK) : DPR-36H MCB
DVW-510 (J, UC) : DPR-36H MCB
DVW-510P (EK) : DPR-36H MCB
DVW-CA510 (J, UC) : DPR-36H MCB
DVW-CA510P (EK) : DPR-36H MCB
DVW-A500_DPR-36B_001_7

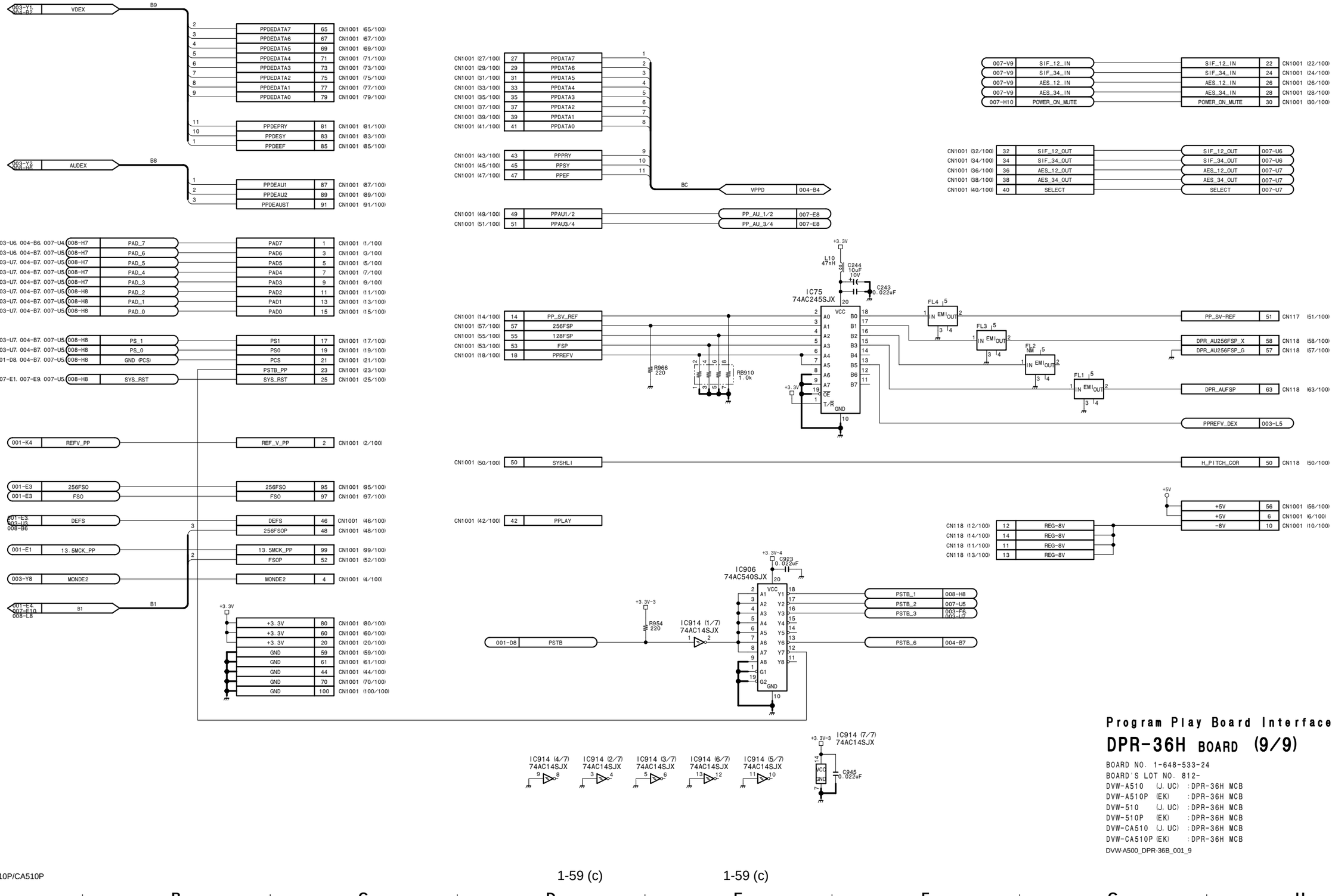


JOG Audio Data Processor

DPR-36H BOARD (8/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) : DPR-36H MCB
DVW-A510P (EK) : DPR-36H MCB
DVW-510 (J, UC) : DPR-36H MCB
DVW-510P (EK) : DPR-36H MCB
DVW-CA510 (J, UC) : DPR-36H MCB
DVW-CA510P (EK) : DPR-36H MCB

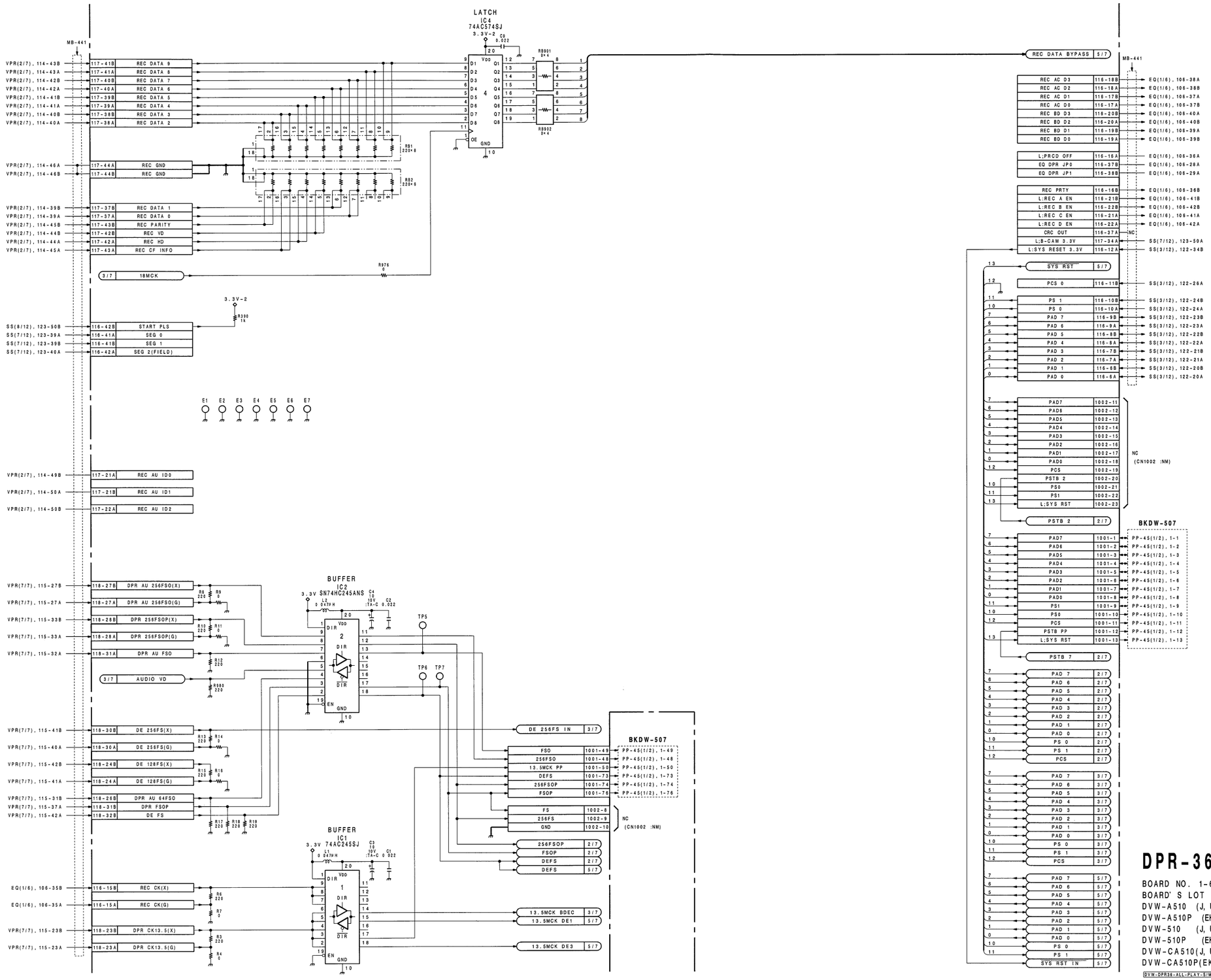
DVW-A500_DPR-36B_001_8



Program Play Board Interface

DPR-36H BOARD (9/9)

BOARD NO. 1-648-533-24
BOARD'S LOT NO. 812-
DVW-A510 (J, UC) : DPR-36H MCB
DVW-A510P (EK) : DPR-36H MCB
DVW-510 (J, UC) : DPR-36H MCB
DVW-510P (EK) : DPR-36H MCB
DVW-CA510 (J, UC) : DPR-36H MCB
DVW-CA510P (EK) : DPR-36H MCB
DVW-A500_DPR-36B_001_9

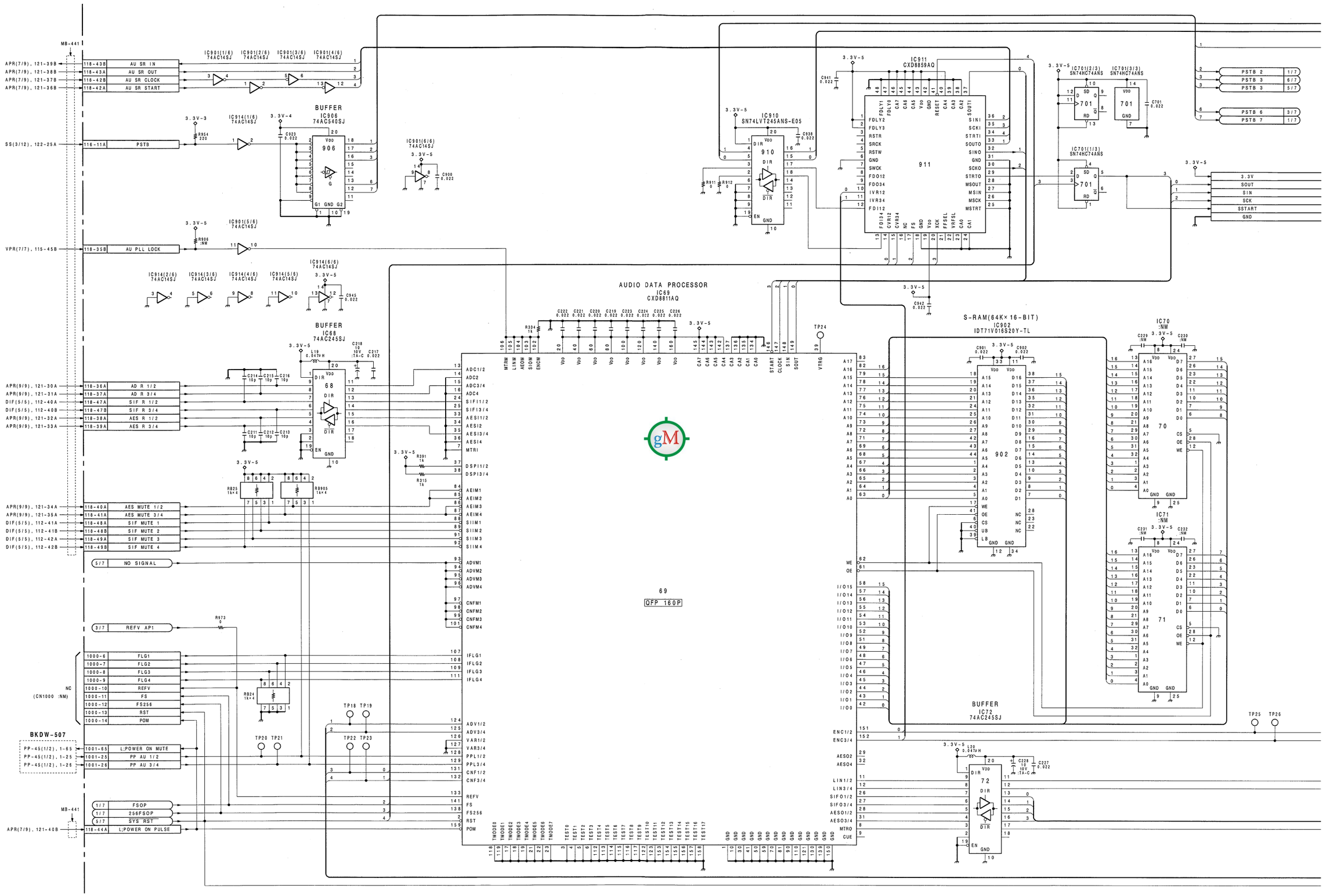


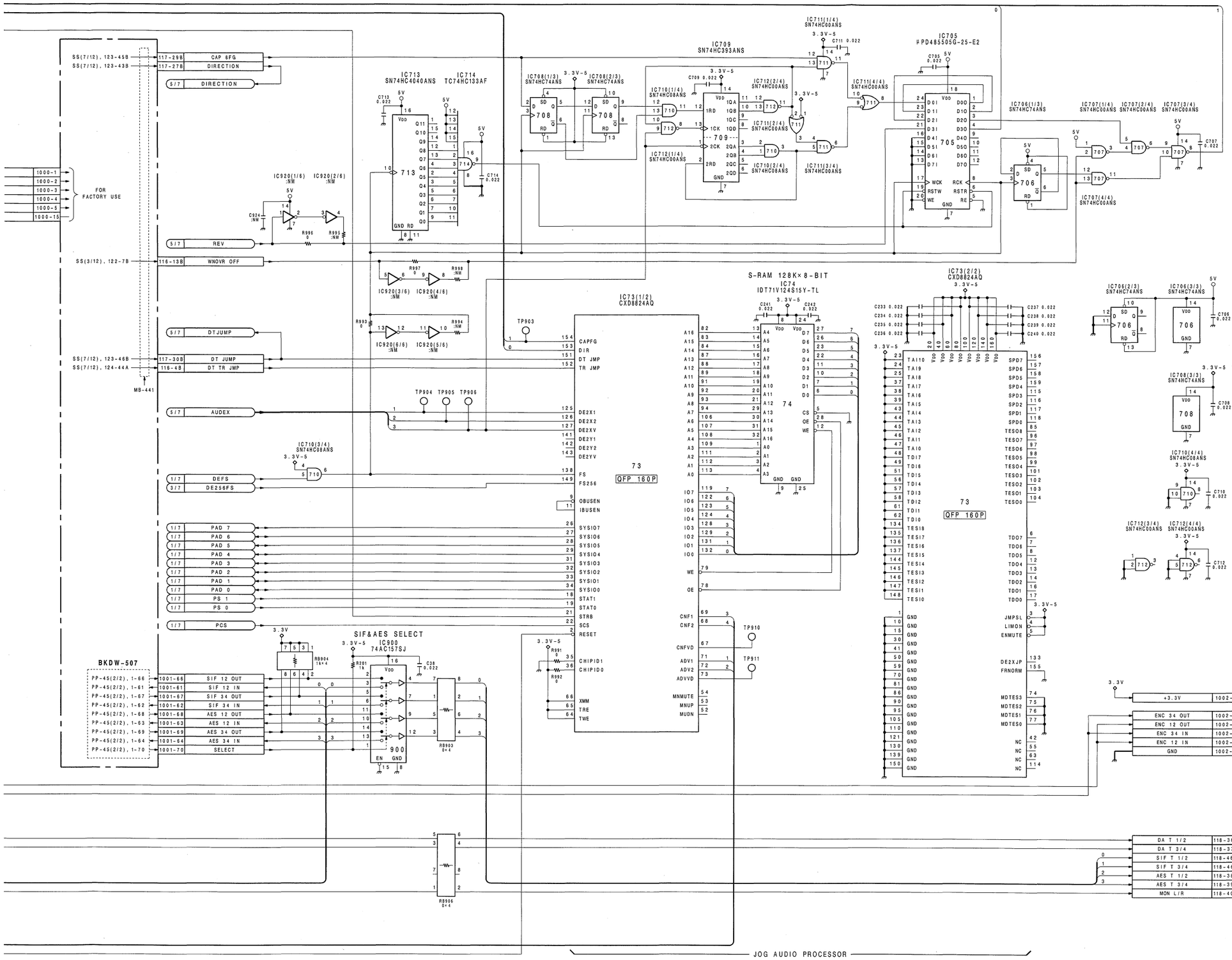
DPR-36H BOARD (1/7)

BOARD NO. 1-648-533-23
BOARD' S LOT NO. 409-811
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510(J, UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-SIM-01-B

DPR-36H (2/7)


AUDIO DATA PROCESSOR
IC69
CXD8811AQ
69
QFP 160P
S-RAM(64K×16-BIT)
IC902
IDT71V016S20Y-TL
IC911
CXD8859AQ
IC910
SN74LVT245ANS-E05
BUFFER
IC906
74AC540SJ
BUFFER
IC68
74AC245SJ
BUFFER
IC72
74AC245SJ
BKDW-507
MB-441
AU SR IN
AU SR OUT
AU SR CLOCK
AU SR START
PSTB
AU PLL LOCK
AD R 1/2
AD R 3/4
SIF R 1/2
SIF R 3/4
AES R 1/2
AES R 3/4
AES MUTE 1/2
AES MUTE 3/4
SIF MUTE 1
SIF MUTE 2
SIF MUTE 3
SIF MUTE 4
NO SIGNAL
REFV AP1
FLG1
FLG2
FLG3
FLG4
REFV
FS
FS256
RST
POM
L;POWER ON MUTE
PP AU 1/2
PP AU 3/4
FSOP
256FSOP
SYS RST
L;POWER ON PULSE
PSTB 2
PSTB 3
PSTB 6
PSTB 7
3.3V
SOUT
SIN
SCK
SSTART
GND



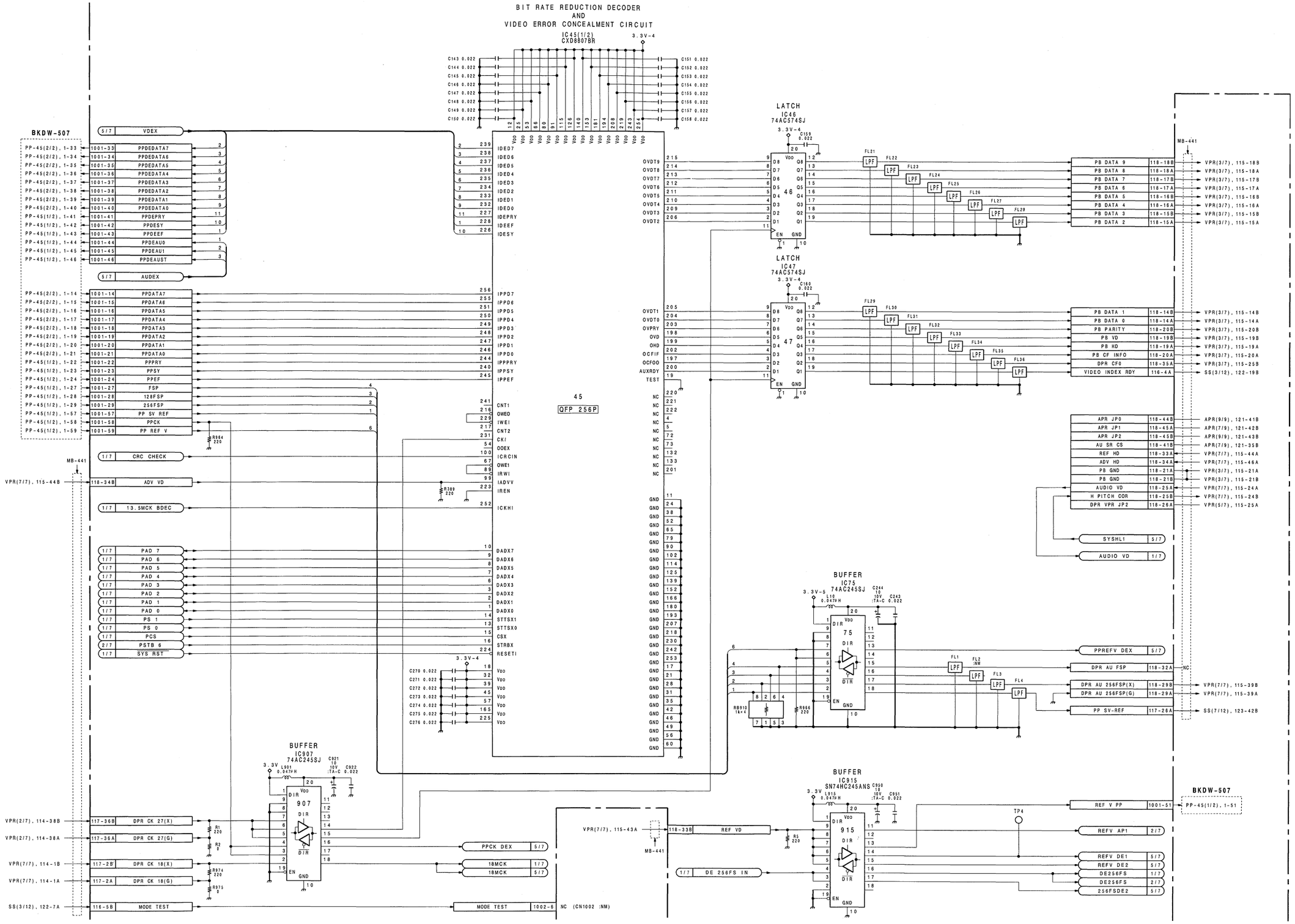
Audio Data Processor, Jog Audio Data Processor

DPR-36H BOARD (2/7)

BOARD NO. 1-648-533-23
BOARD' S LOT NO. 409-811
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510(J, UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

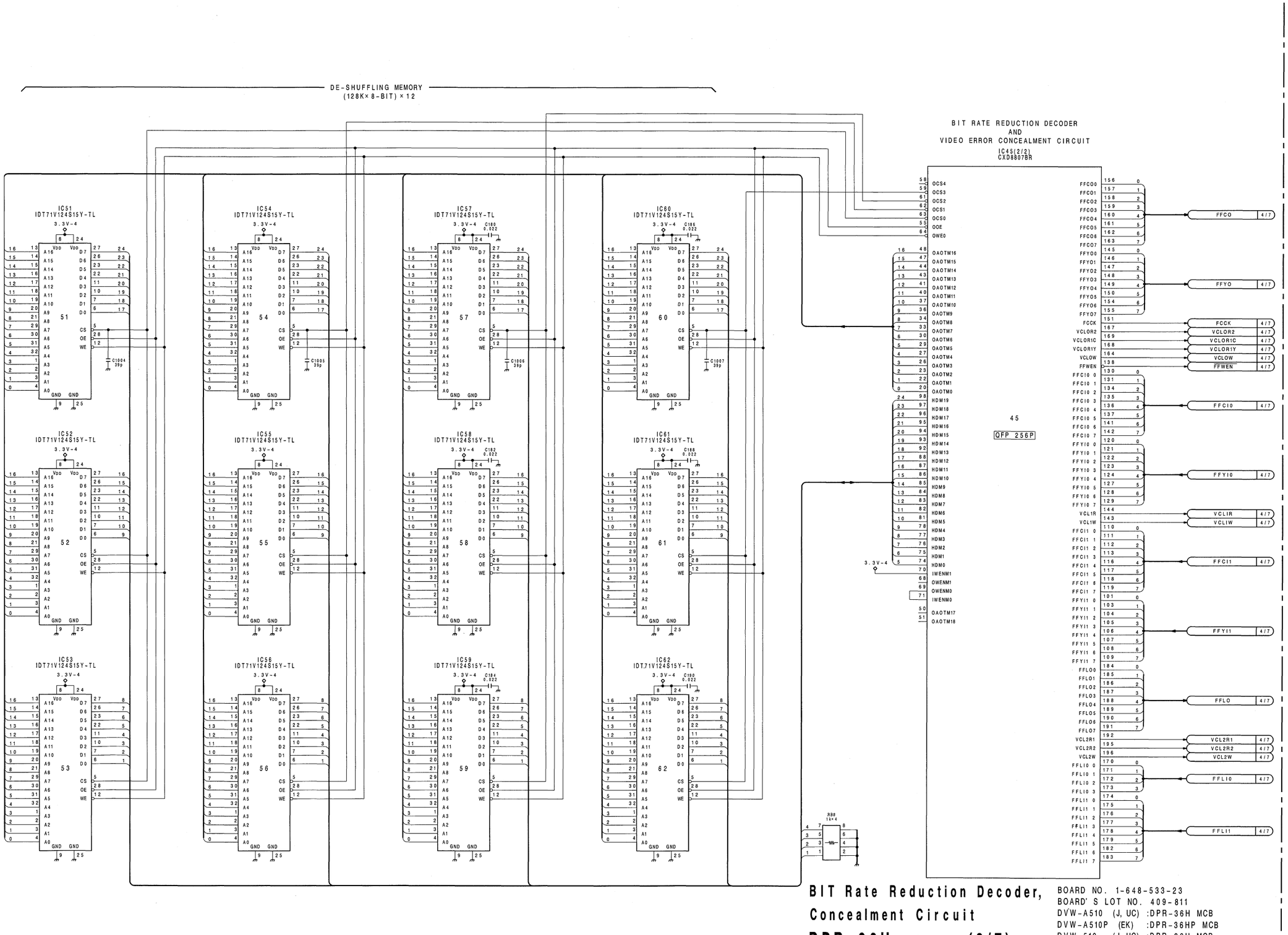
DVW-DPR36-ALL-PLAY-S/M-01-B

DPR-36H (3/7)



1-52 (b)

DPR-36H (3/7)



BIT Rate Reduction Decoder, Concealment Circuit

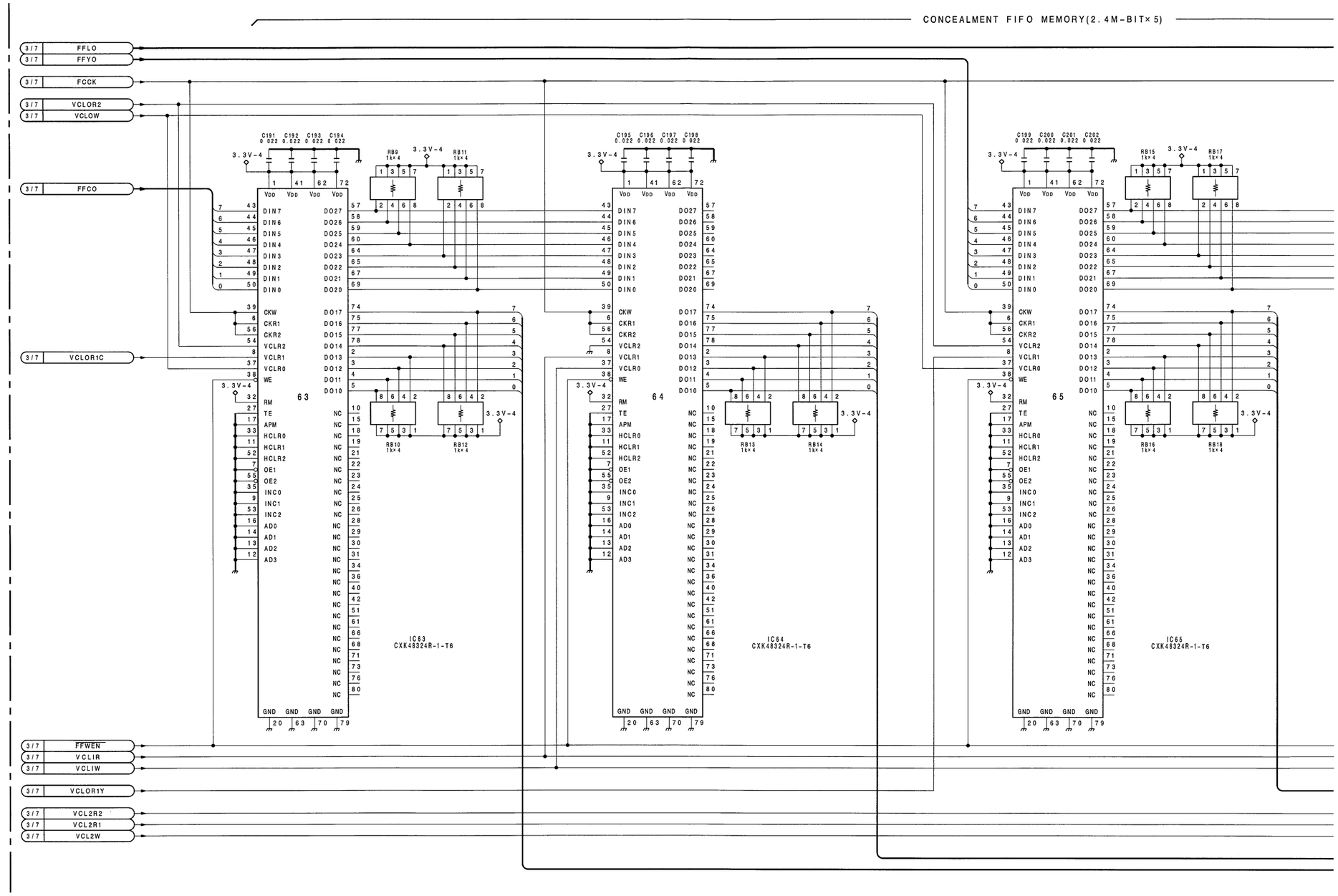
DPR-36H BOARD (3/7)

BOARD NO. 1-648-533-23
BOARD' S LOT NO. 409-811
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510(J, UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-S/M-01-B

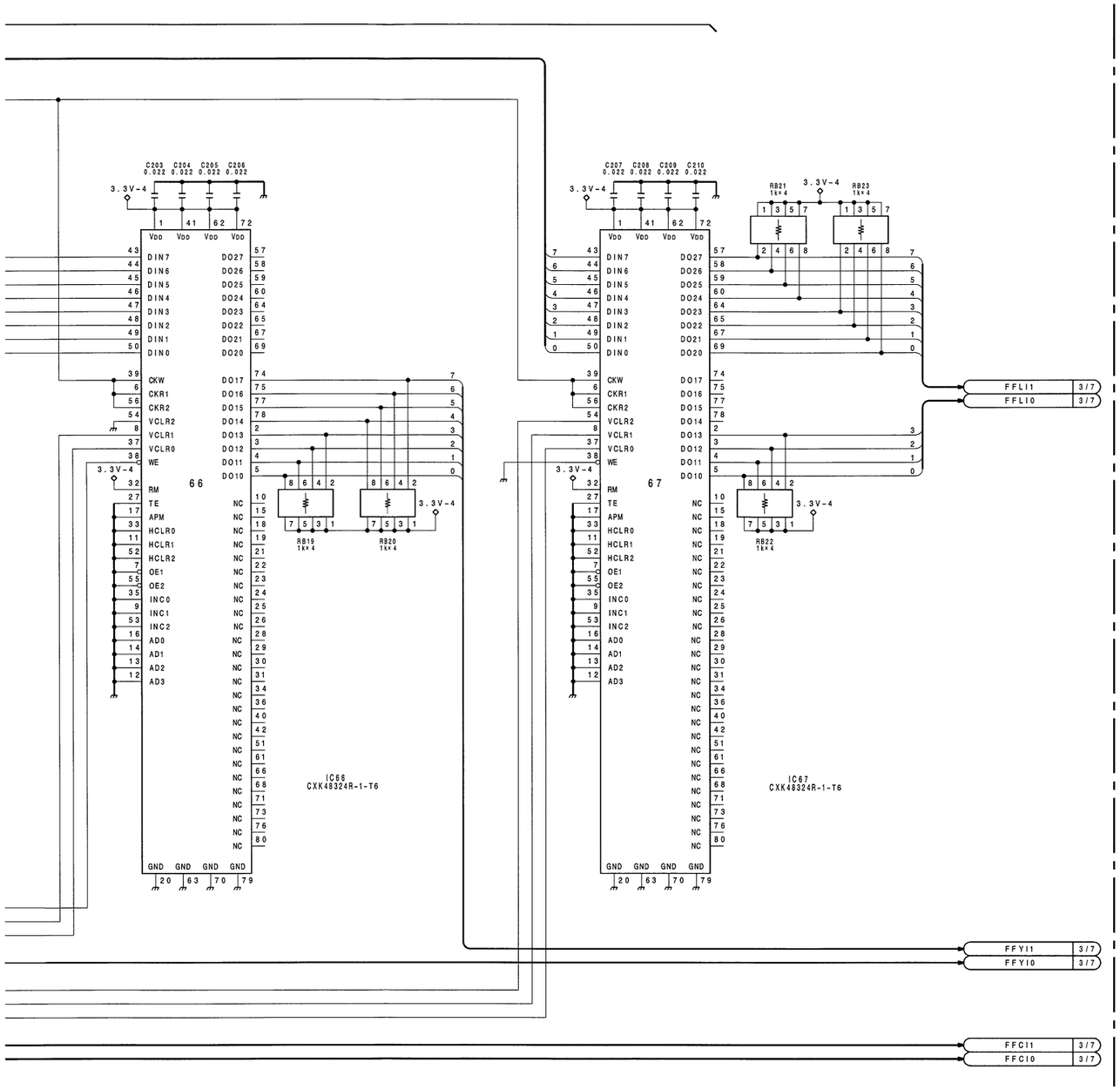
DPR-36H (4/7)

CONCEALMENT FIFO MEMORY(2.4M-BIT× 5)



1-54 (b)

DPR-36H (4/7)



Concealment FIFO Memory

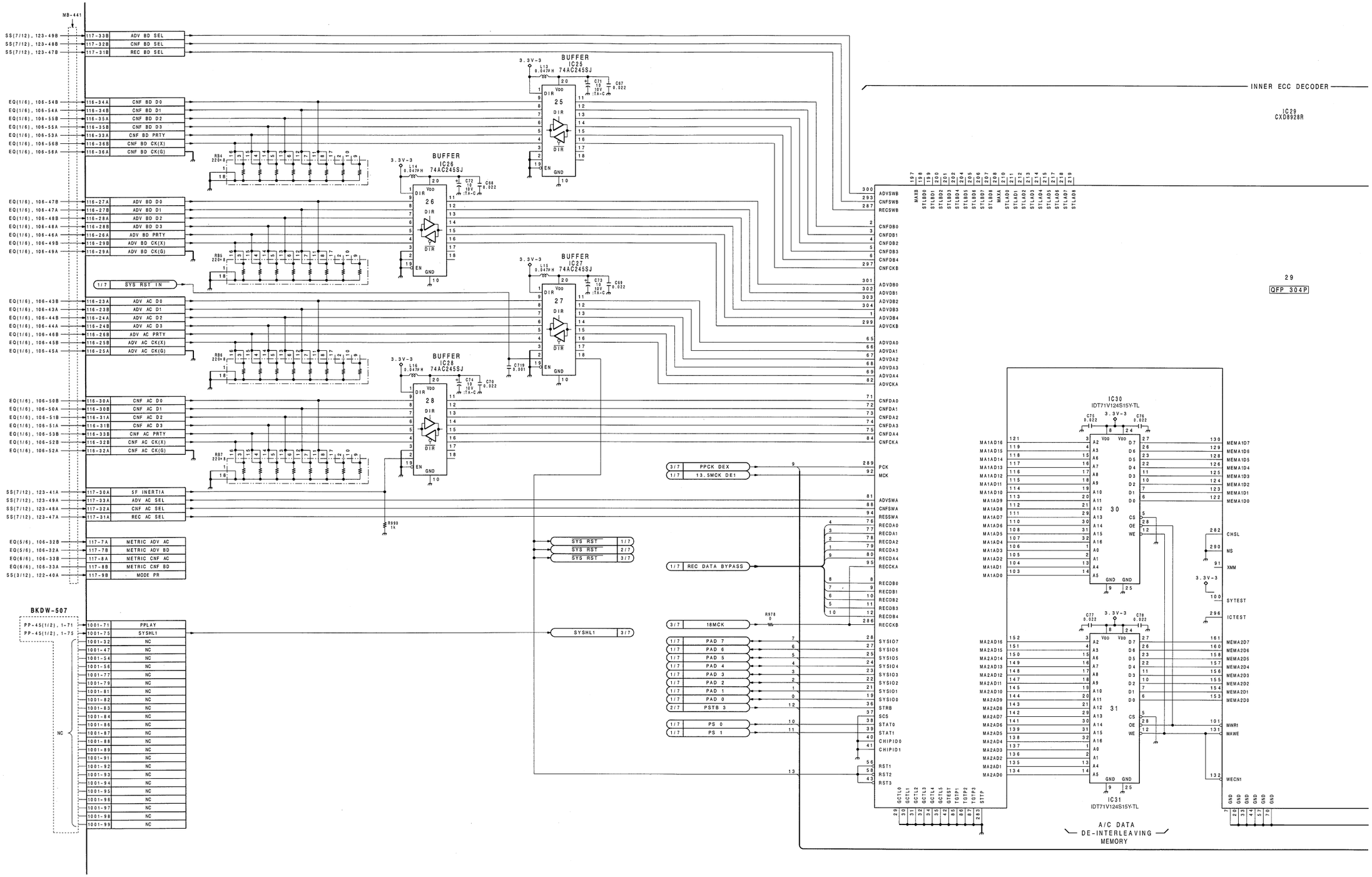
DPR-36H BOARD (4/7)

BOARD NO. 1-648-533-23
BOARD' S LOT NO. 409-811
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510(J, UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-S/M-01-B

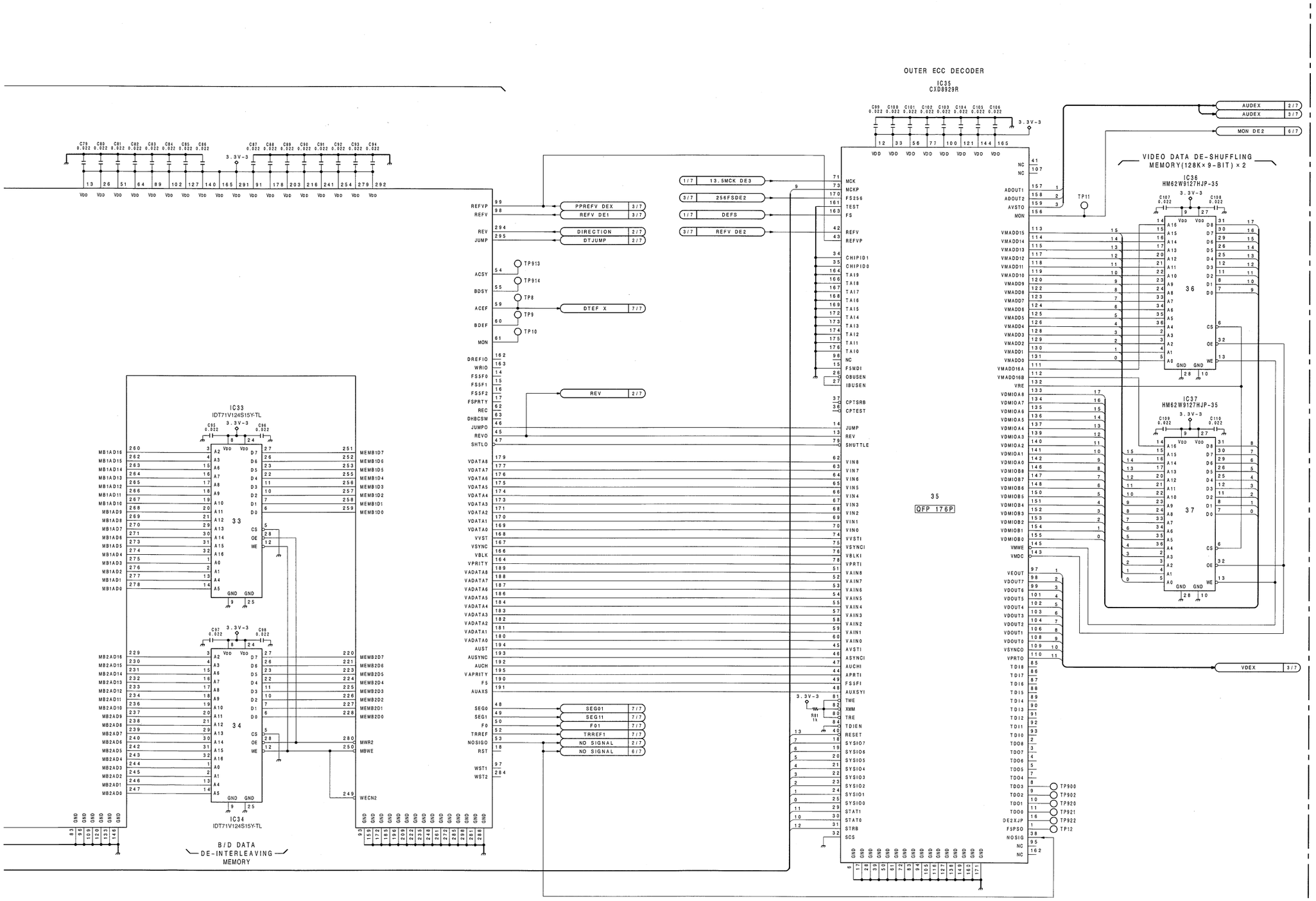
1-55 (b)

DPR-36H (5/7)



1-56 (b)

DPR-36H (5/7)



Inner/Outer ECC Decoder

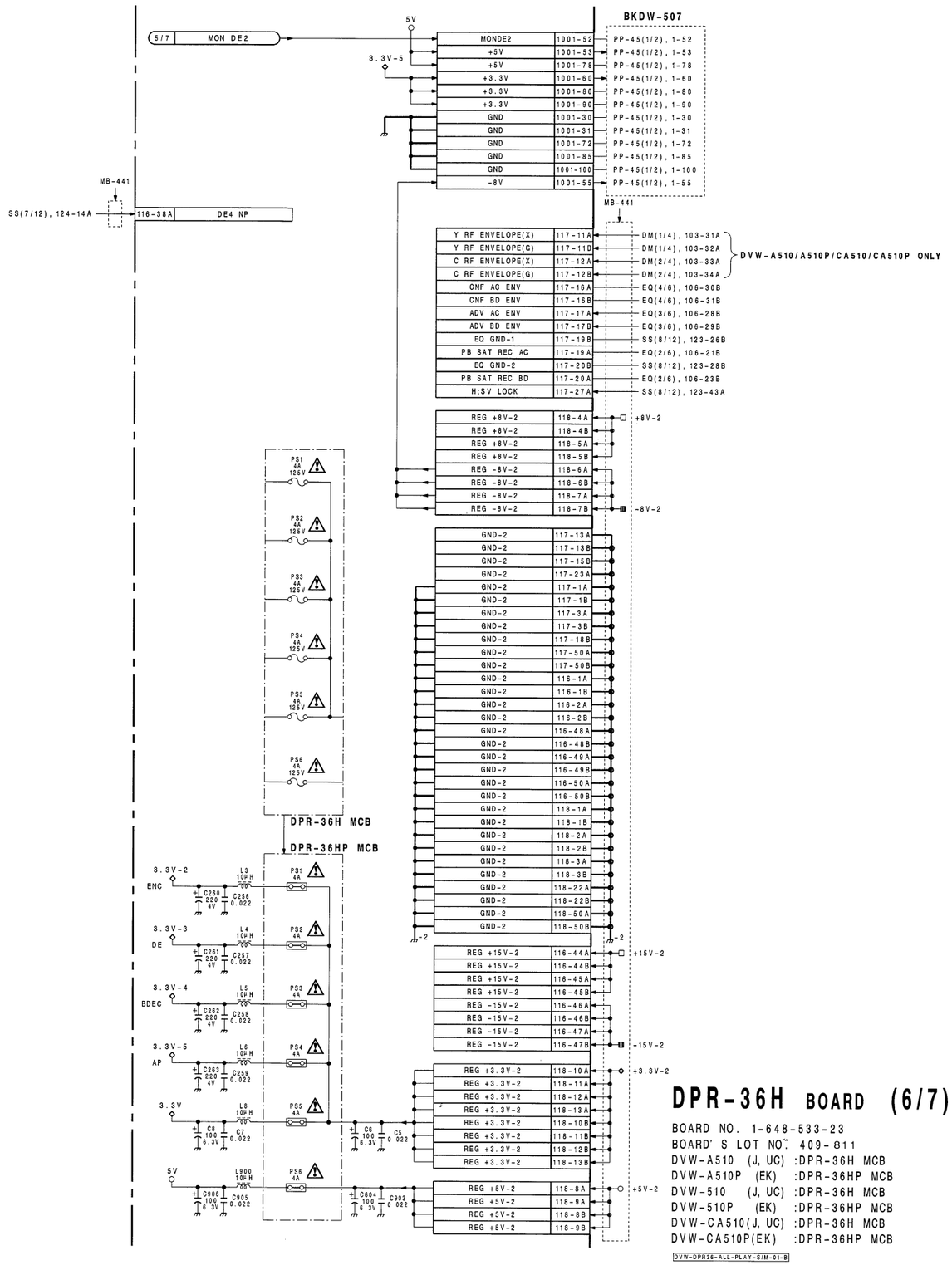
DPR-36H BOARD (5/7)

BOARD NO. 1-648-533-23
BOARD' S LOT NO. 409-811
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510(J, UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-SM-01-0

1-57 (b)

DPR-36H (6/7)



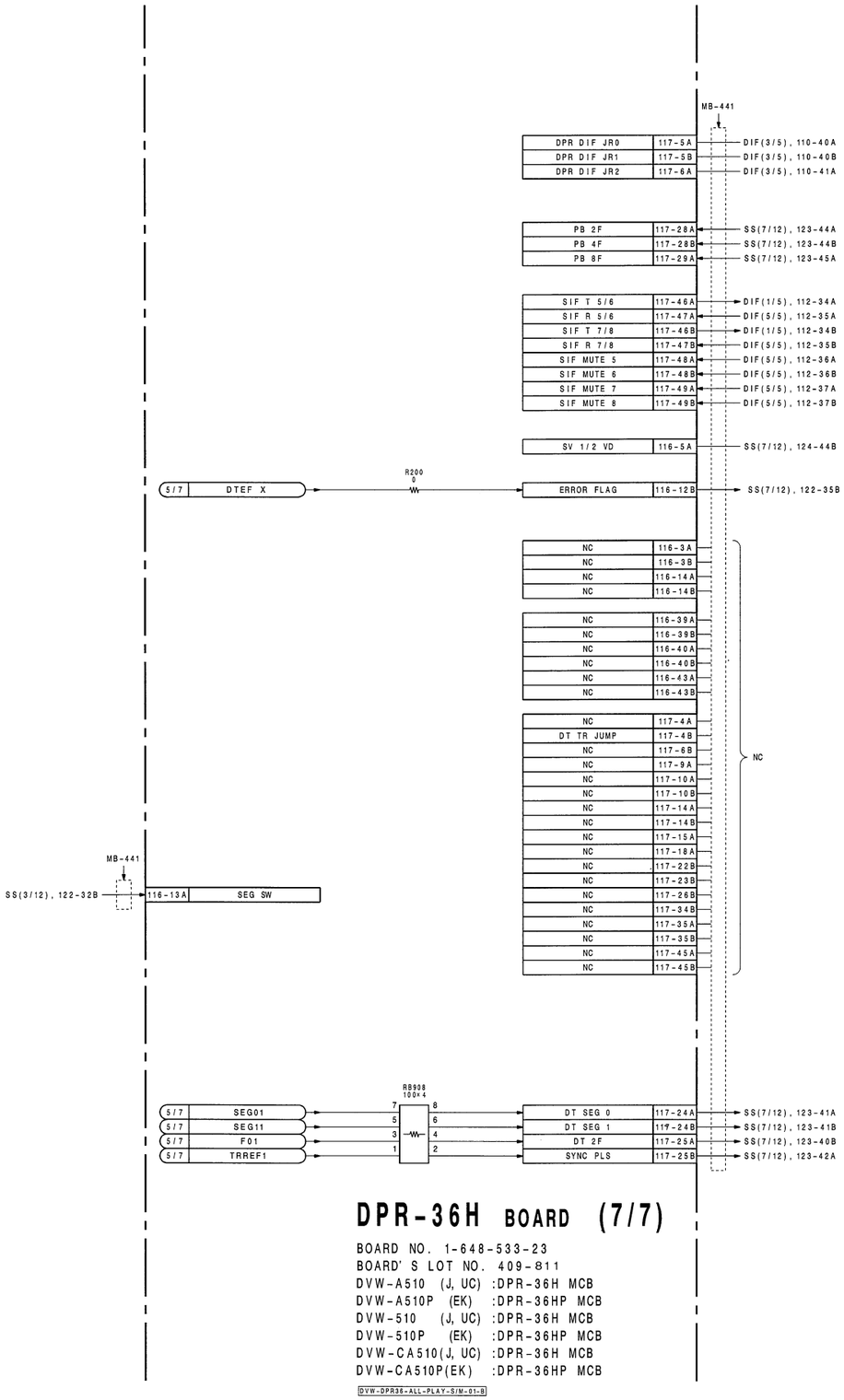
DPR-36H BOARD (6/7)

BOARD NO. 1-648-533-23
BOARD' S LOT NO. 409-811
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510(J, UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-S/M-01-B

1-58 (b)

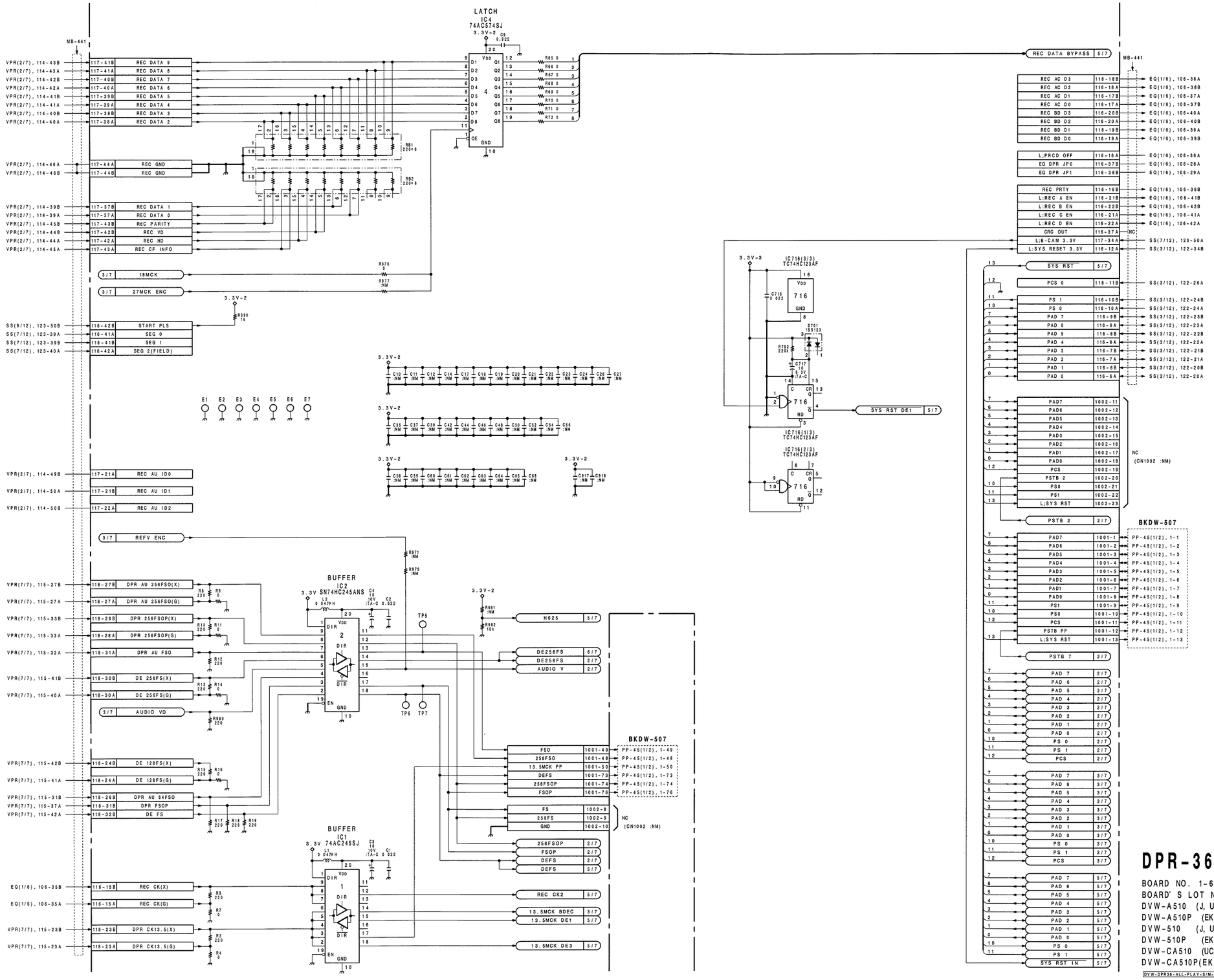
DPR-36H (7/7)

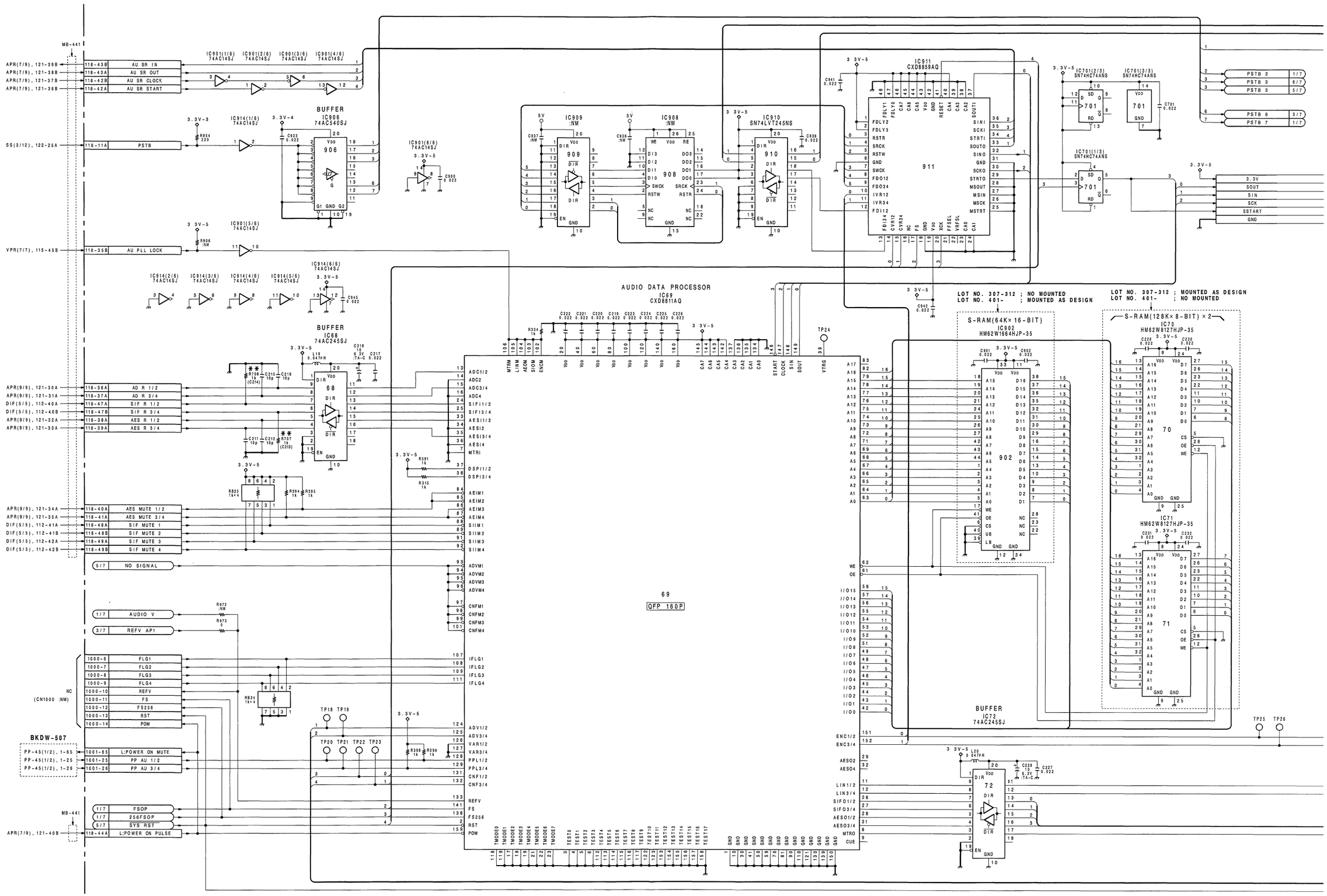


DPR-36H BOARD (7/7)

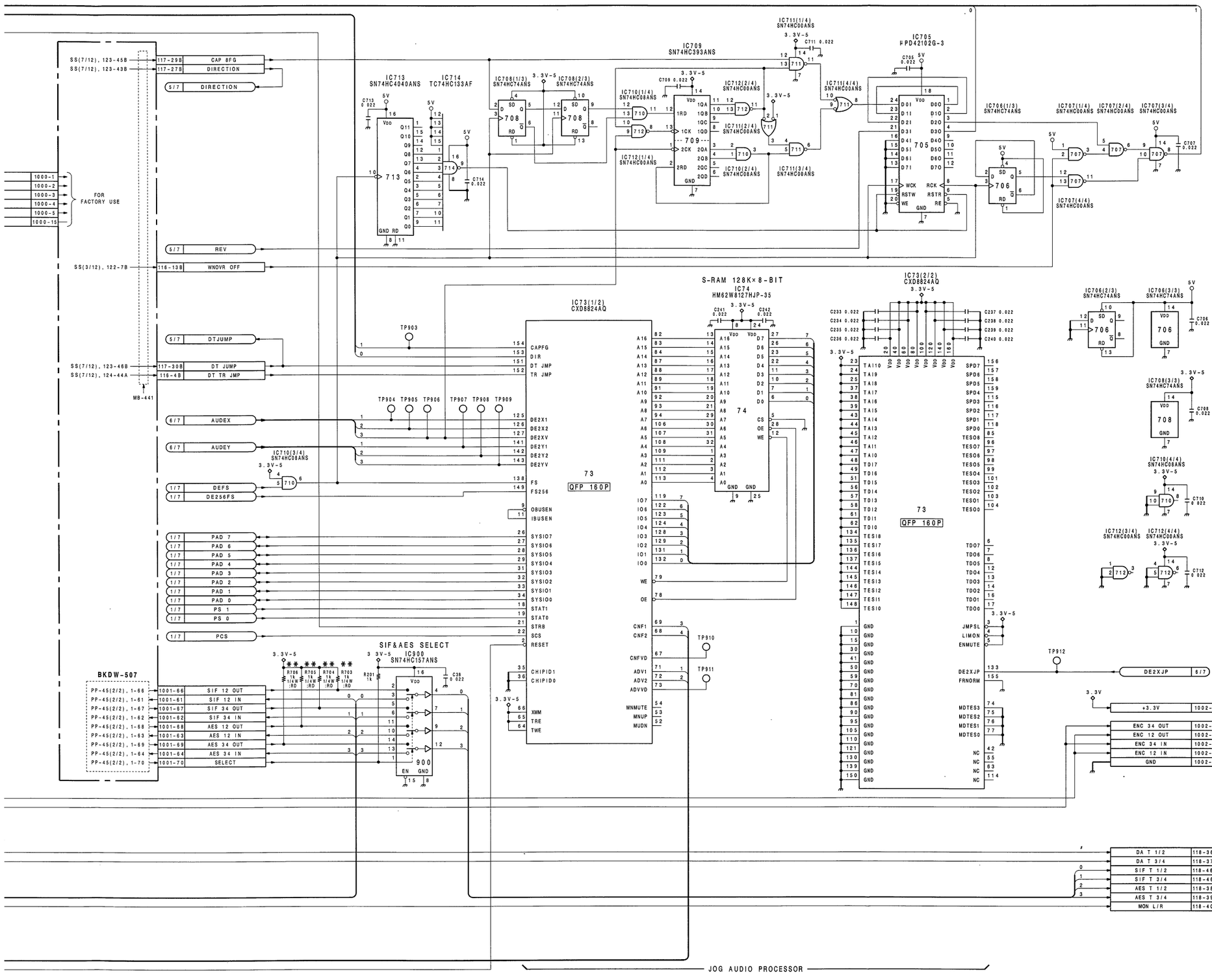
BOARD NO. 1-648-533-23
BOARD' S LOT NO. 409-811
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510(J, UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-S/M-01-B


LATCH
IC4
74ACS74SJ
BUFFER
IC2
3.3V SN74HC245ANS
BUFFER
IC1
3.3V 74AC245SJ
IC716(3/3)
TC74HC123AF
IC716(1/3)
TC74HC123AF
IC716(2/3)
TC74HC123AF
MB-441
REC DATA BYPASS 5/7
SYS RST DE1 5/7
BKDW-507
NC
(CN1002 :NM)
DPR-36H BOARD (1/7)
BOARD NO. 1-648-533-22
BOARD'S LOT NO. 307-409
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510 (UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB
DVW-DPR36-ALL-PLAY-S/M-01-A


MB-441
APR(7/9), 121-39B
APR(7/9), 121-38B
APR(7/9), 121-37B
APR(7/9), 121-36B
118-43B AU SR IN
118-43A AU SR OUT
118-42B AU SR CLOCK
118-42A AU SR START
IC901(1/6) 74AC14SJ
IC901(2/6) 74AC14SJ
IC901(3/6) 74AC14SJ
IC901(4/6) 74AC14SJ
BUFFER
IC906 74AC540SJ
SS(3/12), 122-25A
116-11A PSTB
IC901(6/6) 74AC14SJ
VPR(7/7), 115-45B
118-35B AU PLL LOCK
IC901(5/6) 74AC14SJ
IC914(2/6) 74AC14SJ
IC914(3/6) 74AC14SJ
IC914(4/6) 74AC14SJ
IC914(5/5) 74AC14SJ
IC914(6/6) 74AC14SJ
BUFFER
IC68 74AC245SJ
APR(9/9), 121-30A
APR(9/9), 121-31A
DIF(5/5), 112-40A
DIF(5/5), 112-40B
APR(9/9), 121-32A
APR(9/9), 121-33A
118-36A AD R 1/2
118-37A AD R 3/4
118-47A SIF R 1/2
118-47B SIF R 3/4
118-38A AES R 1/2
118-39A AES R 3/4
APR(9/9), 121-34A
APR(9/9), 121-35A
DIF(5/5), 112-41A
DIF(5/5), 112-41B
DIF(5/5), 112-42A
DIF(5/5), 112-42B
118-40A AES MUTE 1/2
118-41A AES MUTE 3/4
118-48A SIF MUTE 1
118-48B SIF MUTE 2
118-49A SIF MUTE 3
118-49B SIF MUTE 4
5/7 NO SIGNAL
1/7 AUDIO V
3/7 REFV AP1
1000-6 FLG1
1000-7 FLG2
1000-8 FLG3
1000-9 FLG4
1000-10 REFV
1000-11 FS
1000-12 FS256
1000-13 RST
1000-14 POM
NC (CN1000 :NM)
BKDW-507
PP-45(1/2), 1-6S
PP-45(1/2), 1-2S
PP-45(1/2), 1-2B
1001-6S L:POWER ON MUTE
1001-2S PP AU 1/2
1001-2B PP AU 3/4
1/7 FSOP
1/7 256FSOP
5/7 SYS RST
APR(7/9), 121-40B
118-44A L:POWER ON PULSE
IC909 :NM
IC908 :NM
IC910 SN74LVT245NS
IC911 CXD8859AQ
IC701(2/3) SN74HC74ANS
IC701(3/3) SN74HC74ANS
IC701(1/3) SN74HC74ANS
PSTB 2 1/7
PSTB 3 6/7
PSTB 3 5/7
PSTB 6 3/7
PSTB 7 1/7
3.3V
SOUT
SIN
SCK
SSTART
GND
AUDIO DATA PROCESSOR
IC69 CXD8811AQ
ADC1/2
ADC2
ADC3/4
ADC4
SIFI1/2
SIFI3/4
AESI1/2
AESI2
AESI3/4
AESI4
MTRI
DSPI1/2
DSPI3/4
AEIM1
AEIM2
AEIM3
AEIM4
SIIM1
SIIM2
SIIM3
SIIM4
ADVM1
ADVM2
ADVM3
ADVM4
CNFM1
CNFM2
CNFM3
CNFM4
IFLG1
IFLG2
IFLG3
IFLG4
ADV1/2
ADV3/4
VAR1/2
VAR3/4
PPL1/2
PPL3/4
CNF1/2
CNF3/4
REFV
FS
FS256
RST
POM
TMODE0
TMODE1
TMODE2
TMODE3
TMODE4
TMODE5
TMODE6
TMODE7
TEST0
TEST1
TEST2
TEST3
TEST4
TEST5
TEST6
TEST7
TEST8
TEST9
TEST10
TEST11
TEST12
TEST13
TEST14
TEST15
TEST16
TEST17
MTRN
LINM
AEOM
SIOM
ENCM
START
CLOCK
SIN
SOUT
VTRG
TP24
69
QFP 160P
LOT NO. 307-312 ; NO MOUNTED
LOT NO. 401- ; MOUNTED AS DESIGN
S-RAM(64K× 16-BIT)
IC902 HM62W1664HJP-35
LOT NO. 307-312 ; MOUNTED AS DESIGN
LOT NO. 401- ; NO MOUNTED
S-RAM(128K× 8-BIT) ×2
IC70 HM62W8127HJP-35
IC71 HM62W8127HJP-35
BUFFER
IC72 74AC245SJ
TP25
TP26

DPR-36H (2/7)



The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

DPR-36H BOARD: 1-648-533-22

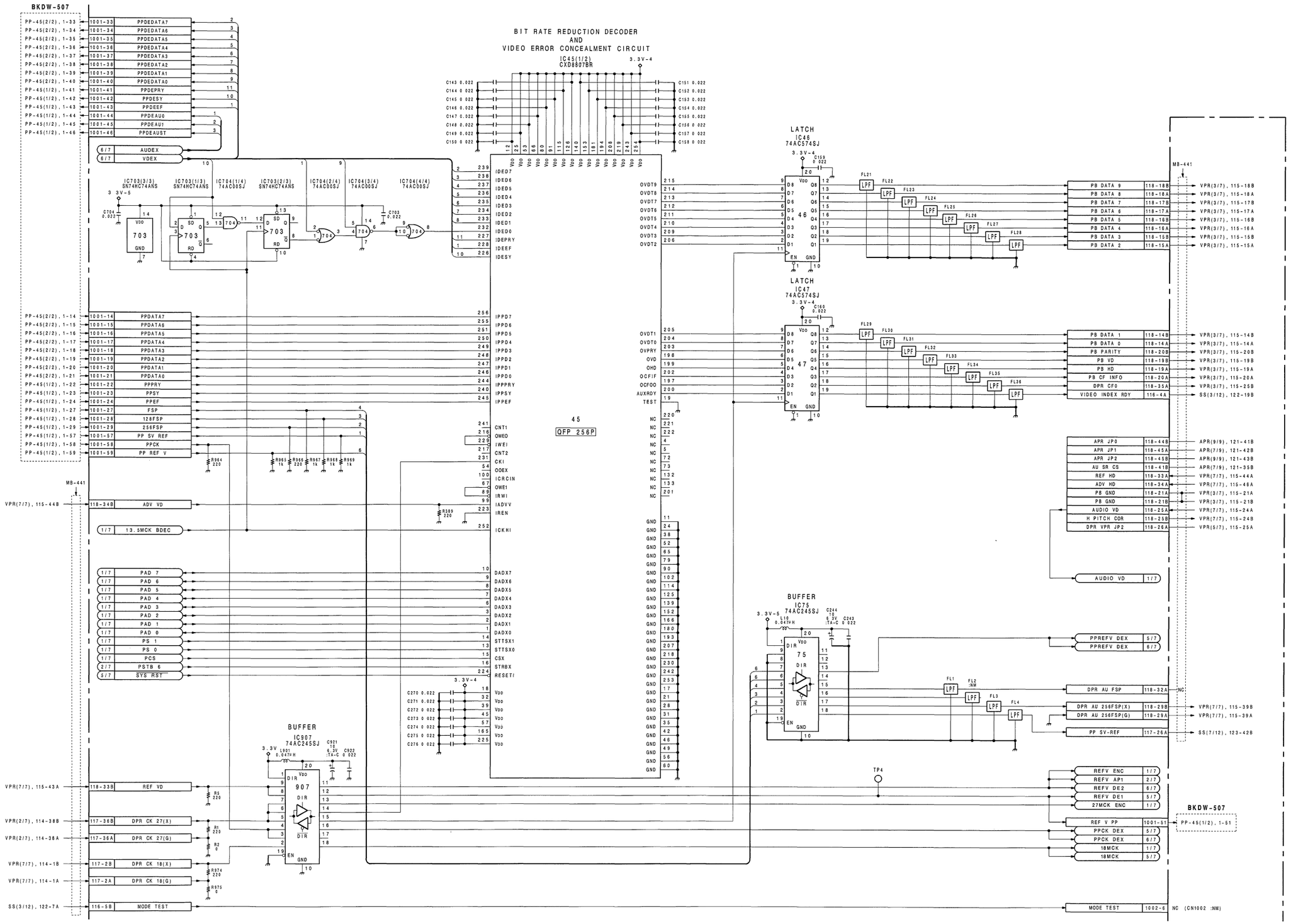
Audio Data Processor, Jog Audio Data Processor

DPR-36H BOARD (2/7)

BOARD NO. 1-648-533-22
BOARD' S LOT NO. 307-409
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510 (UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-S/M-01-A

DPR-36H (3/7)



1-52 (a)

DPR-36H (3/7)

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

DPR-36H BOARD: 1-648-533-22

DE-SHUFFLING MEMORY
(128K×8-BIT)×12

IC51 HM62W8127HJP-27
IC52 HM62W8127HJP-27
IC53 HM62W8127HJP-27
IC54 HM62W8127HJP-27
IC55 HM62W8127HJP-27
IC56 HM62W8127HJP-27
IC57 HM62W8127HJP-27
IC58 HM62W8127HJP-27
IC59 HM62W8127HJP-27
IC60 HM62W8127HJP-27
IC61 HM62W8127HJP-27
IC62 HM62W8127HJP-27

BIT RATE REDUCTION DECODER
AND
VIDEO ERROR CONCEALMENT CIRCUIT
IC45(2/2)
CXD8807BR
QFP 256P

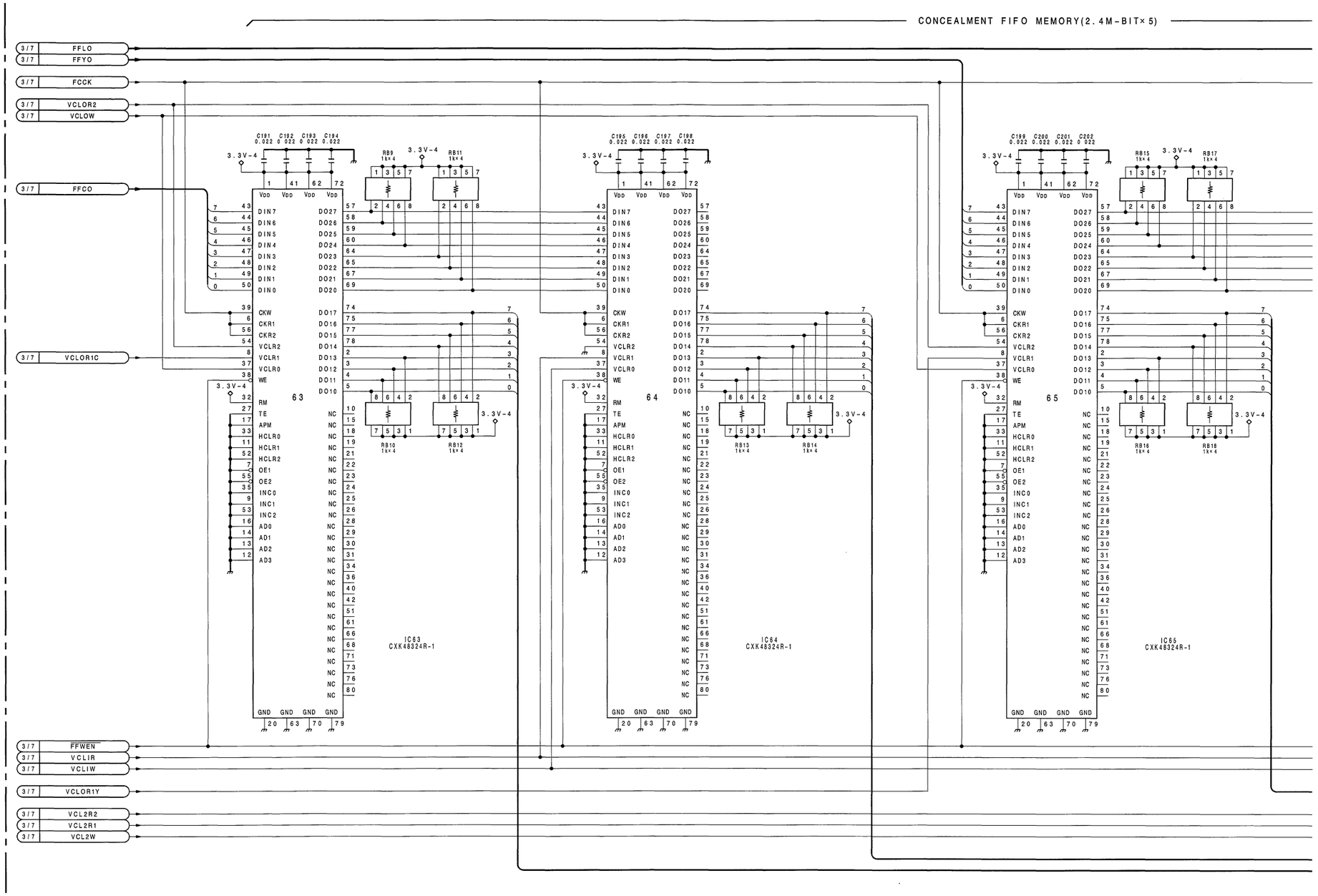
FFCO 4/7
FFYO 4/7
FCCK 4/7
VCLOR2 4/7
VCLOR1C 4/7
VCLOR1Y 4/7
VCLOW 4/7
FFWEN 4/7
FFCI0 4/7
FFYI0 4/7
VCL1R 4/7
VCL1W 4/7
FFCI1 4/7
FFYI1 4/7
FFLO 4/7
VCL2R1 4/7
VCL2R2 4/7
VCL2W 4/7
FFLI0 4/7
FFLI1 4/7

BIT Rate Reduction Decoder, Concealment Circuit
DPR-36H BOARD (3/7)

BOARD NO. 1-648-533-22
BOARD' S LOT NO. 307-409
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510 (UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB
DVW-DPR36-ALL-PLAY-SIM-01-A

DPR-36H (4/7)

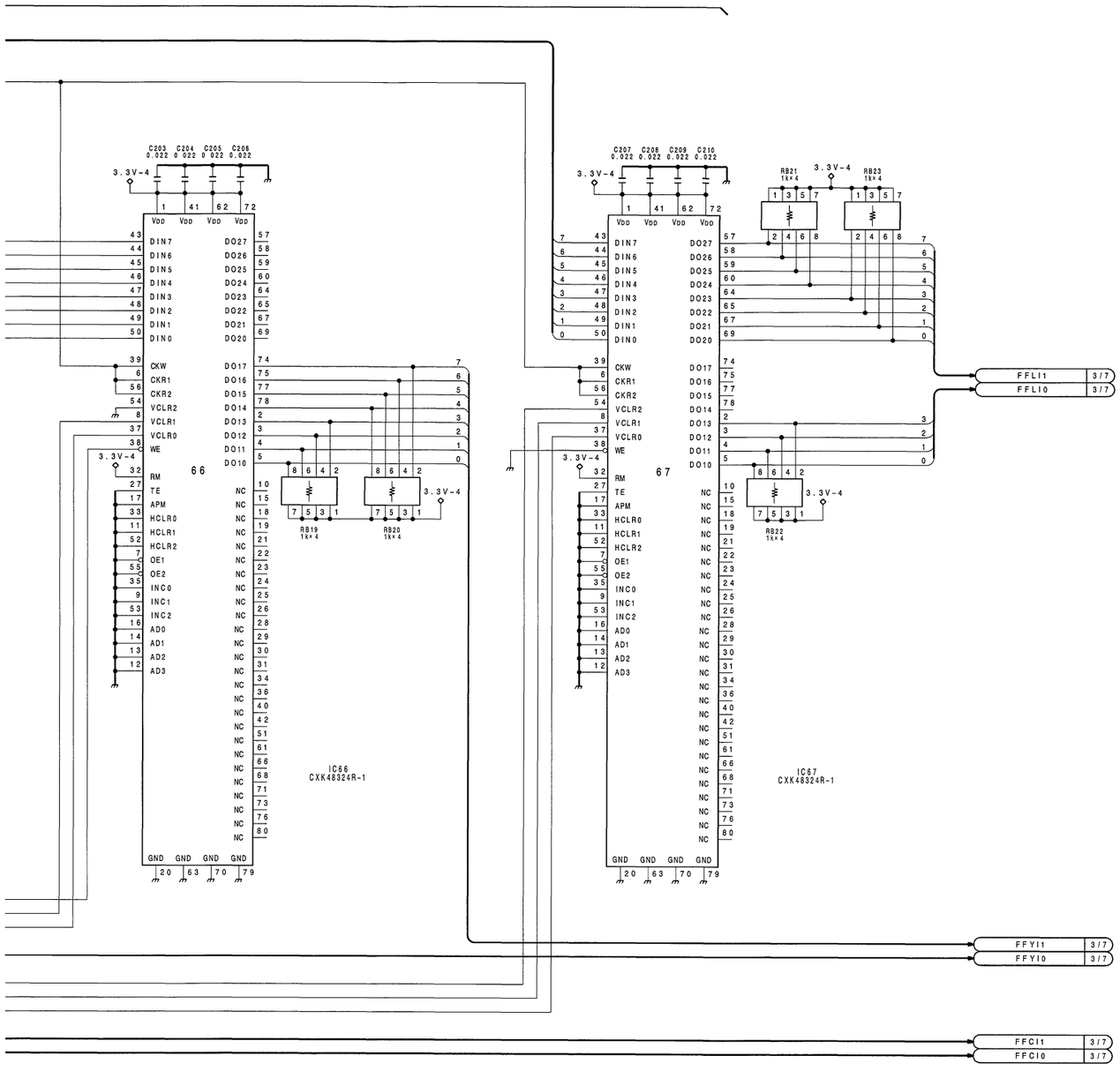
CONCEALMENT FIFO MEMORY(2.4M-BIT× 5)



1-54 (a)

1-54 (a)

DPR-36H (4/7)

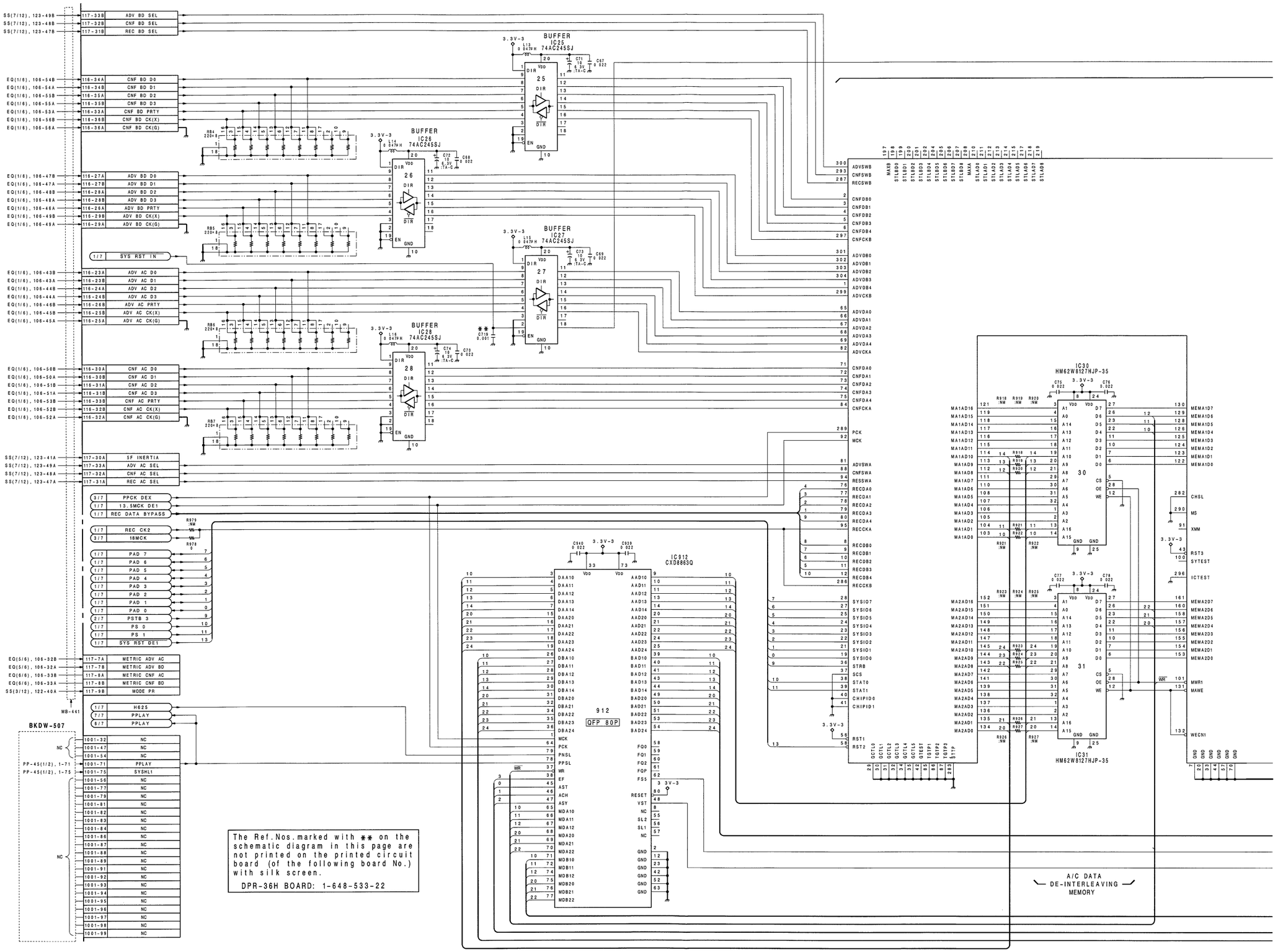


Concealment FIFO Memory

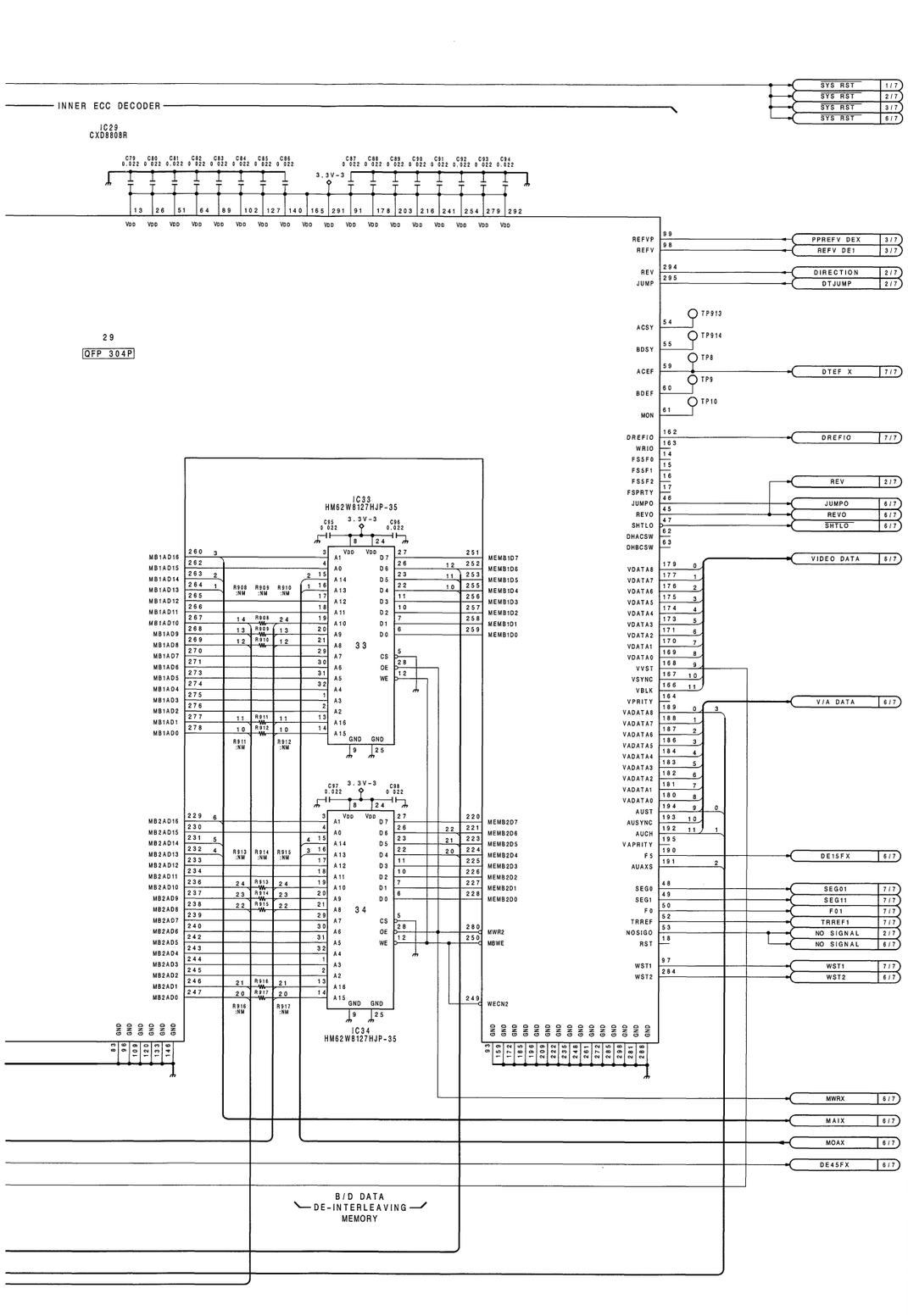
DPR-36H BOARD (4/7)

BOARD NO. 1-648-533-22
BOARD' S LOT NO. 307-409
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510 (UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-SIM-01-A


BUFFER IC25 74AC245SJ
BUFFER IC26 74AC245SJ
BUFFER IC27 74AC245SJ
BUFFER IC28 74AC245SJ
IC912 CXD8863Q
912 QFP 80P
IC30 HM62W8127HJP-35
IC31 HM62W8127HJP-35
BKDW-507
MB-441
The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.
DPR-36H BOARD: 1-648-533-22
A/C DATA DE-INTERLEAVING MEMORY

DPR-36H (5/7)



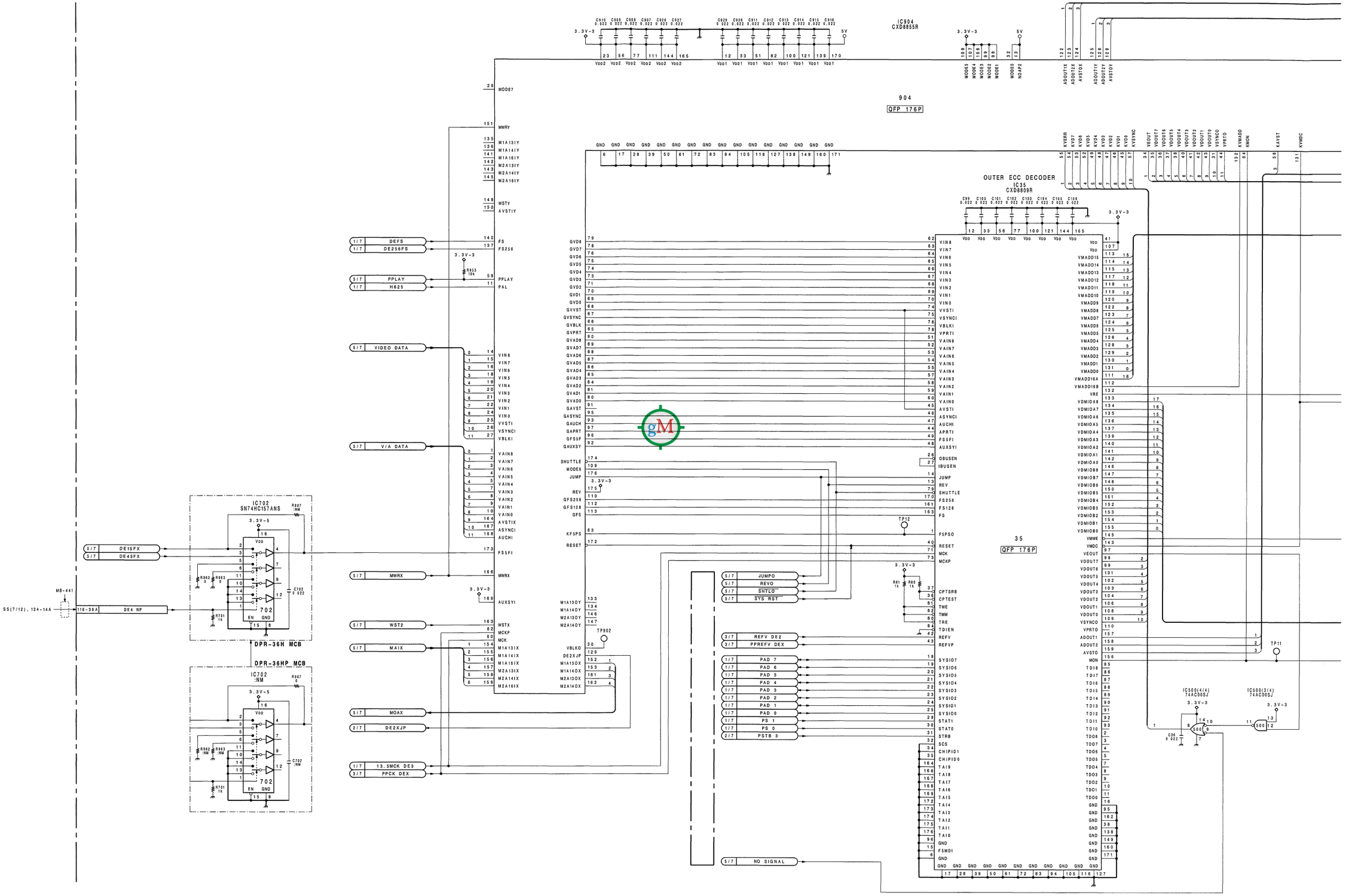
Inner ECC Decoder

DPR-36H BOARD (5/7)

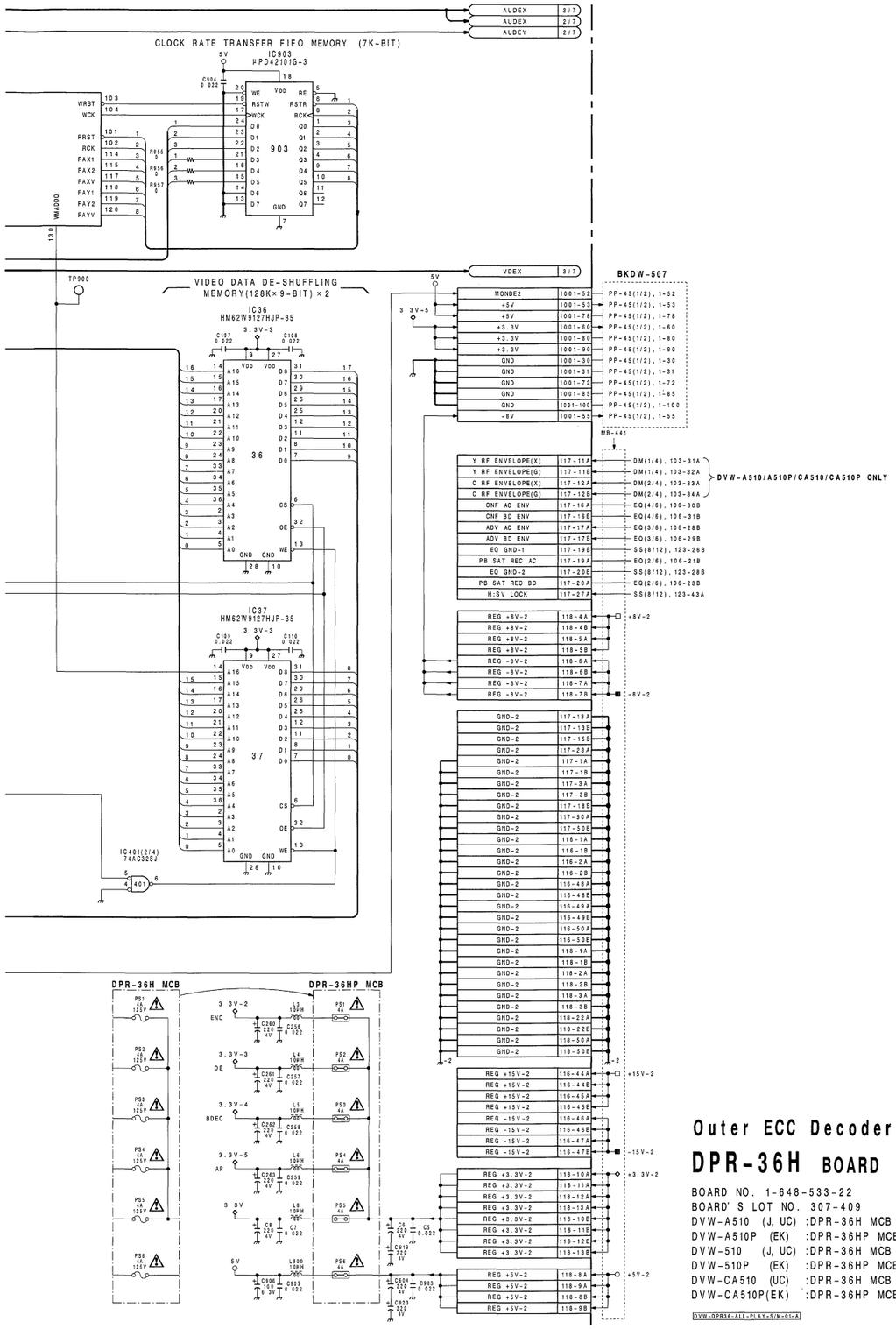
BOARD NO. 1-648-533-22
BOARD' S LOT NO. 307-409
DVW-A510 (J, UC)` :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510 (UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-SIM-01-A

DPR-36H (6/7) (7/7)



1-58 (a)

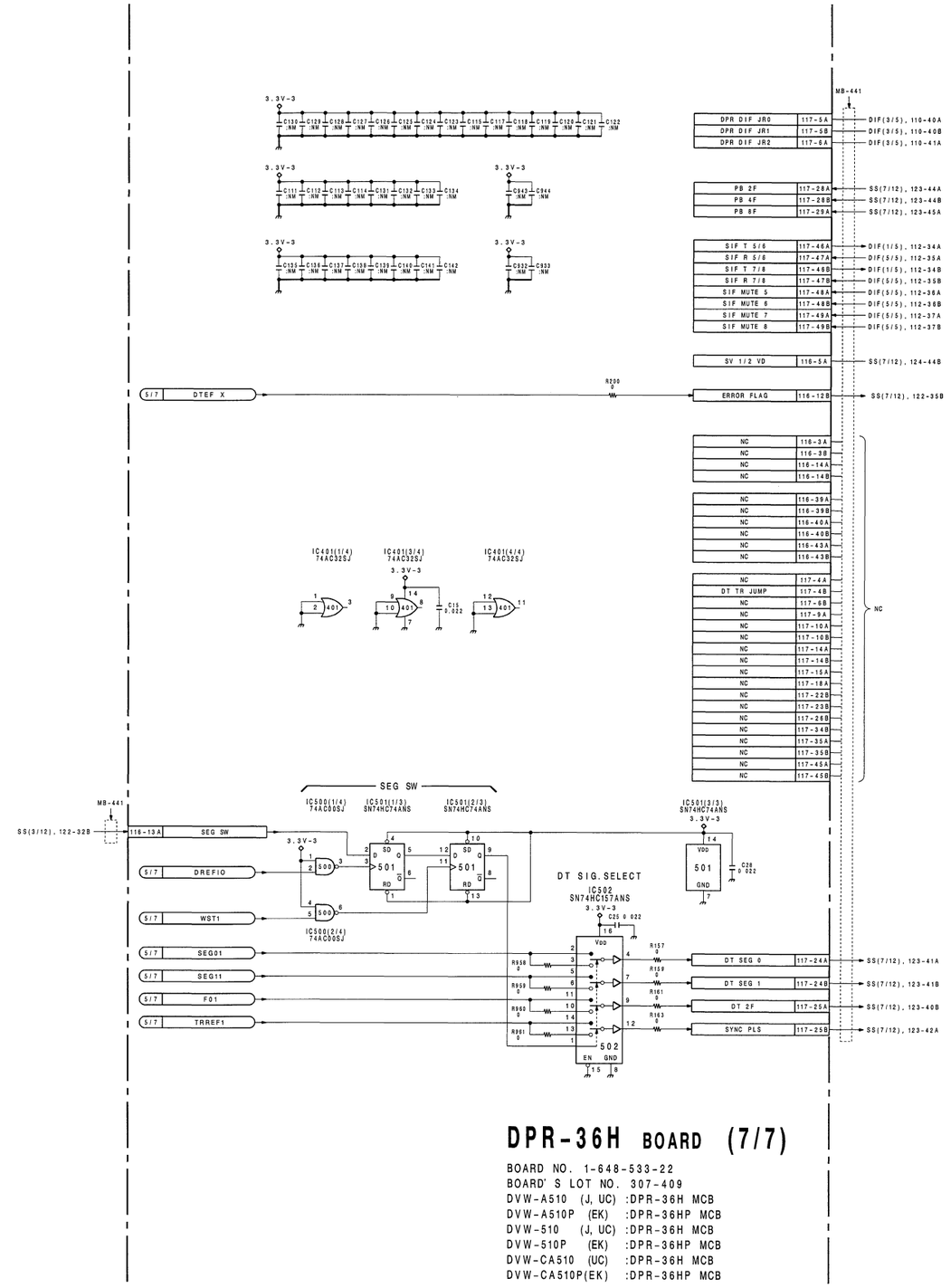


Outer ECC Decoder

DPR-36H BOARD (6/7)

BOARD NO. 1-648-533-22
BOARD' S LOT NO. 307-409
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510 (UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

DVW-DPR36-ALL-PLAY-S/M-01-A

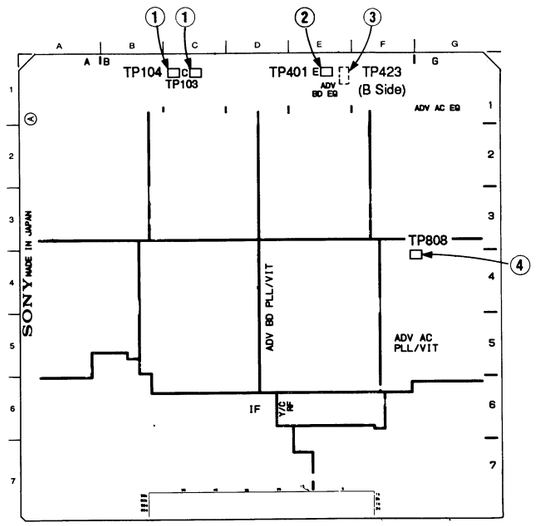


DPR-36H BOARD (7/7)

BOARD NO. 1-648-533-22
BOARD' S LOT NO. 307-409
DVW-A510 (J, UC) :DPR-36H MCB
DVW-A510P (EK) :DPR-36HP MCB
DVW-510 (J, UC) :DPR-36H MCB
DVW-510P (EK) :DPR-36HP MCB
DVW-CA510 (UC) :DPR-36H MCB
DVW-CA510P(EK) :DPR-36HP MCB

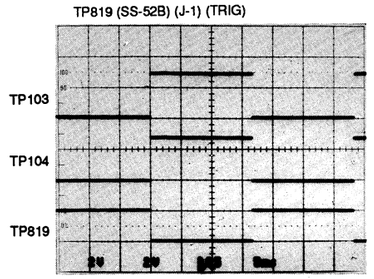
DVW-DPR36-ALL-PLAY-S/M-01-A

EQ-45BA/B Board -A Side-

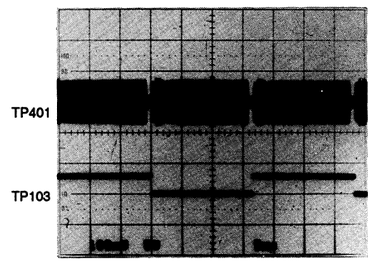


CR5-1B PB mode
(In only case of the VTR with a Batacam PB function)

① TP103 (C-1) PB mode
TP104 (C-1) PB mode
TP819 (SS-52B) (J-1) (TRIG)

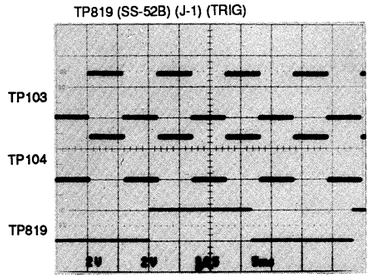


②TP401(E-1) PB mode(B/W LIMIT OFF)
TP103(C-1)(TRIG)

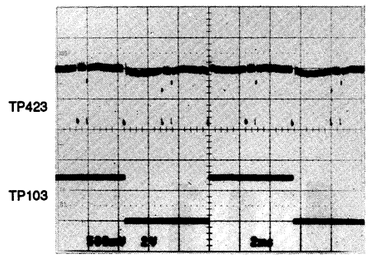


ZR5-1 PB mode

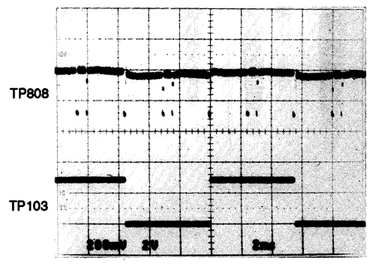
① TP103 (C-1) PB mode
TP104 (C-1) PB mode
TP819 (SS-52B) (J-1) (TRIG)



③ TP423 (E-1) PB mode
TP103(C-1)(TRIG)



④TP808(G-4) PB mode
TP103(C-1)(TRIG)

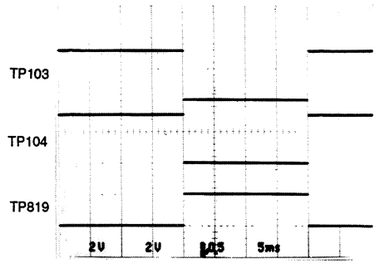


Measurement Condition
MODE : PB mode
TAPE : ZR5-1
: CR5-1B

For DVW-A510/510/CA510

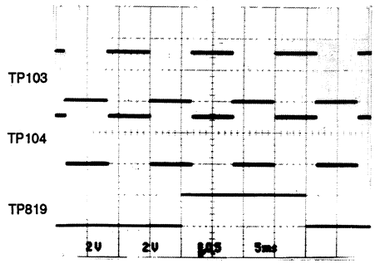
CR5-1B PS PB mode
(In only case of the VTR with a Betacam PB function)

① TP103 (C-1) PB mode
TP104 (C-1) PB mode
TP819 (SS-52B) (J-1) (TRIG)

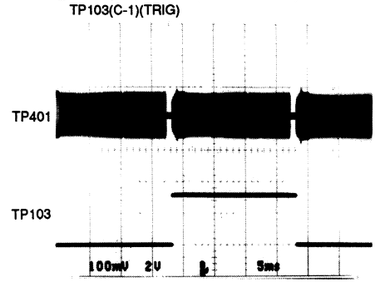


ZR5-1P PB mode

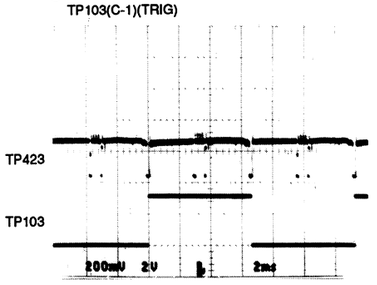
① TP103 (C-1) PB mode
TP104 (C-1) PB mode
TP819 (SS-52B) (J-1) (TRIG)



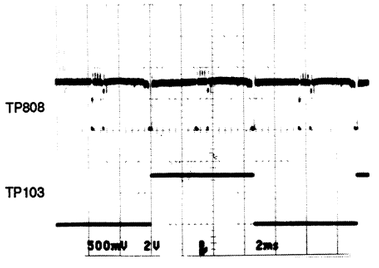
②TP401(E-1) PB mode(B/W LIMIT OFF)
TP103(C-1)(TRIG)



③ TP423 (E-1) PB mode
TP103(C-1)(TRIG)



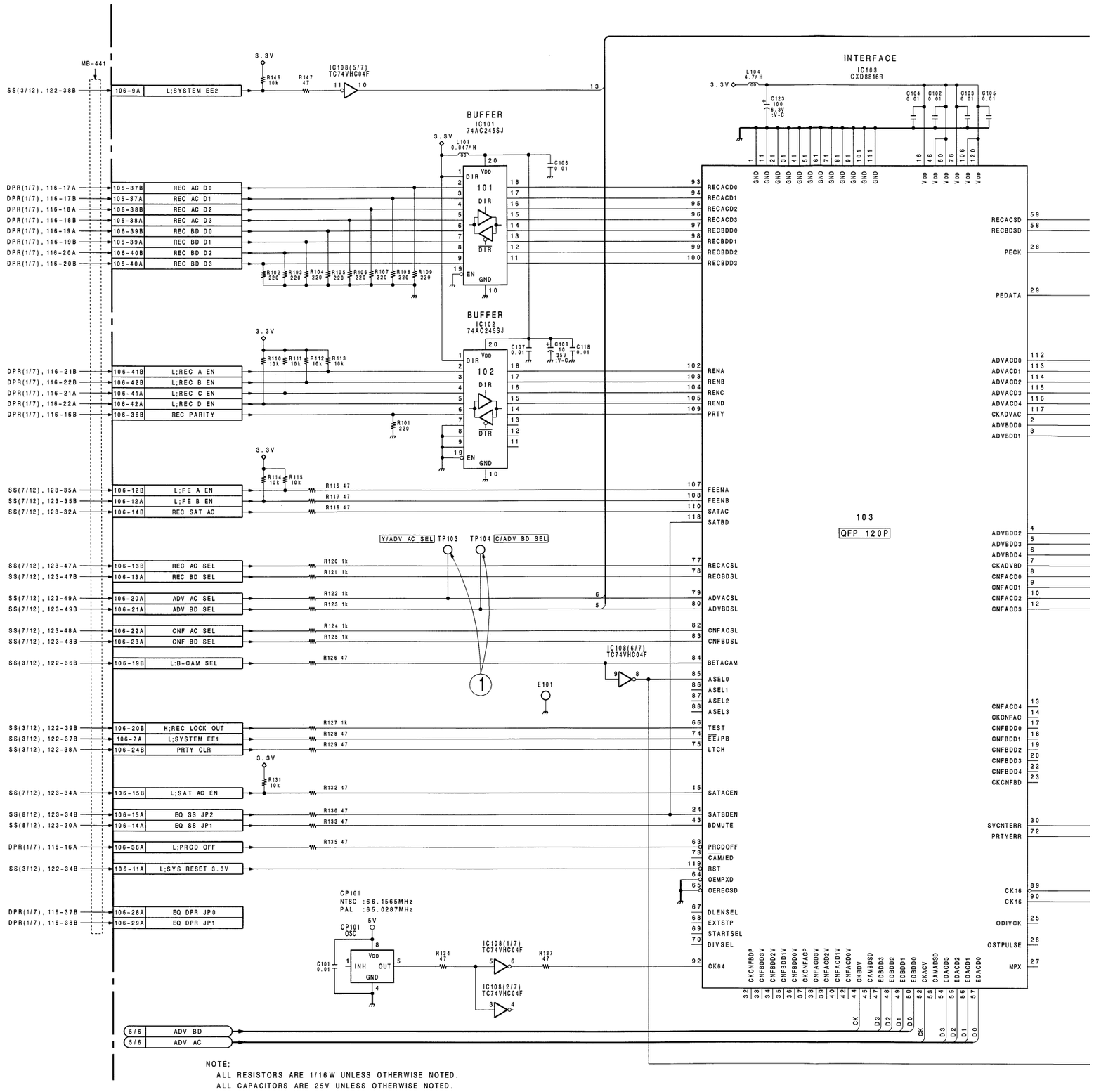
④TP808(G-4) PB mode
TP103(C-1)(TRIG)



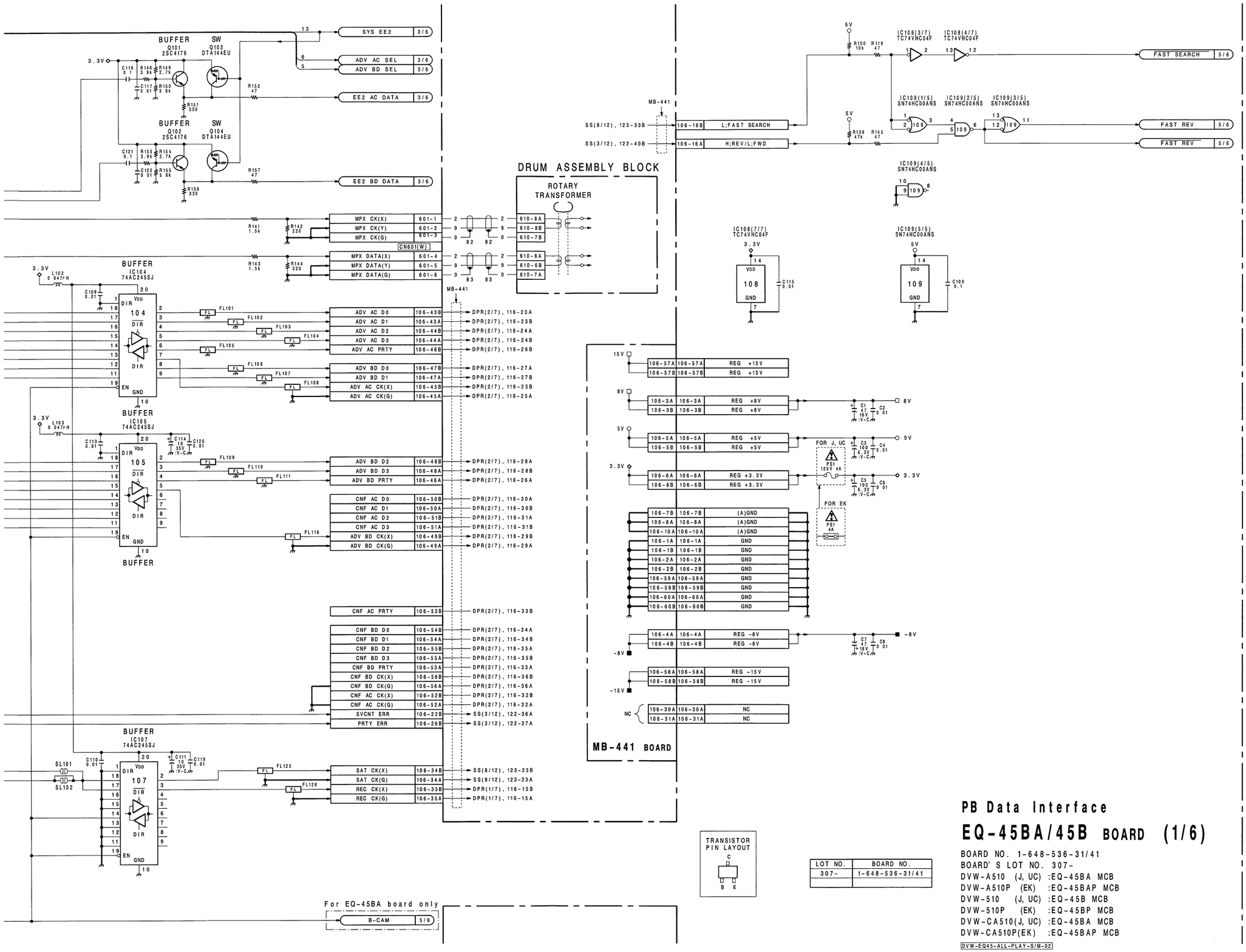
Measurement Condition
MODE : PB mode
TAPE : ZR5-1P
: CR5-1B PS

For DVW-A510P/510P/CA510P

EQ-45BA/45B (1/6)



1-62



LOT NO.	BOARD NO.
307-	1-648-536-31/41

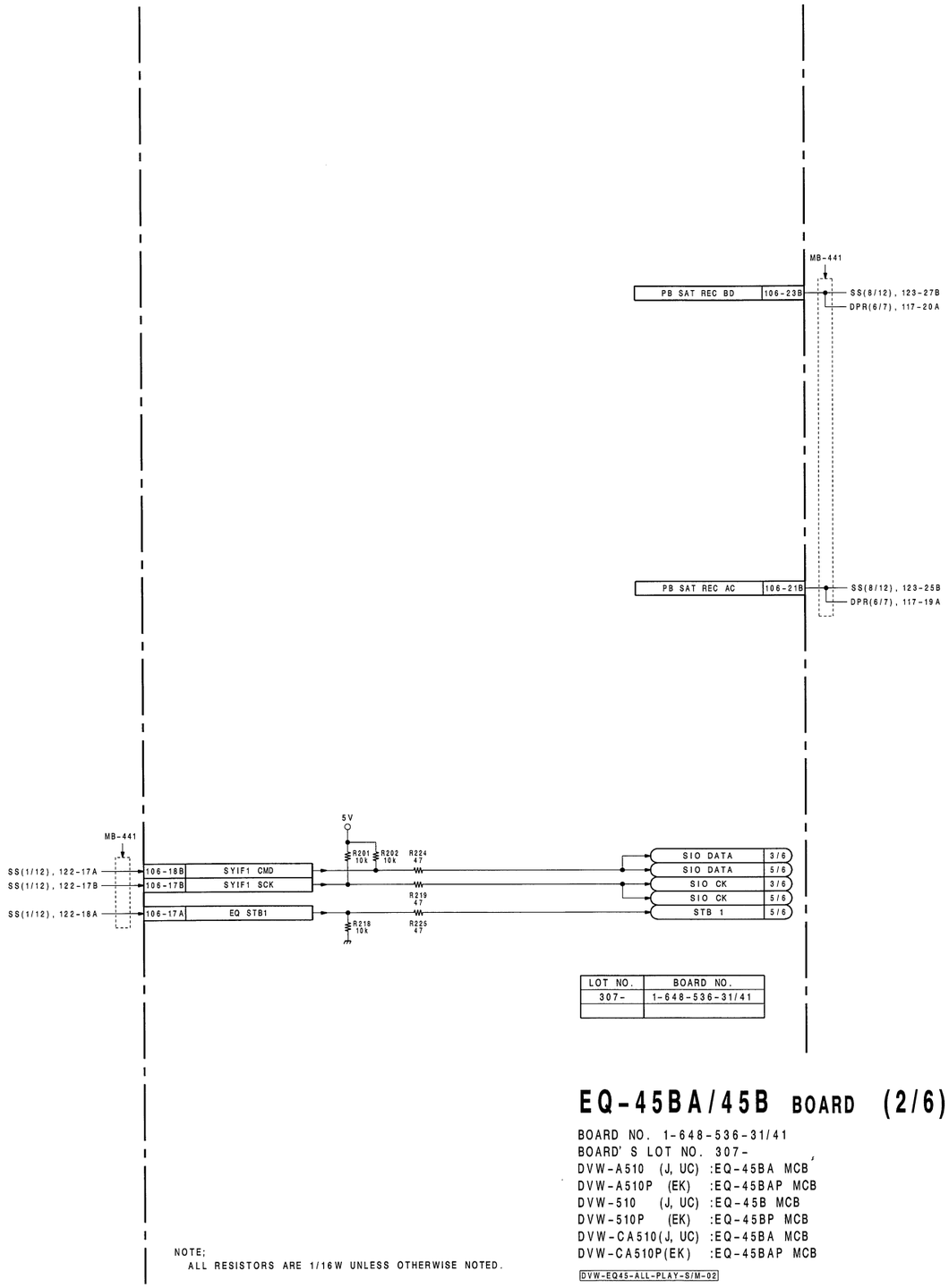
PB Data Interface

EQ-45BA/45B BOARD (1/6)

BOARD NO. 1-648-536-31/41
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :EQ-45BA MCB
DVW-A510P (EK) :EQ-45BAP MCB
DVW-510 (J, UC) :EQ-45B MCB
DVW-510P (EK) :EQ-45BP MCB
DVW-CA510(J, UC) :EQ-45BA MCB
DVW-CA510P(EK) :EQ-45BAP MCB

DVW-EQ45-ALL-PLAY-S/M-02

EQ-45BA/45B (2/6)



LOT NO.	BOARD NO.
307-	1-648-536-31/41

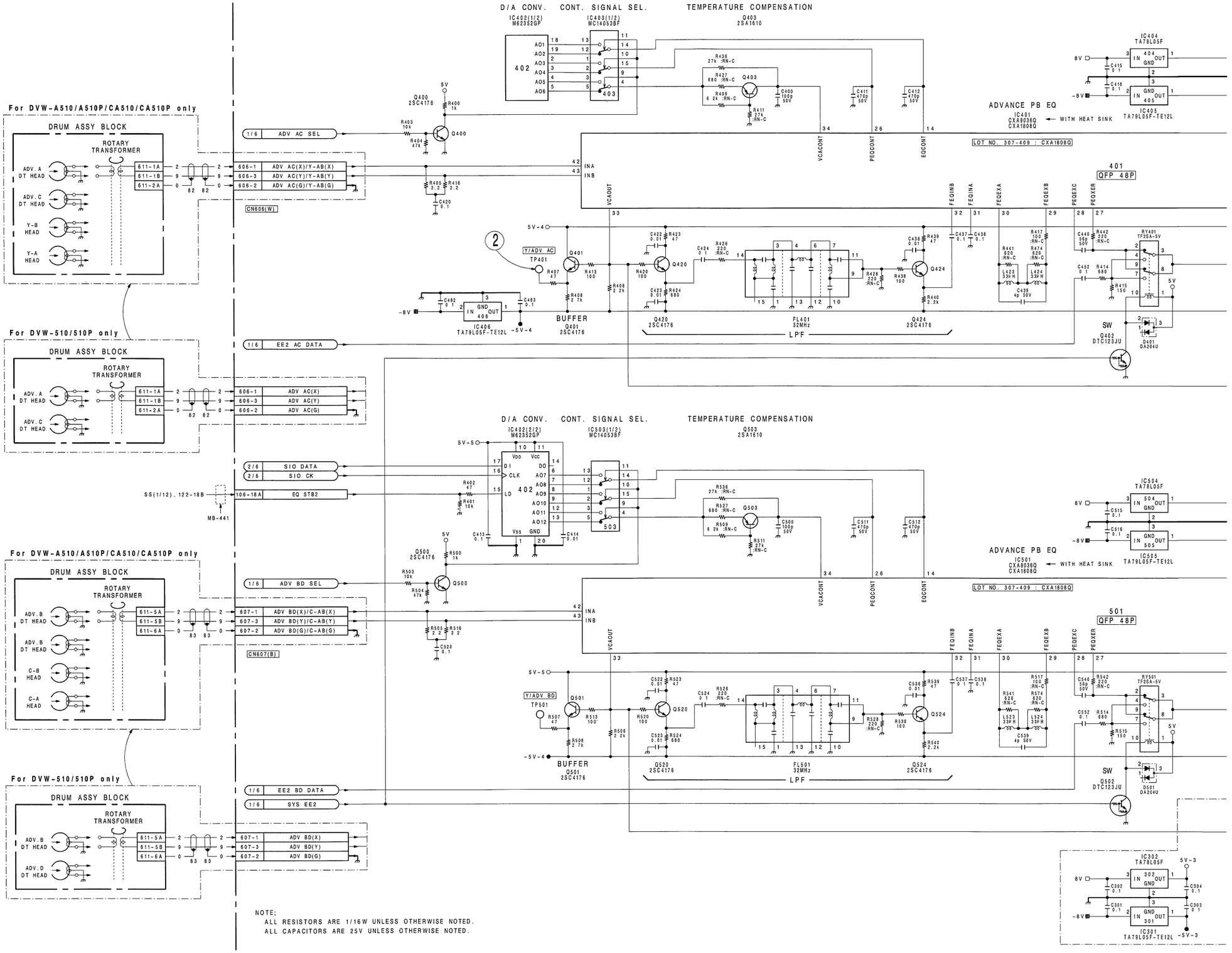
NOTE;
ALL RESISTORS ARE 1/16W UNLESS OTHERWISE NOTED.

EQ-45BA/45B BOARD (2/6)

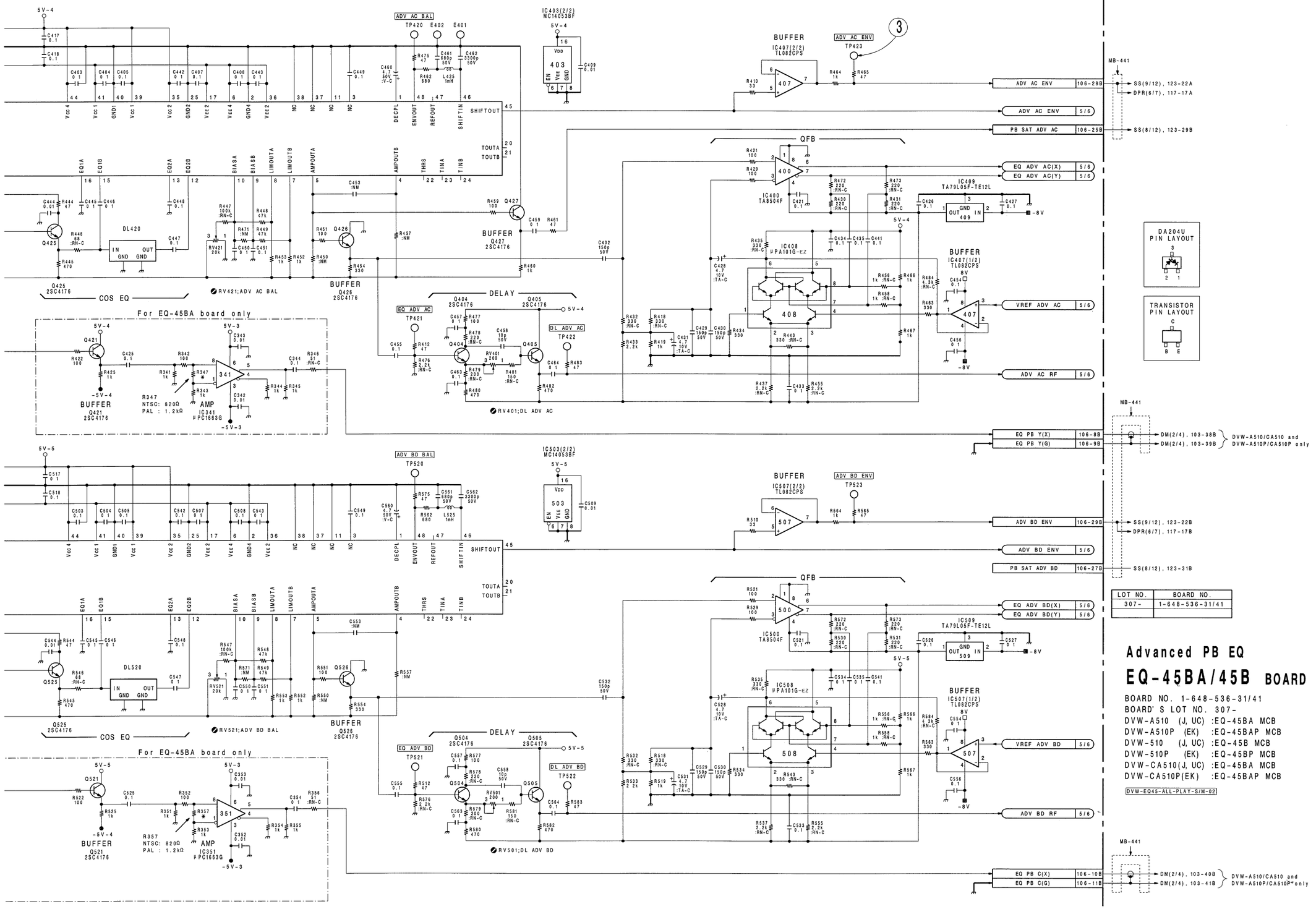
BOARD NO. 1-648-536-31/41
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :EQ-45BA MCB
DVW-A510P (EK) :EQ-45BAP MCB
DVW-510 (J, UC) :EQ-45B MCB
DVW-510P (EK) :EQ-45BP MCB
DVW-CA510(J, UC) :EQ-45BA MCB
DVW-CA510P(EK) :EQ-45BAP MCB

DVW-EQ45-ALL-PLAY-S/M-02

EQ-45BA/45B (3/6)



EQ-45BA/45B (3/6)



LOT NO.	BOARD NO.
307-	1-648-536-31/41

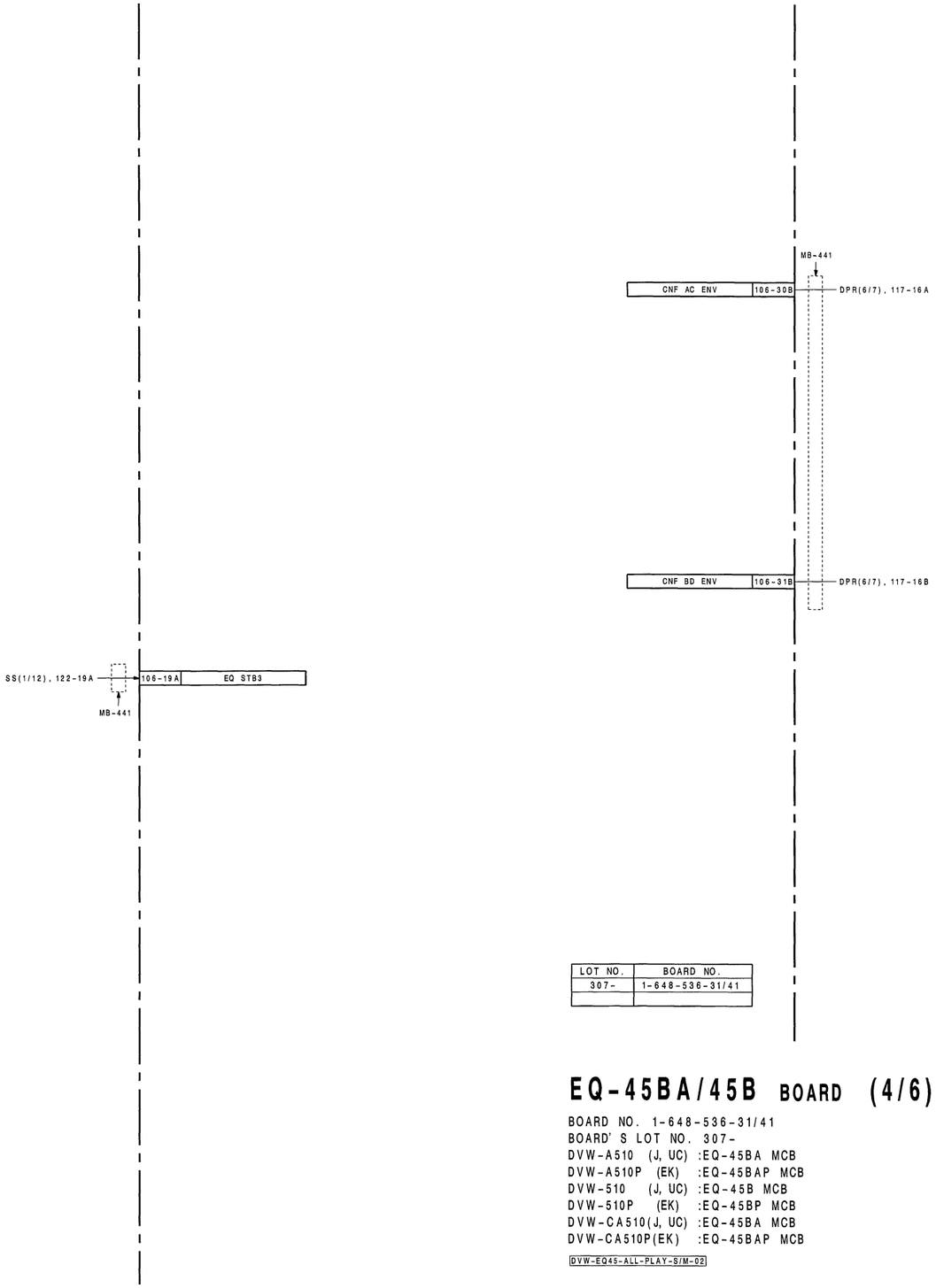
Advanced PB EQ

EQ-45BA/45B BOARD (3/6)

BOARD NO. 1-648-536-31/41
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :EQ-45BA MCB
DVW-A510P (EK) :EQ-45BAP MCB
DVW-510 (J, UC) :EQ-45B MCB
DVW-510P (EK) :EQ-45BP MCB
DVW-CA510(J, UC) :EQ-45BA MCB
DVW-CA510P(EK) :EQ-45BAP MCB

DVW-EQ45-ALL-PLAY-SIM-02

EQ-45BA/45B (4/6)



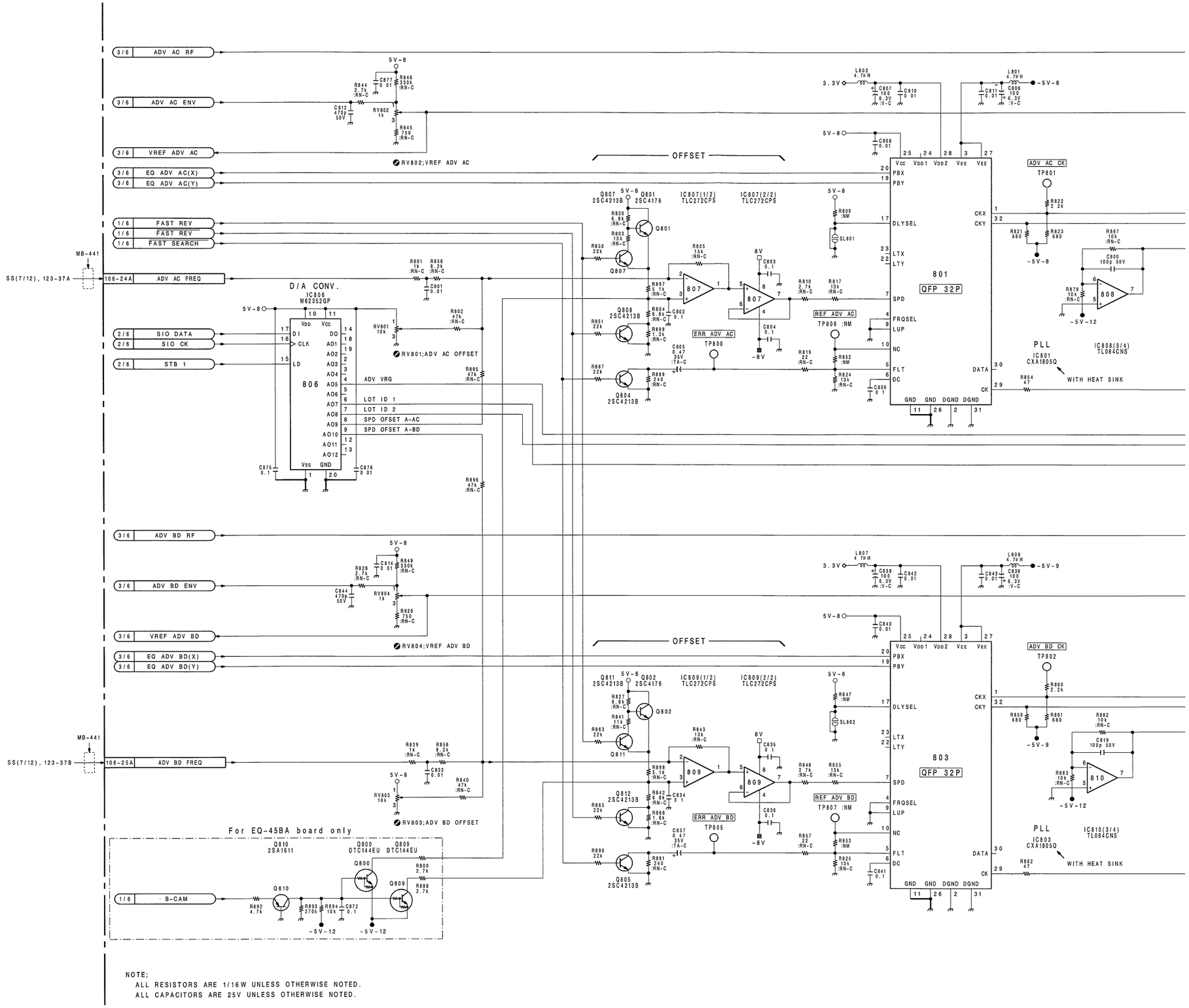
LOT NO.	BOARD NO.
307-	1-648-536-31/41

EQ-45BA/45B BOARD (4/6)

BOARD NO. 1-648-536-31/41
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :EQ-45BA MCB
DVW-A510P (EK) :EQ-45BAP MCB
DVW-510 (J, UC) :EQ-45B MCB
DVW-510P (EK) :EQ-45BP MCB
DVW-CA510(J, UC) :EQ-45BA MCB
DVW-CA510P(EK) :EQ-45BAP MCB

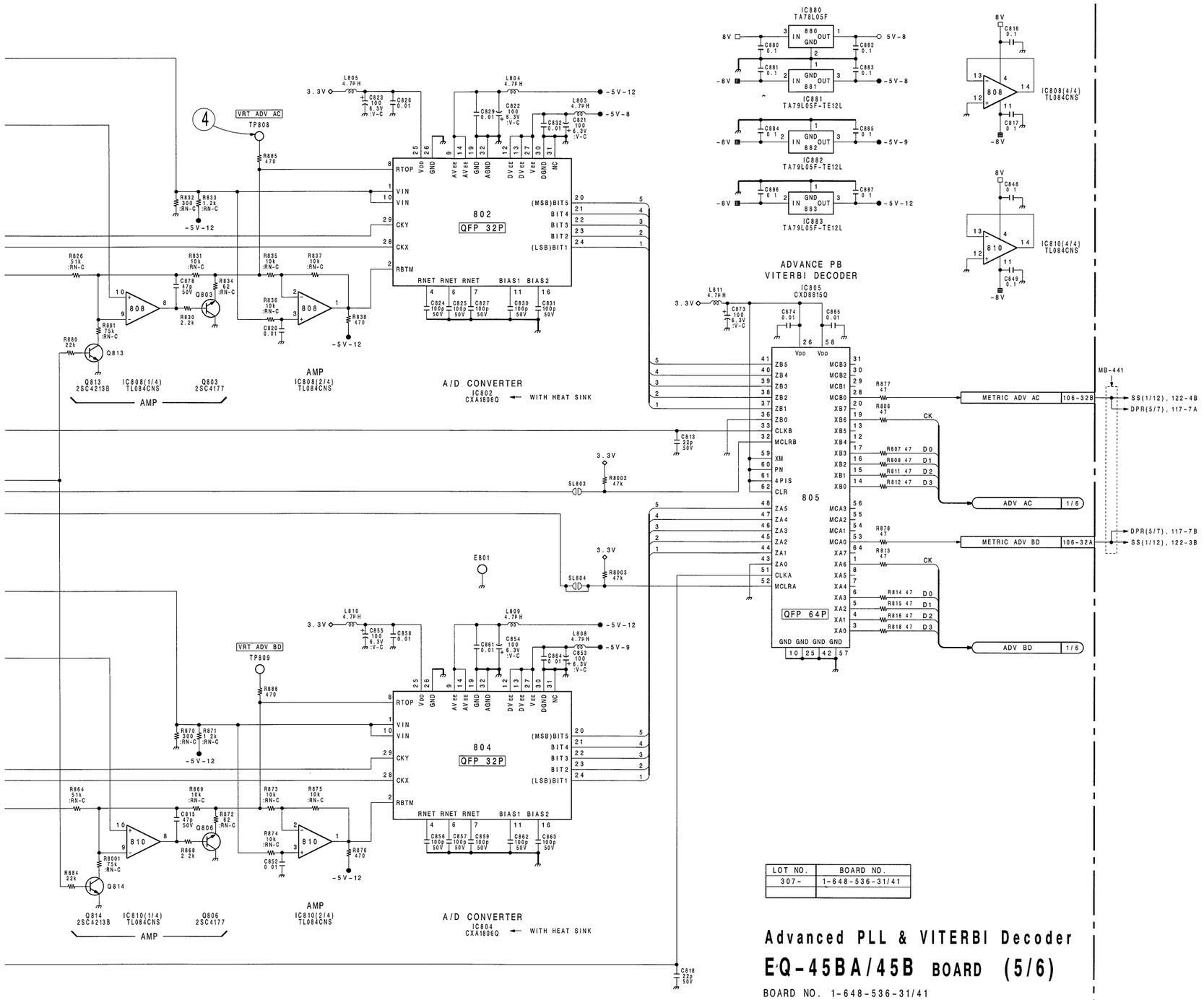
DVW-EQ45-ALL-PLAY-S/M-02

EQ-45BA/45B (5/6)



1-70

EQ-45BA/45B (5/6)



LOT NO.	BOARD NO.
307-	1-648-536-31/41

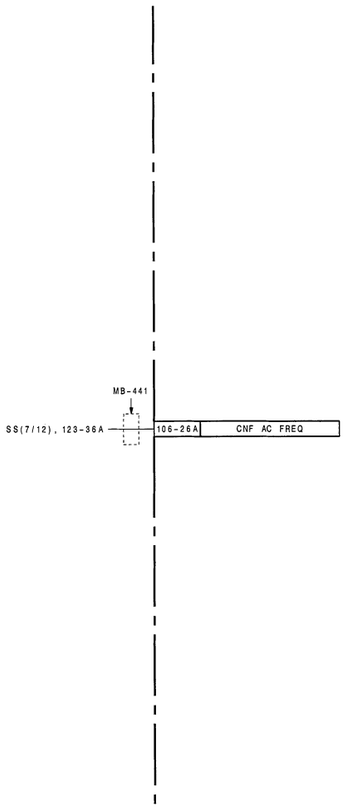
Advanced PLL & VITERBI Decoder

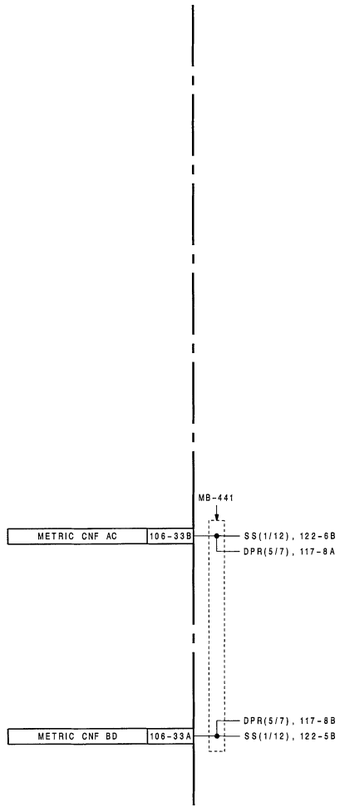
EQ-45BA/45B BOARD (5/6)

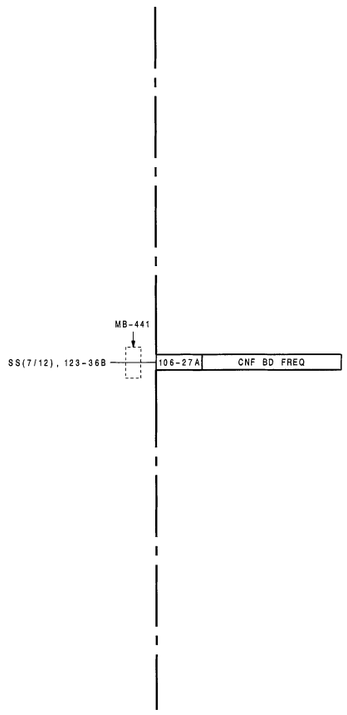
BOARD NO. 1-648-536-31/41
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :EQ-45BA MCB
DVW-A510P (EK) :EQ-45BAP MCB
DVW-510 (J, UC) :EQ-45B MCB
DVW-510P (EK) :EQ-45BP MCB
DVW-CA510(J, UC) :EQ-45BA MCB
DVW-CA510P(EK) :EQ-45BAP MCB

DVW-EQ45-ALL-PLAY-S/M-02

EQ-45BA/45B (6/6)





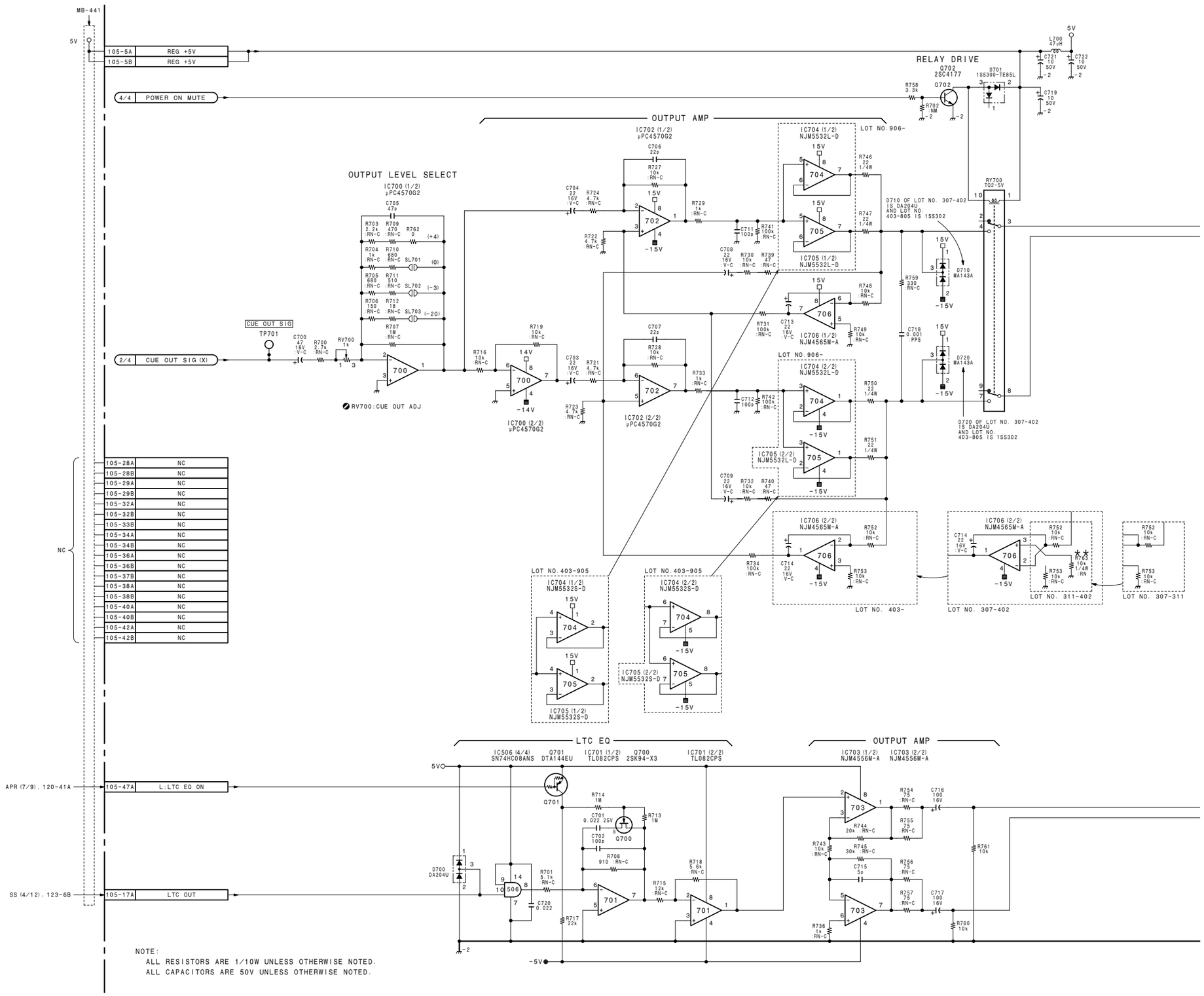


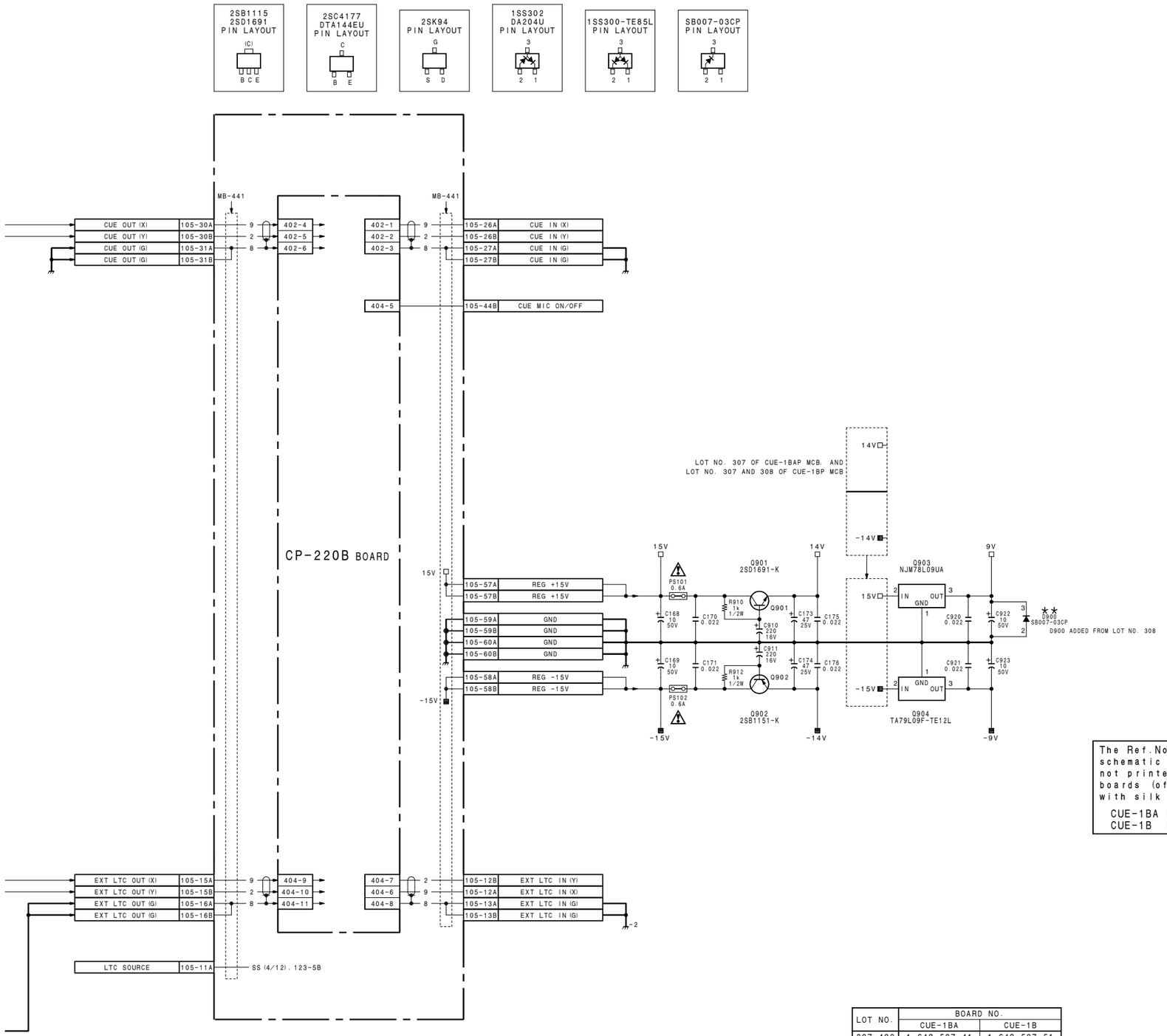
LOT NO.	BOARD NO.
307-	1-648-536-31/41

EQ-45BA/45B BOARD (6/6)

BOARD NO. 1-648-536-31/41
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :EQ-45BA MCB
DVW-A510P (EK) :EQ-45BAP MCB
DVW-510 (J, UC) :EQ-45B MCB
DVW-510P (EK) :EQ-45BP MCB
DVW-CA510(J, UC) :EQ-45BA MCB
DVW-CA510P(EK) :EQ-45BAP MCB

DVW-EQ45-ALL-PLAY-S/M-02


MB-441
5V
105-5A REG +5V
105-5B REG +5V
4/4 POWER ON MUTE
RELAY DRIVE
Q702 2SC4177
D701 1SS300-TE85L
R758 3.3k
R702 NM
L700 47μH
C721 10 50V
C722 10 50V
C719 10 50V
OUTPUT AMP
IC702 (1/2) μPC4570G2
IC704 (1/2) NJM5532L-D
LOT NO.906-
OUTPUT LEVEL SELECT
IC700 (1/2) μPC4570G2
C705 47p
R703 2.2k :RN-C
R709 470 :RN-C
R762 0 (+4)
R704 1k :RN-C
R710 680 :RN-C SL701 (0)
R705 680 :RN-C
R711 510 :RN-C SL702 (-3)
R706 150 :RN-C
R712 18 :RN-C SL703 (-20)
R707 1M :RN-C
CUE OUT SIG
TP701
2/4 CUE OUT SIG (X)
C700 47 16V :V-C
R700 2.7k :RN-C
RV700 1k
RV700:CUE OUT ADJ
IC700 (2/2) μPC4570G2
C704 22 16V :V-C
R724 4.7k :RN-C
R722 4.7k :RN-C
R716 10k :RN-C
R719 10k :RN-C
C703 22 16V :V-C
R721 4.7k :RN-C
R723 4.7k :RN-C
C706 22p
R727 10k :RN-C
R729 1k :RN-C
C707 22p
R728 10k :RN-C
R733 1k :RN-C
C708 22 16V :V-C
C711 100p
R741 100k :RN-C
R730 10k :RN-C
R739 47 :RN-C
C713 22 16V :V-C
R731 100k :RN-C
C712 100p
R742 100k :RN-C
C709 22 16V :V-C
R732 10k :RN-C
R740 47 :RN-C
R734 100k :RN-C
IC705 (1/2) NJM5532L-D
IC706 (1/2) NJM4565M-A
IC705 (2/2) NJM5532L-D
IC706 (2/2) NJM4565M-A
R746 22 1/4W
R747 22 1/4W
R748 10k :RN-C
R749 10k :RN-C
R750 22 1/4W
R751 22 1/4W
D710 OF LOT NO. 307-402 IS DA204U AND LOT NO. 403-805 IS 1SS302
D710 MA143A
D720 MA143A
D720 OF LOT NO. 307-402 IS DA204U AND LOT NO. 403-805 IS 1SS302
RY700 TQ2-5V
R759 330 :RN-C
C718 0.001 :PPS
R752 10k :RN-C
C714 22 16V :V-C
R753 10k :RN-C
R763 10k 1/4W :RN
LOT NO. 403-905
LOT NO. 403-
LOT NO. 307-402
LOT NO. 311-402
LOT NO. 307-311
105-28A NC
105-28B NC
105-29A NC
105-29B NC
105-32A NC
105-32B NC
105-33B NC
105-34A NC
105-34B NC
105-36A NC
105-36B NC
105-37B NC
105-38A NC
105-38B NC
105-40A NC
105-40B NC
105-42A NC
105-42B NC
NC
LTC EQ
IC506 (4/4) SN74HC08ANS
Q701 DTA144EU
IC701 (1/2) TL082CPS
Q700 2SK94-X3
IC701 (2/2) TL082CPS
APR (7/9), 120-41A
105-47A L:LTC EQ ON
SS (4/12), 123-6B
105-17A LTC OUT
D700 DA204U
R714 1M
R713 1M
C701 0.022 25V
C702 100p
R708 910 :RN-C
R701 5.1k :RN-C
C720 0.022
R717 22k
R715 12k :RN-C
R718 5.6k :RN-C
IC703 (1/2) NJM4556M-A
IC703 (2/2) NJM4556M-A
R754 75 :RN-C
R755 75 :RN-C
R744 20k :RN-C
R743 10k :RN-C
R745 30k :RN-C
C715 5p
R756 75 :RN-C
R757 75 :RN-C
C716 100 16V
C717 100 16V
R761 10k
R760 10k
R736 1k :RN-C
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.



The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit boards (of the following board No.) with silk screen.

CUE-1BA BOARD: 1-648-537-41
CUE-1B BOARD: 1-648-537-51

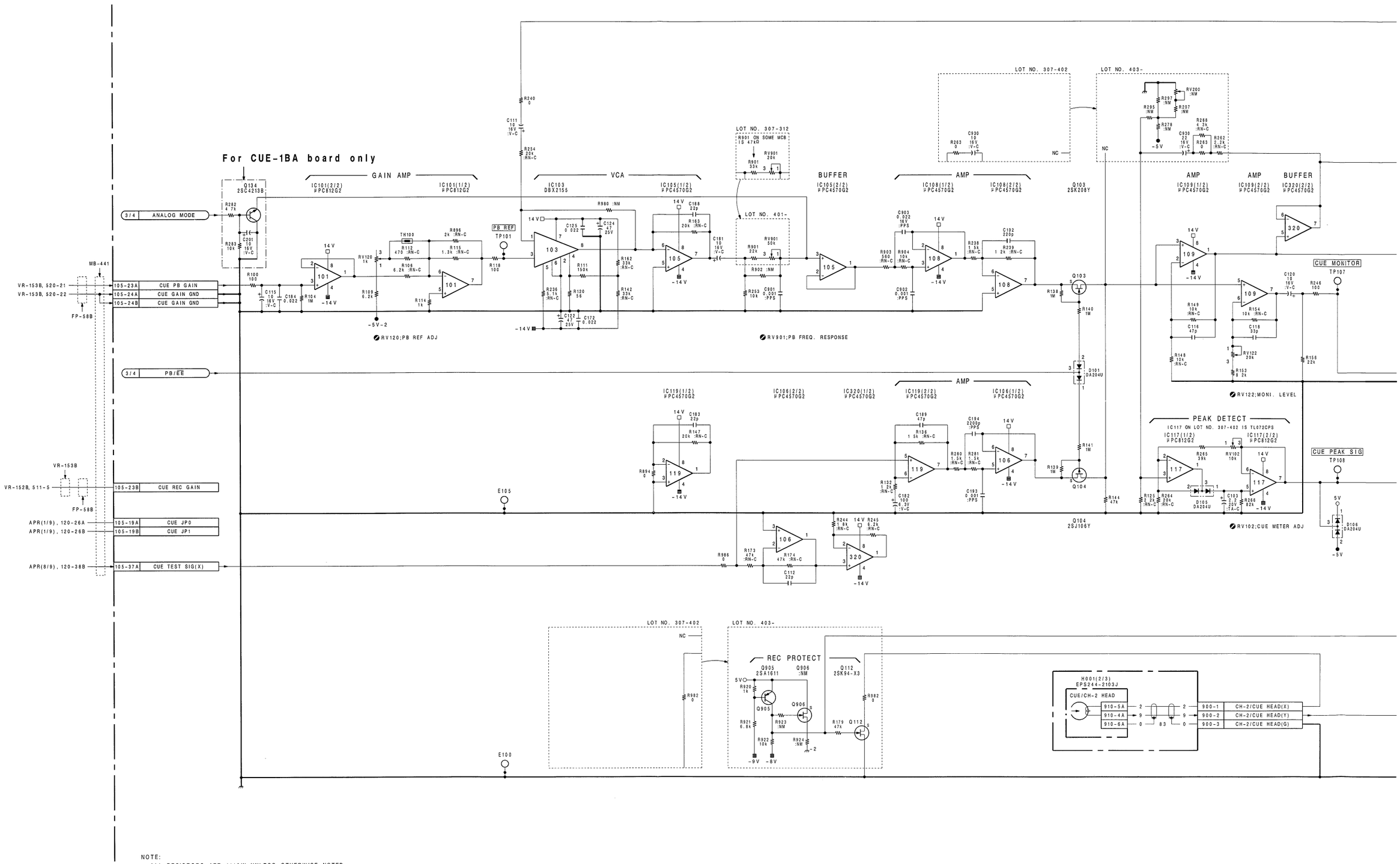
LOT NO.	BOARD NO.	
	CUE-1BA	CUE-1B
307-402	1-648-537-41	1-648-537-51
403-508	1-648-537-42	1-648-537-52
509	1-648-537-42	1-648-537-53
510-	1-648-537-43	1-648-537-53

Cue OUT, LTC OUT

CUE-1BA/1B BOARD (1/4)

BOARD NO. 1-648-537-41, 42, 43/51, 52, 53
BOARD'S LOT NO. 307-
DVW-A510P (EK) :CUE-1BAP MCB
DVW-510P (EK) :CUE-1BP MCB
DVW-CA510P (EK) :CUE-1BAP MCB

DVW-CUE1-PAL-PLAY-S/M-04



NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

LOT NO. 307-410: MOUNTED AS DESIGN
LOT NO. 411- : NO MOUNTED

2SA1611 2SC4213B PIN LAYOUT (C, B E)
2SK94 2SK208Y 2SJ106Y PIN LAYOUT (G, S D)
DA204U PIN LAYOUT (3, 2 1)
1SS303 PIN LAYOUT (3, 2 1)

NC
LOT NO 307-402

CUE OUT DETECT
IC322(1/4) SN74HC02ANS
IC322(2/4) SN74HC02ANS
IC322(3/4) SN74HC02ANS
IC322(4/4) SN74HC02ANS
IC324(1/2) NJM2903M
IC324(2/2) NJM2903M
D107 DA204U
D311 1SS303

CUE EE DET | 105-46A → APR(7/9), 120-40A
CUE OUT DET | 105-47B → APR(7/9), 120-41B

For CUE-1BA board only

LOT NO. 403-
REC PROTECT Q113 2SK94-X3
RV106:CH-1 HEAD DUMP
RV108:CH-1 FREQ.RESP. (OXIDE)
RV109:CH-1 FREQ.RESP. (METAL)

CUE OUT SIG(X) | 1/4
H001(1/3) EPS244-2103J
CH-1 HEAD
910-7A, 910-8A, 910-9A
900-5 CH-1 HEAD(Y)
900-4 CH-1 HEAD(X)
900-6 CH-1 HEAD(G)

CH-1 HEAD TUNE
S101
RV105 100k
RV106 100k

CUE-1BAP MCB | SHORT
CUE-1BP MCB | OPEN
SL1

CH-1 PB: IC110(1/2) NJM2068M-D, Q115 2SK94-X3, ATT & EQ Q118 2SC4213B, LAU MUTE Q120 2SC4213B, AUDIO ATT Q122 2SC4213B, SLOW EQ Q124 2SC4213B, OUTPUT AMP IC110(2/2) NJM2068M-D, CH-1 PB SIG, TP109

PB CH-1 SIG(X) | 105-41A → AP(1/3), 104-41A
PB CH-1 SIG(G) | 105-41B → AP(1/3), 104-41B
DVW-A510P/CA510P only

MB-441
CUE MONITOR(X) | 105-35A → APR(5/9), 119-40A
CUE MONITOR(G) | 105-35B → APR(5/9), 119-40B
APR(5/9), 119-41A
APR(5/9), 119-41B

DVW-A510P/CA510P only
DM(4/4), 103-22B → 105-56A H;LAU MUTE
APR(7/9), 120-50B → 105-56B H;AUDIO ATT ON
APR(7/9), 120-49A → 105-55A H;SLOW EQ ON
APR(7/9), 120-47A → 105-53A H;CUE PB MUTE

CUE PEAK SIGNAL | 105-33A → APR(7/9), 120-36A

3/4 ANALOG MTL2
3/4 ANALOG MTL1
3/4 METAL MODE
R267 0
SL100

SOME MCB OF LOT NO. 307-312: R292 IS 2.2kΩ, AND RV109 IS 1kΩ

AMP IC116(2/2) μPC4570G2
LAU MUTE Q133 2SC4213B
OUTPUT AMP IC116(1/2) μPC4570G2
CH-2 PB SIG, TP111

PB CH-2 SIG(X) | 105-39A → AP(1/3), 104-39A
PB CH-2 SIG(G) | 105-39B → AP(1/3), 104-39B
DVW-A510P/CA510P only

	R304	R261
CUE-1BAP MCB	NO MOUNTED	NO MOUNTED
CUE-1BP MCB	39k :RN-C	3.6k :RN-C

CUE-1BP MCB: R187 10k :RN-C, C146 680p 16V :PPS
CUE-1BAP MCB: R187 2k :RN-C, C145 0.001 16V :PPS, C148 6800p 16V :PPS

PB EQ IC111(1/2) NJM2068M-D, D108 DA204U
CUE MUTE Q121 2SC4213B
AUDIO ATT Q123 2SC4213B
SLOW EQ Q125 2SC4213B
AMP IC111(2/2) NJM2068M-D
CONTOUR EFFECT COMPENSATOR: IC112(1/2) μPC4570G2, IC112(2/2) μPC4570G2, IC113(1/2) μPC4570G2, IC113(2/2) μPC4570G2
CUE PB SIG, TP110

HEAD CURRENT (X), TP105
HEAD CURRENT (G), TP106
CUE/CH-2 HEAD TUNE
S102

EQ SW Q116 2SK94-X3
ATT & EQ Q119 2SC4213B
SOME MCB OF LOT NO. 307-312: R294 IS 2.2kΩ, AND RV111 IS 1kΩ.

RV107:CH-2 HEAD DUMP(O)
RV110:CH-2 FREQ RESP (OXIDE)
RV111:CH-2 FREQ.RESP. (METAL)
RV114:PB LEVEL ADJ

For CUE-1BA board only

LOT NO. 307-402	
R213	150k :RN-C
R214	22k :RN-C
R217	120k :RN-C
R218	56k :RN-C
R220	220k :RN-C
R222	33k :RN-C

3/4 -8V → IC118 TA79L05F-TE12 → -5V-2

Cue PB & Audio CH-1/CH-2 PB Process

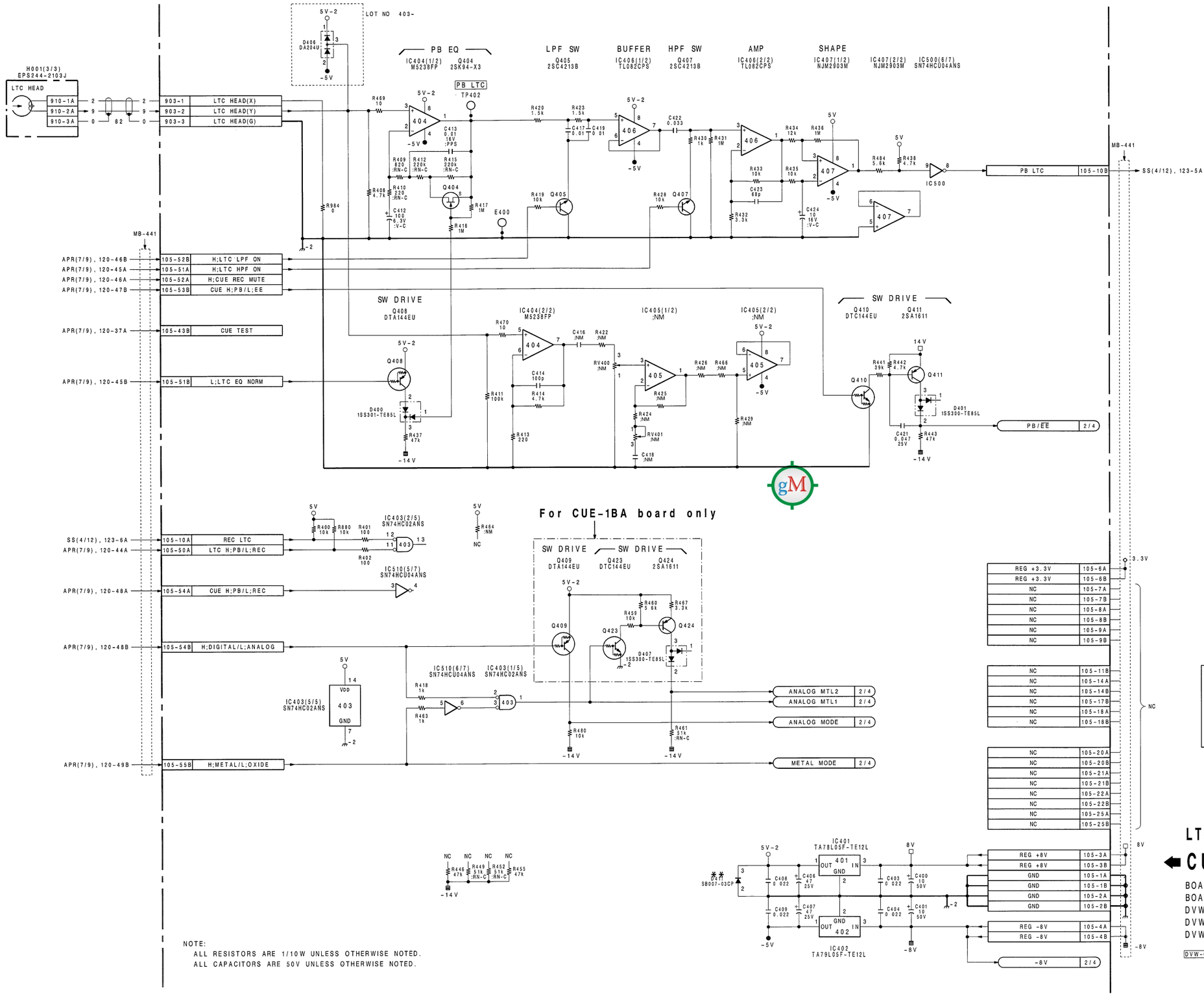
CUE-1BA/1B BOARD (2/4)

BOARD NO. 1-648-537-41, 42, 43/51, 52, 53
BOARD' S LOT NO. 307-
DVW-A510P (EK) :CUE-1BAP MCB
DVW-510P (EK) :CUE-1BP MCB
DVW-CA510P(EK) :CUE-1BAP MCB

DVW-CUE1-PAL-PLAY-S/M-04

LOT NO.	BOARD NO.	
	CUE-1BA	CUE-1B
307-402	1-648-537-41	1-648-537-51
403-508	1-648-537-42	1-648-537-52
509	1-648-537-42	1-648-537-53
510-	1-648-537-43	1-648-537-53

CUE-1BA/1B (3/4)



The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit boards (of the following board No.) with silk screen.

CUE-1BA BOARD: 1-648-537-41
CUE-1B BOARD: 1-648-537-51

NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

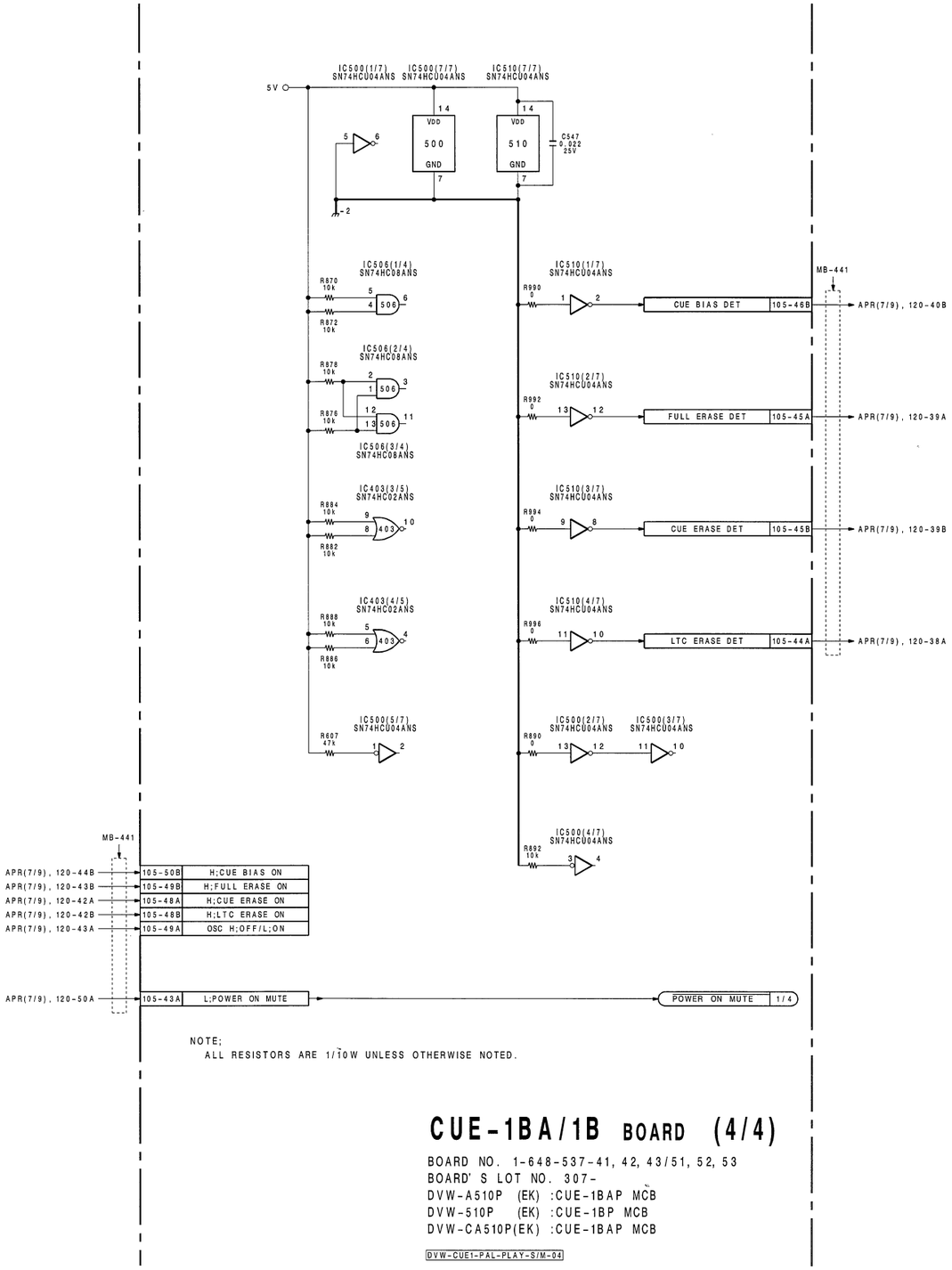
LTC PB Process & Control Circuit

◀CUE-1BA/1B BOARD (3/4)

BOARD NO. 1-648-537-41, 42, 43/51, 52, 53
BOARD' S LOT NO. 307-
DVW-A510P (EK) :CUE-1BAP MCB
DVW-510P (EK) :CUE-1BP MCB
DVW-CA510P(EK) :CUE-1BAP MCB

DVW-CUE1-PAL-PLAY-S/M-04

LOT NO.	BOARD NO.	
	CUE-1BA	CUE-1B
307-402	1-648-537-41	1-648-537-51
403-508	1-648-537-42	1-648-537-52
509	1-648-537-42	1-648-537-53
510-	1-648-537-43	1-648-537-53



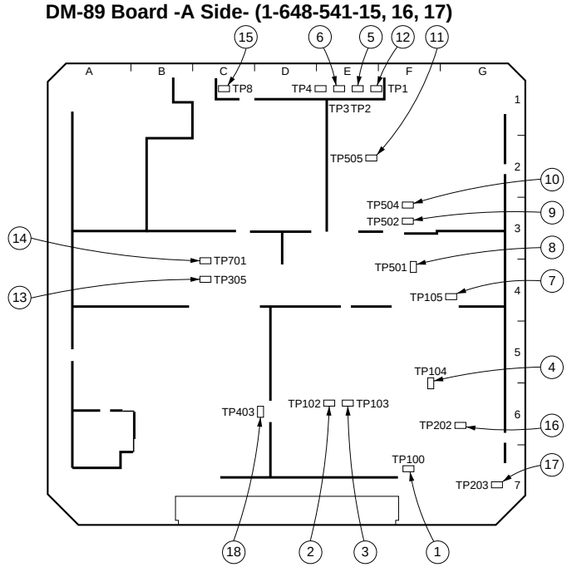
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.

CUE-1BA/1B BOARD (4/4)

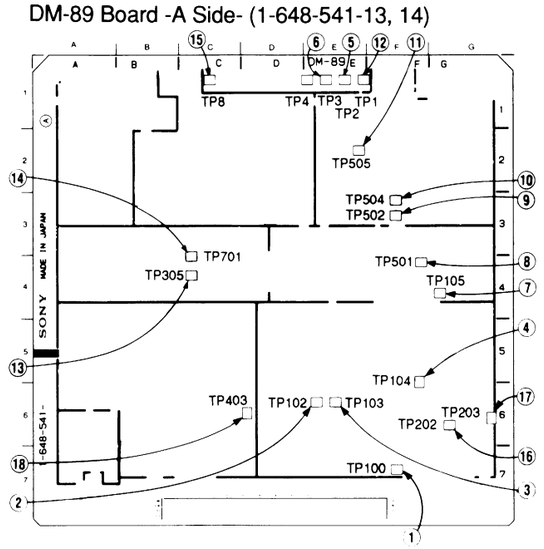
BOARD NO. 1-648-537-41, 42, 43/51, 52, 53
BOARD' S LOT NO. 307-
DVW-A510P (EK) :CUE-1BAP MCB
DVW-510P (EK) :CUE-1BP MCB
DVW-CA510P(EK) :CUE-1BAP MCB

DVW-CUE1-PAL-PLAY-S/M-04

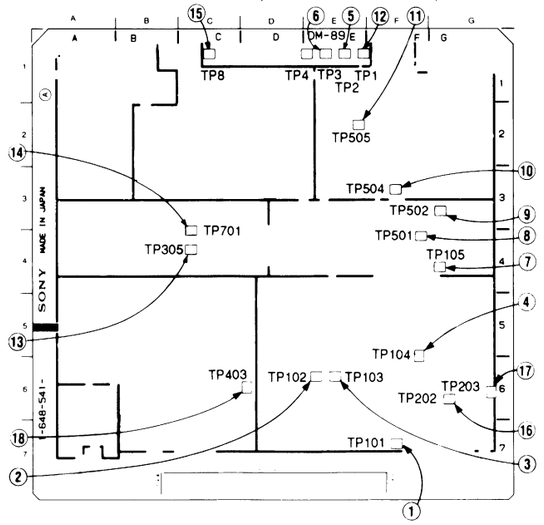
DM-89 Board -A Side- (1-648-541-15, 16, 17)



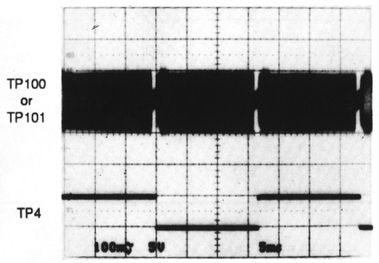
DM-89 Board -A Side- (1-648-541-13, 14)



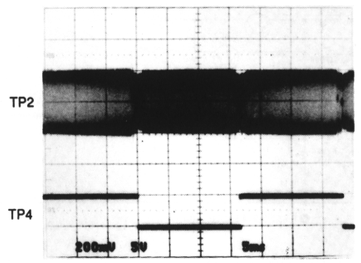
DM-89 Board -A Side- (1-648-541-11, 12)



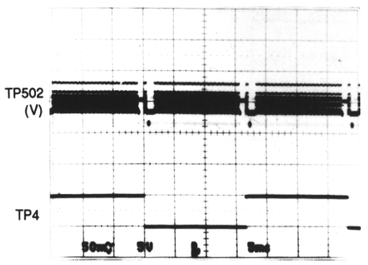
① TP100/101 (F-7) PB mode
TP4 (E-1) (TRIG)



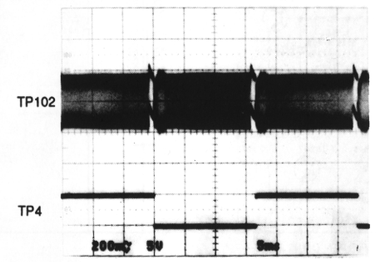
⑤ TP2(E-1) PB mode
TP4(E-1)(TRIG)



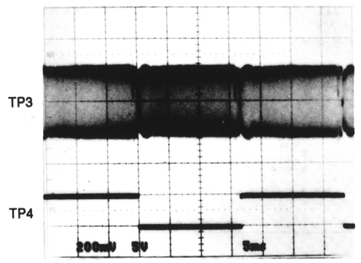
⑨ TP502 (F-3/G-3) PB mode
TP4(E-1)(TRIG)

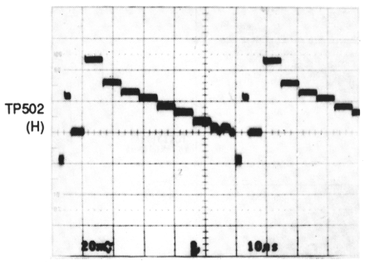


② TP102(E-6) PB mode
TP4(E-1)(TRIG)

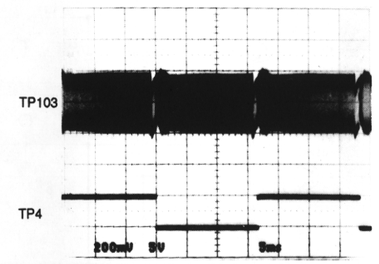


⑥ TP3(E-1) PB mode
TP4(E-1)(TRIG)

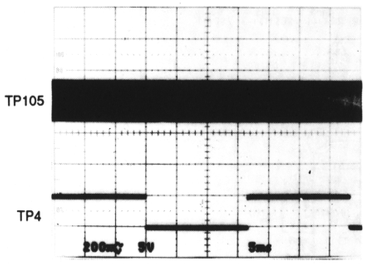




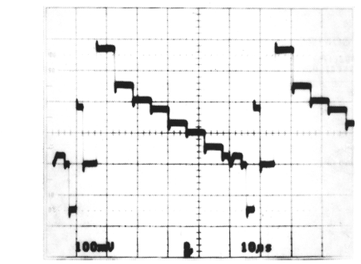
③ TP103(E-6) PB mode
TP4(E-1)(TRIG)



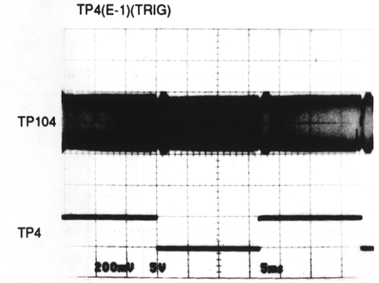
⑦ TP105(G-4) PB mode
TP4(E-1)(TRIG)



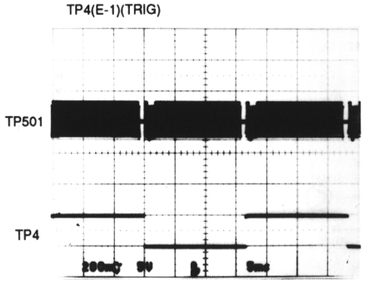
⑩ TP504 (F-2/F-3) PB mode



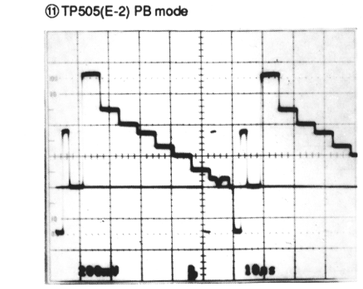
④ TP104(F-5) PB mode
TP4(E-1)(TRIG)



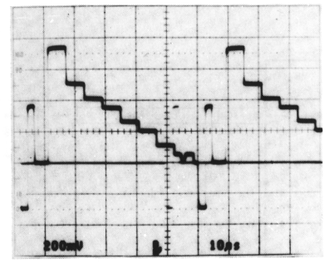
⑧ TP501(F-4) PB mode
TP4(E-1)(TRIG)



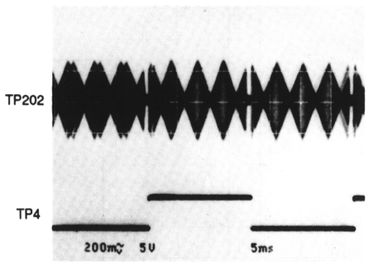
⑪ TP505(E-2) PB mode



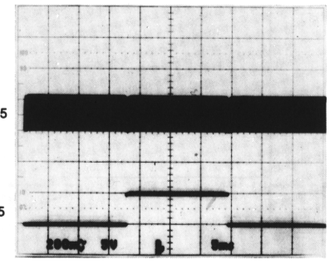
⑫ TP1(E-1) PB mode



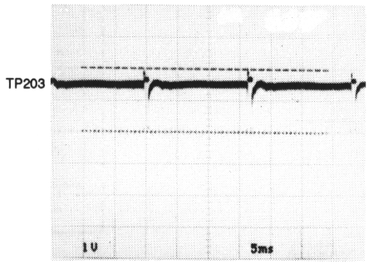
⑯ TP202(G-6) ×–3 SPEED mode
TP4(E-1)(TRIG)



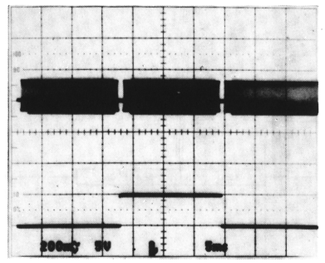
⑬ TP305(C-4) PB mode
TP5(D-1)(TRIG)



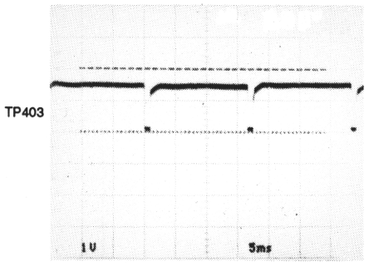
⑰ TP203(G-6) PB mode
TP4(E-1)(TRIG)



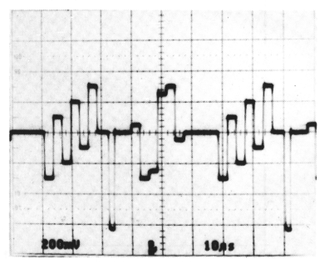
⑭ TP701(C-4) PB mode
TP5(D-1)(TRIG)



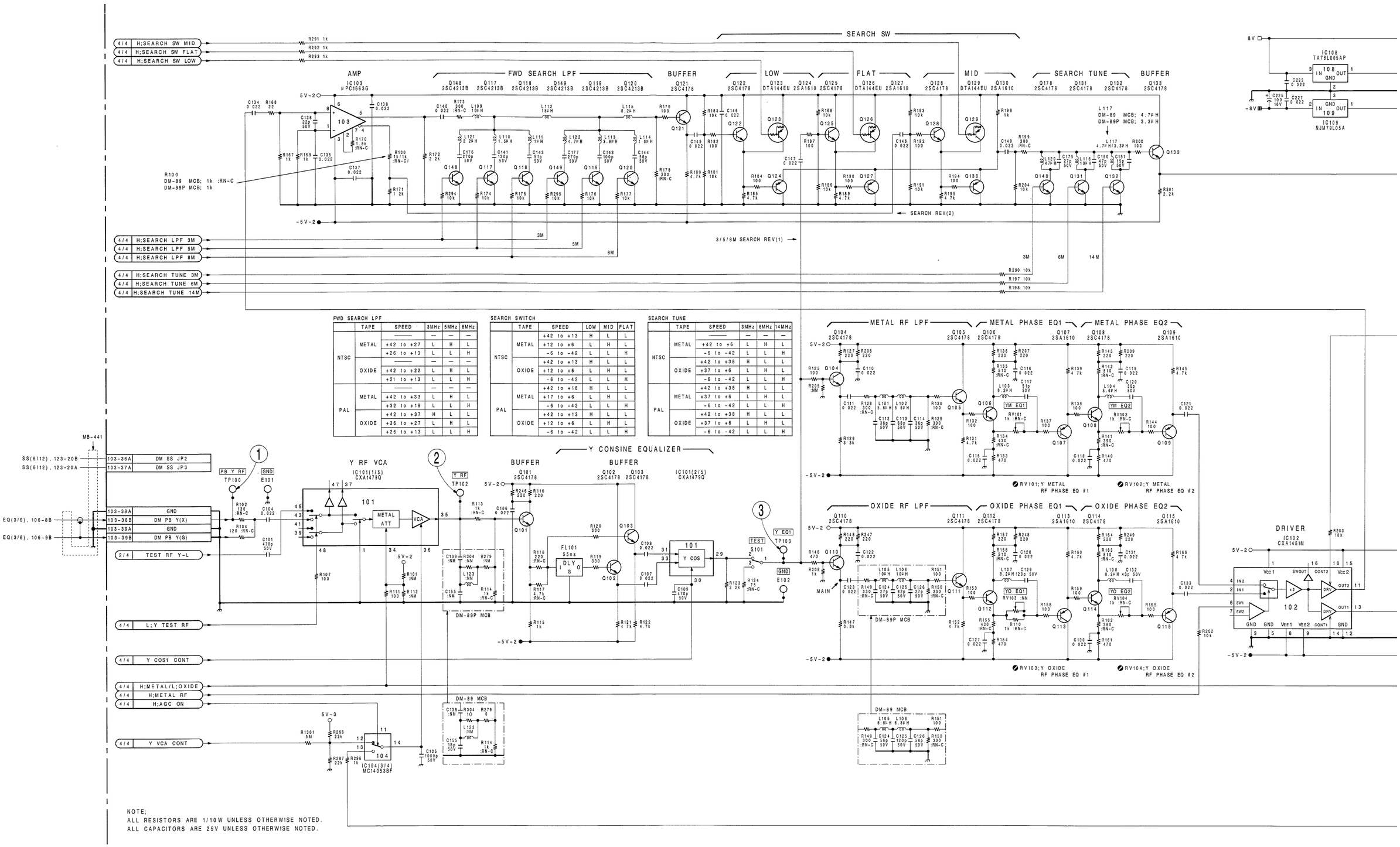
⑱ TP403(D-6) PB mode
TP4(E-1)(TRIG)



⑮ TP8(C-1) PB mode



Measurement condition
MODE : PB mode
: ×–3 SPEED mode
TAPE : CR5-1B



FWD SEARCH LPF

	TAPE	SPEED	3MHz	5MHz	8MHz
NTSC	METAL	———	—	—	—
		+42 to +27	L	H	L
		+26 to +13	L	L	H
	OXIDE	———	—	—	—
		+42 to +22	L	H	L
		+21 to +13	L	L	H
PAL	METAL	———	—	—	—
		+42 to +33	L	H	L
		+32 to +18	L	L	H
	OXIDE	+42 to +37	H	L	L
		+36 to +27	L	H	L
		+26 to +13	L	L	H

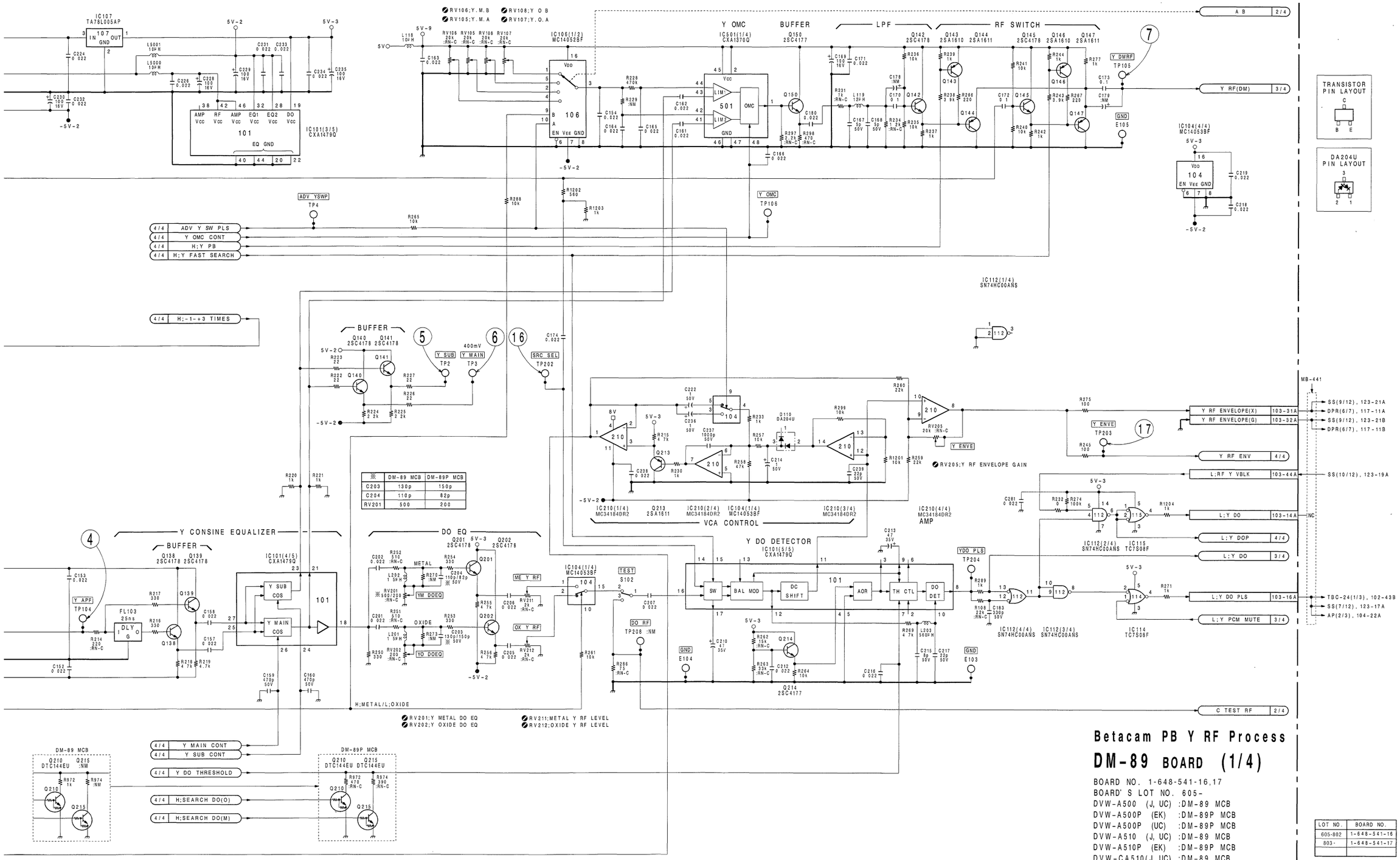
SEARCH SWITCH

	TAPE	SPEED	LOW	MID	FLAT
NTSC	METAL	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +18	H	L	L
		+17 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H

SEARCH TUNE

	TAPE	SPEED	3MHz	6MHz	14MHz
NTSC	METAL	———	—	—	—
		+42 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+37 to +6	L	H	L
		-6 to -42	L	L	H

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



※	DM-89 MCB	DM-89P MCB
C203	130p	150p
C204	110p	82p
RV201	500	200

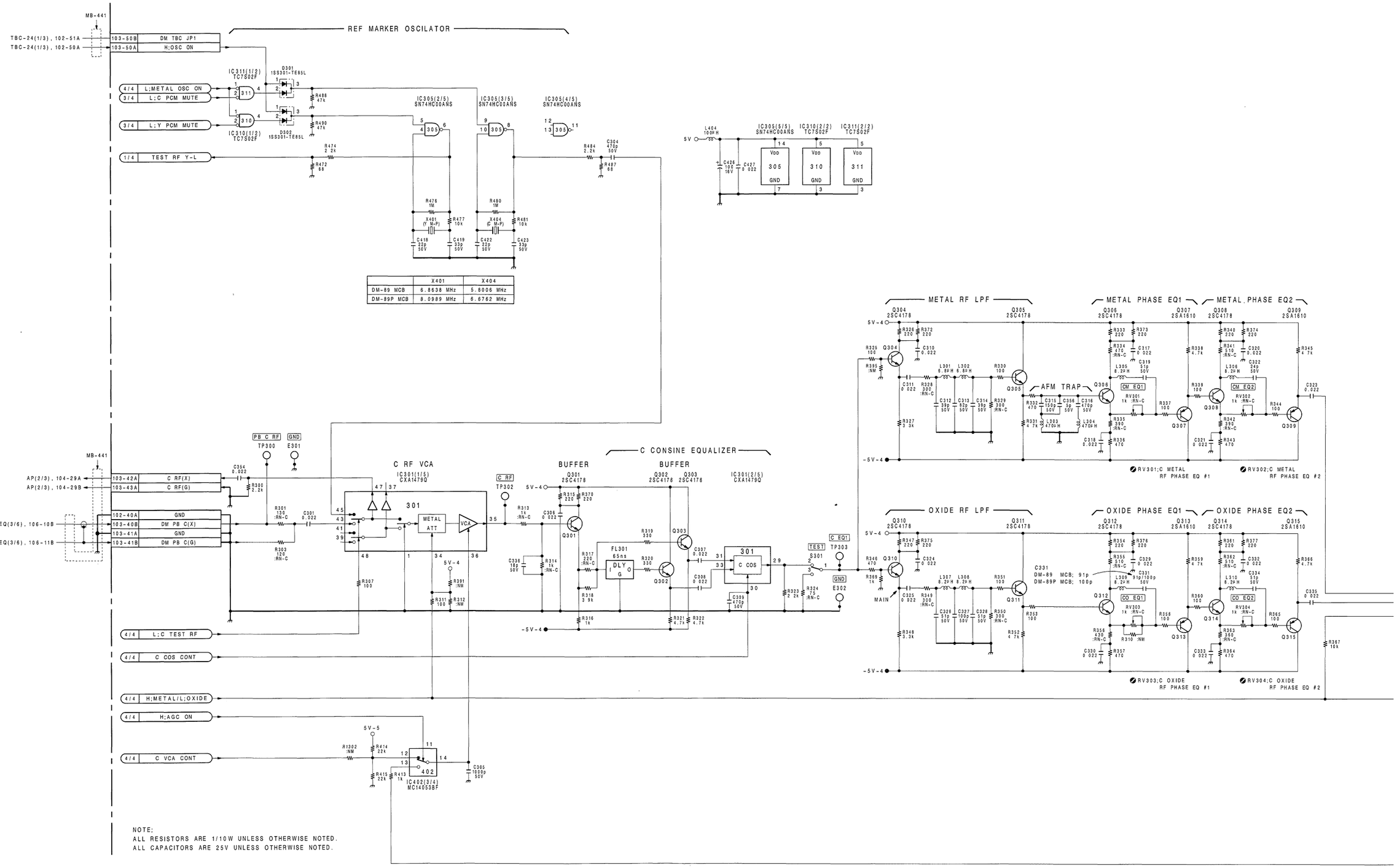
LOT NO.	BOARD NO.
605-802	1-648-541-16
803-	1-648-541-17

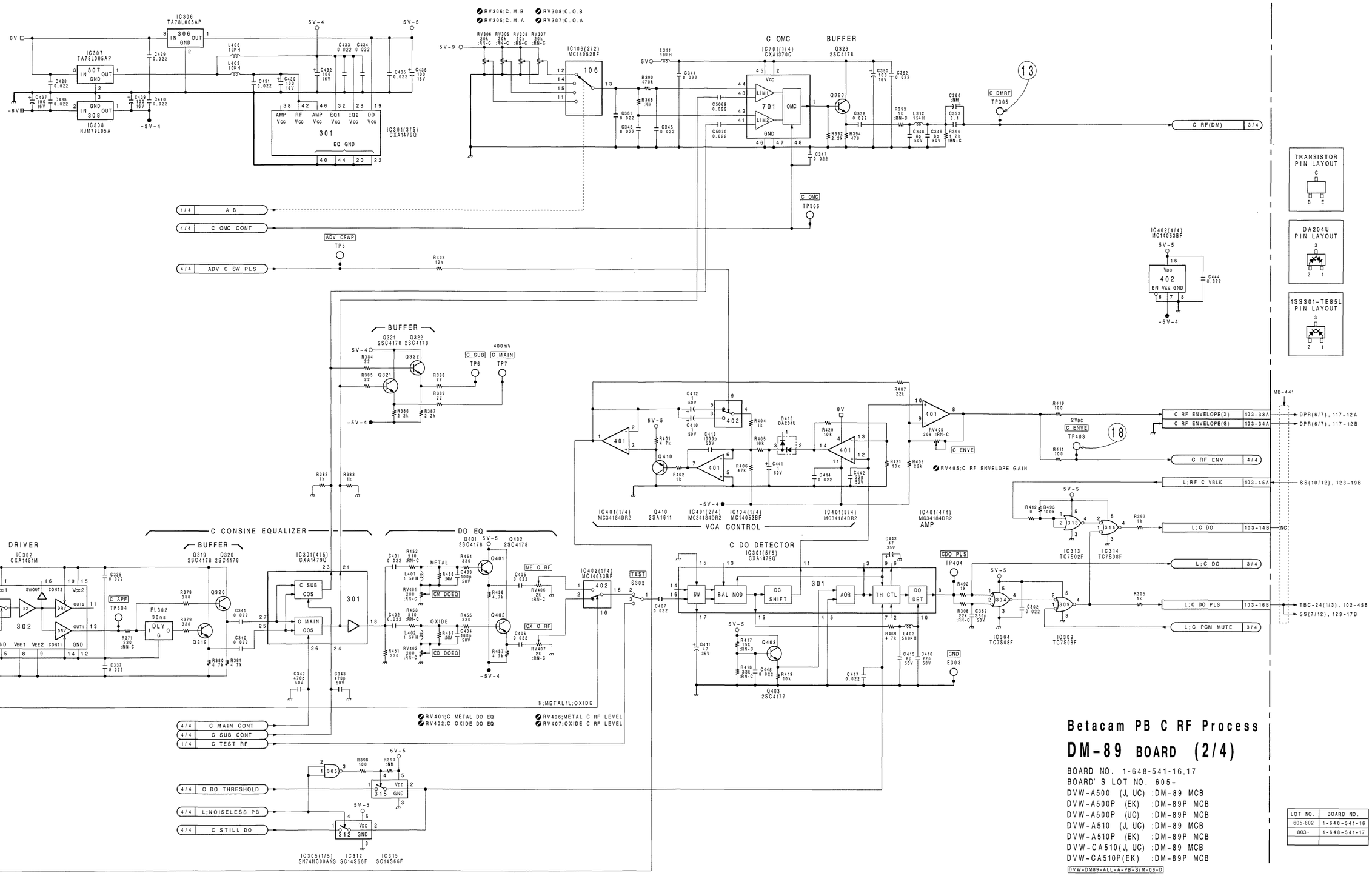
Betacam PB Y RF Process

DM-89 BOARD (1/4)

BOARD NO. 1-648-541-16,17
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

DVW-DM89-ALL-A-PB-S/M-06-D


REF MARKER OSCILATOR
MB-441
TBC-24(1/3), 102-51A
TBC-24(1/3), 102-50A
103-50B DM TBC JP1
103-50A H;OSC ON
4/4 L;METAL OSC ON
3/4 L;C PCM MUTE
3/4 L;Y PCM MUTE
1/4 TEST RF Y-L
IC311(1/2) TC7S02F
IC310(1/2) TC7S02F
D301 1SS301-TE85L
D302 1SS301-TE85L
R488 47k
R490 47k
R474 2.2k
R472 68
IC305(2/5) SN74HC00ANS
IC305(3/5) SN74HC00ANS
IC305(4/5) SN74HC00ANS
R476 1M
R480 1M
X401 (Y M-P)
X404 (C M-P)
R477 10k
R481 10k
C418 22p 50V
C419 33p 50V
C422 22p 50V
C423 33p 50V
R484 2.2k
R487 68
C304 470p 50V
L404 100μH
C426 100 16V
C427 0.022
IC305(5/5) SN74HC00ANS
IC310(2/2) TC7S02F
IC311(2/2) TC7S02F
X401 X404
DM-89 MCB 6.8638 MHz 5.8006 MHz
DM-89P MCB 8.0989 MHz 6.6762 MHz
METAL RF LPF
METAL PHASE EQ1
METAL PHASE EQ2
Q304 2SC4178
Q305 2SC4178
Q306 2SC4178
Q307 2SA1610
Q308 2SC4178
Q309 2SA1610
AFM TRAP
CM EQ1
CM EQ2
RV301 1k :RN-C
RV302 1k :RN-C
RV301;C METAL RF PHASE EQ #1
RV302;C METAL RF PHASE EQ #2
PB C RF TP300
GND E301
MB-441
AP(2/3), 104-29A
AP(2/3), 104-29B
EQ(3/6), 106-10B
EQ(3/6), 106-11B
103-42A C RF(X)
103-43A C RF(G)
102-40A GND
103-40B DM PB C(X)
103-41A GND
103-41B DM PB C(G)
C RF VCA
IC301(1/5) CXA1479Q
METAL ATT
VCA
C CONSINE EQUALIZER
BUFFER
BUFFER
IC301(2/5) CXA1479Q
C RF TP302
FL301 65ns DLY
C COS
TEST TP303
C EQ1
GND E302
S301
4/4 L;C TEST RF
4/4 C COS CONT
4/4 H;METAL/L;OXIDE
4/4 H;AGC ON
4/4 C VCA CONT
IC402(3/4) MC14053BF
OXIDE RF LPF
OXIDE PHASE EQ1
OXIDE PHASE EQ2
Q310 2SC4178
Q311 2SC4178
Q312 2SC4178
Q313 2SA1610
Q314 2SC4178
Q315 2SA1610
MAIN
CO EQ1
CO EQ2
RV303 1k :RN-C
RV304 1k :RN-C
RV303;C OXIDE RF PHASE EQ #1
RV304;C OXIDE RF PHASE EQ #2
C331 DM-89 MCB; 91p DM-89P MCB; 100p
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



Betacam PB C RF Process

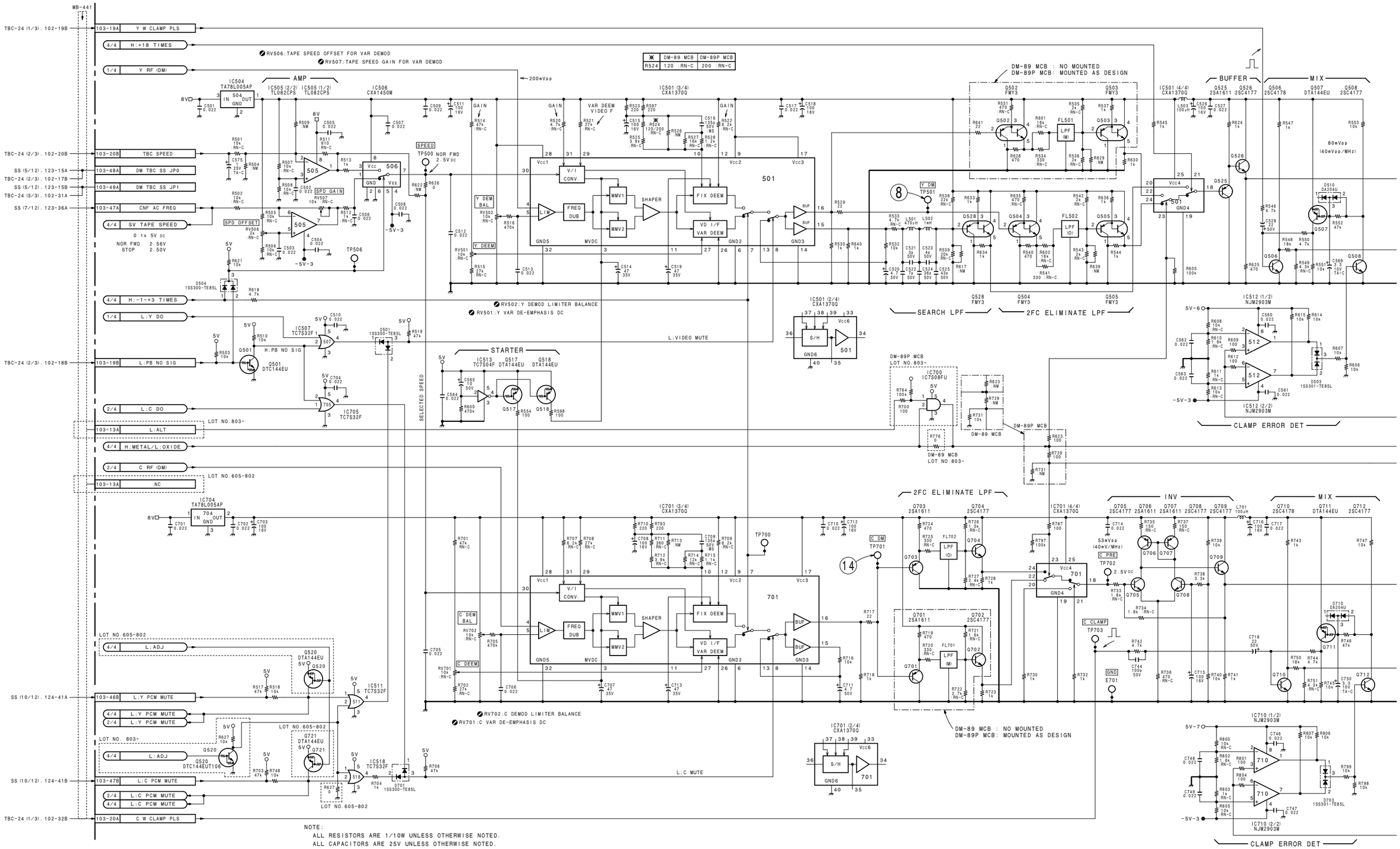
DM-89 BOARD (2/4)

BOARD NO. 1-648-541-16,17
BOARD' S LOT NO. 605-
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

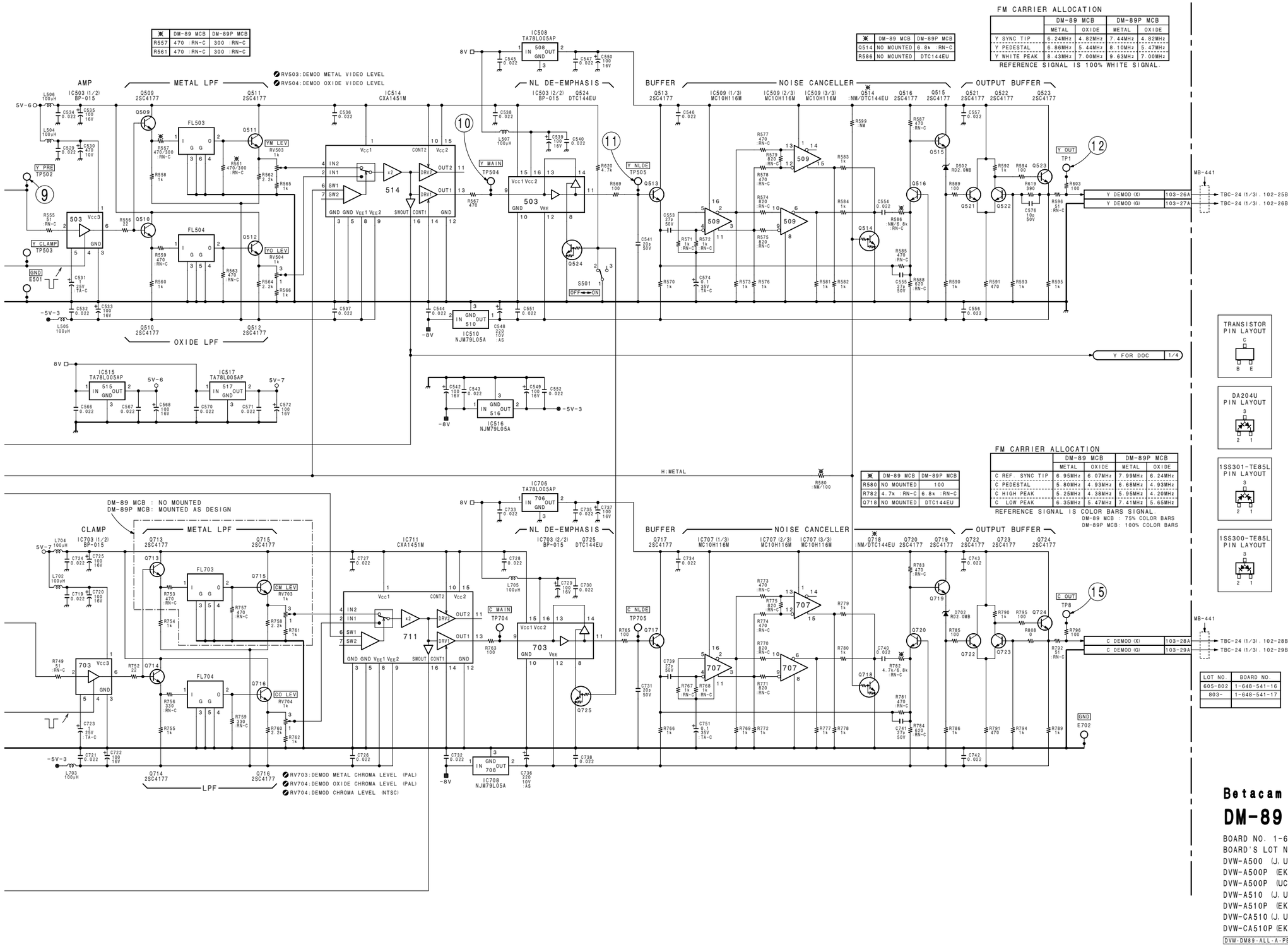
DVW-DM89-ALL-A-PB-S/M-06-D

LOT NO.	BOARD NO.
605-802	1-648-541-16
803-	1-648-541-17

I J K L M N O P



	DM-89 MCB	DM-89P MCB
R524	120 :RN-C	200 :RN-C



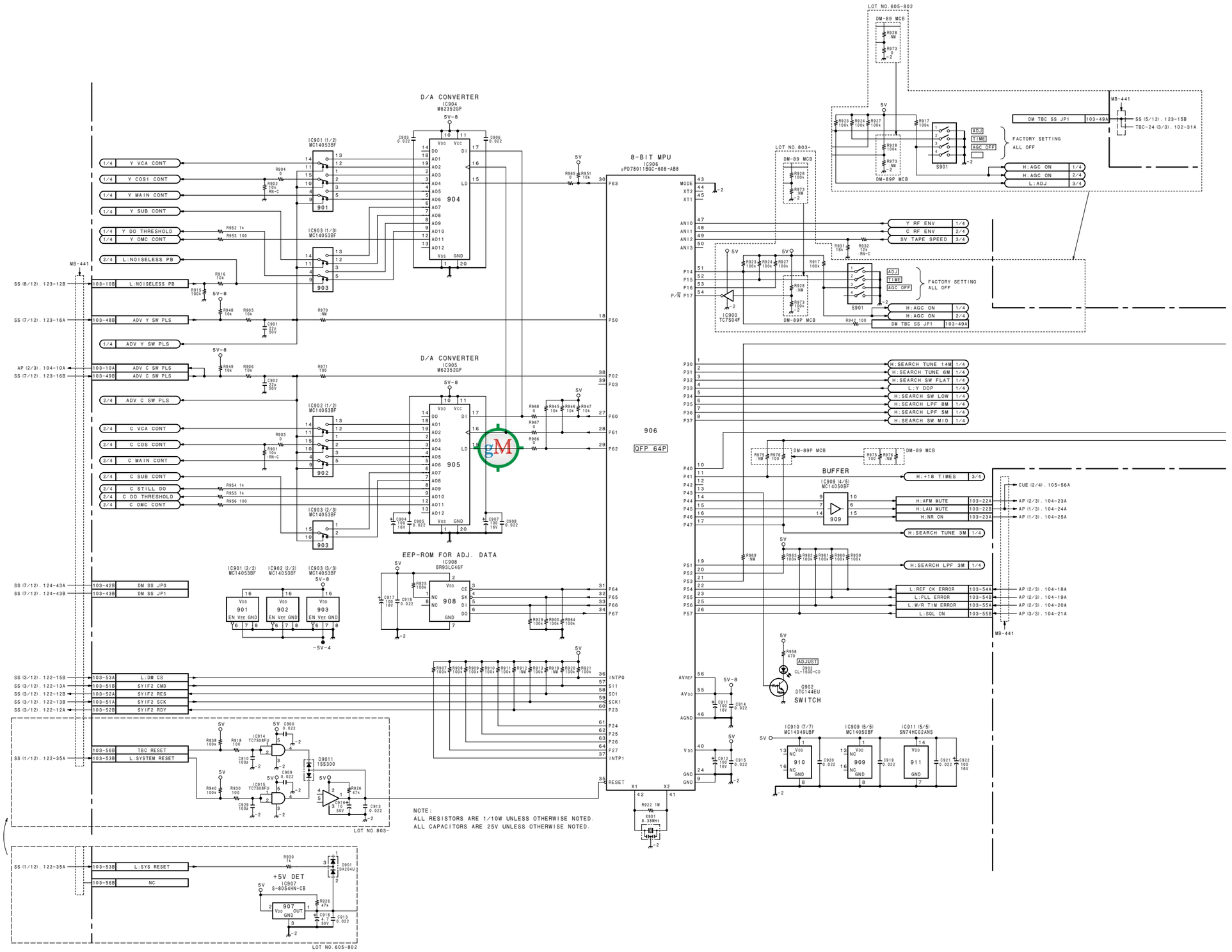
LOT NO.	BOARD NO.
605-802	1-648-541-16
803-	1-648-541-17

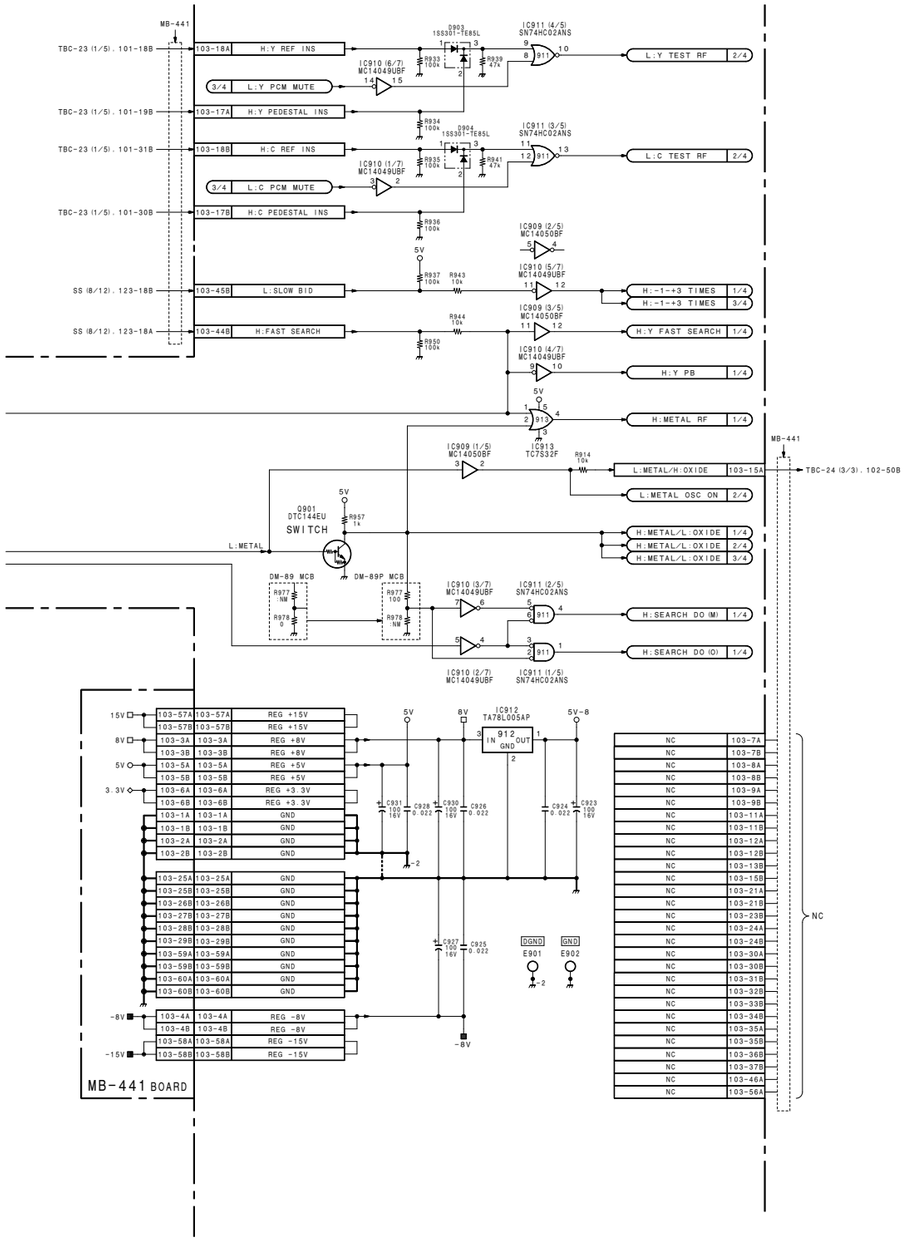
Betacam PB Y/C Demod Process

DM-89 BOARD (3/4)

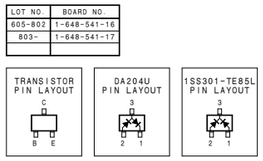
BOARD NO. 1-648-541-16, 17
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : DM-89 MCB
DVW-A500P (EK) : DM-89P MCB
DVW-A500P (UC) : DM-89P MCB
DVW-A510 (J, UC) : DM-89 MCB
DVW-A510P (EK) : DM-89P MCB
DVW-CA510 (J, UC) : DM-89 MCB
DVW-CA510P (EK) : DM-89P MCB

DVW-DM89-ALL-A-PB-S/M-06-D


D/A CONVERTER
IC904
M62352GP
D/A CONVERTER
IC905
M62352GP
8-BIT MPU
IC906
μPD78011BGC-608-AB8
906
QFP 64P
EEP-ROM FOR ADJ. DATA
IC908
BR93LC46F
IC901 (1/2) MC14053BF
IC902 (1/2) MC14053BF
IC903 (1/3) MC14053BF
IC901 (2/2) MC14053BF
IC902 (2/2) MC14053BF
IC903 (2/3) MC14053BF
IC903 (3/3) MC14053BF
IC909 (4/5) MC14050BF
IC910 (7/7) MC14049UBF
IC909 (5/5) MC14050BF
IC911 (5/5) SN74HC02ANS
IC900 TC7S04F
Y VCA CONT
Y COS1 CONT
Y MAIN CONT
Y SUB CONT
Y DO THRESHOLD
Y OMC CONT
L:NOISELESS PB
ADV Y SW PLS
ADV C SW PLS
C VCA CONT
C COS CONT
C MAIN CONT
C SUB CONT
C STILL DO
C DO THRESHOLD
C OMC CONT
DM SS JP0
DM SS JP1
L:DM CS
SYIF2 CMD
SYIF2 RES
SYIF2 SCK
SYIF2 RDY
TBC RESET
L:SYSTEM RESET
L:SYS RESET
NC
Y RF ENV
C RF ENV
SV TAPE SPEED
H:AGC ON
L:ADJ
DM TBC SS JP1
H:SEARCH TUNE 14M
H:SEARCH TUNE 6M
H:SEARCH SW FLAT
L:Y DOP
H:SEARCH SW LOW
H:SEARCH LPF 8M
H:SEARCH LPF 5M
H:SEARCH SW MID
H:SEARCH LPF 3M
H:SEARCH TUNE 3M
H:+18 TIMES
H:AFM MUTE
H:LAU MUTE
H:NR ON
L:REF CK ERROR
L:PLL ERROR
L:W/R TIM ERROR
L:SQL ON
CUE (2/4), 105-56A
AP (2/3), 104-23A
AP (1/3), 104-24A
AP (1/3), 104-25A
AP (2/3), 104-18A
AP (2/3), 104-19A
AP (2/3), 104-20A
AP (3/3), 104-21A
SS (5/12), 123-15B
TBC-24 (3/3), 102-31A
SS (8/12), 123-12B
SS (7/12), 123-16A
AP (2/3), 104-10A
SS (7/12), 123-16B
SS (7/12), 124-43A
SS (7/12), 124-43B
SS (3/12), 122-15B
SS (3/12), 122-13A
SS (3/12), 122-12B
SS (3/12), 122-13B
SS (3/12), 122-12A
SS (1/12), 122-35A
SS (1/12), 122-35A
S901
ADJ
TIME
AGC OFF
FACTORY SETTING
ALL OFF
BUFFER
+5V DET
IC907 S-8054HN-CB
D901 DA204U
D902 CL-150D-CO
SWITCH
ADJUSY
X901 8.388MHz
D9011 1SS300
LOT NO.803-
LOT NO.605-802
DM-89 MCB
DM-89P MCB
MB-441
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



LOT NO.	BOARD NO.
605-802	1-648-541-16
803-	1-648-541-17

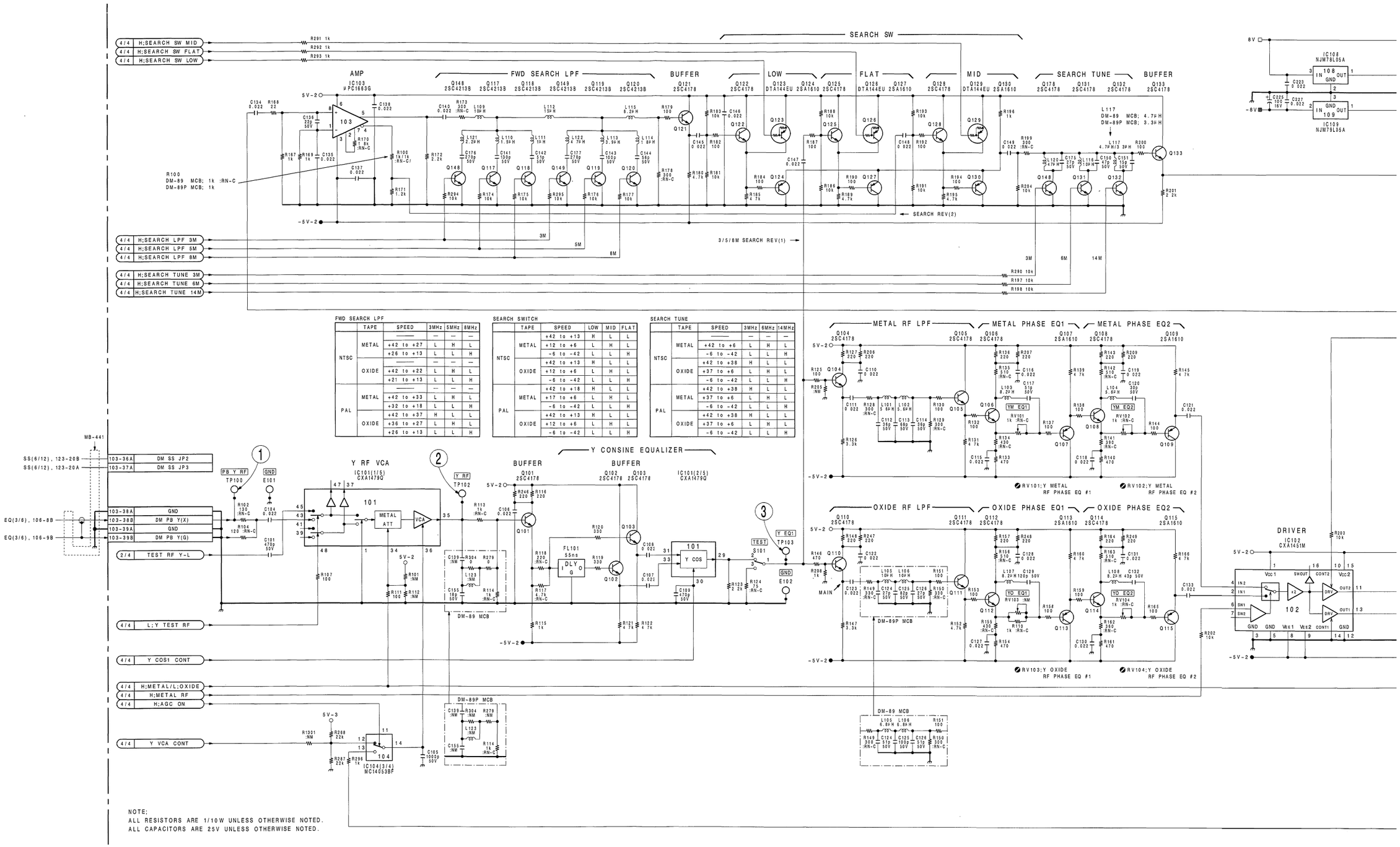


Betacam PB Control

DM-89 BOARD (4/4)

BOARD NO. 1-648-541-16, 17
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : DM-89 MCB
DVW-A500P (EK) : DM-89P MCB
DVW-A500P (UC) : DM-89P MCB
DVW-A510 (J, UC) : DM-89 MCB
DVW-A510P (EK) : DM-89P MCB
DVW-CA510 (J, UC) : DM-89 MCB
DVW-CA510P (EK) : DM-89P MCB

DVW-DM89-ALL-A-PB-S/M-06-D

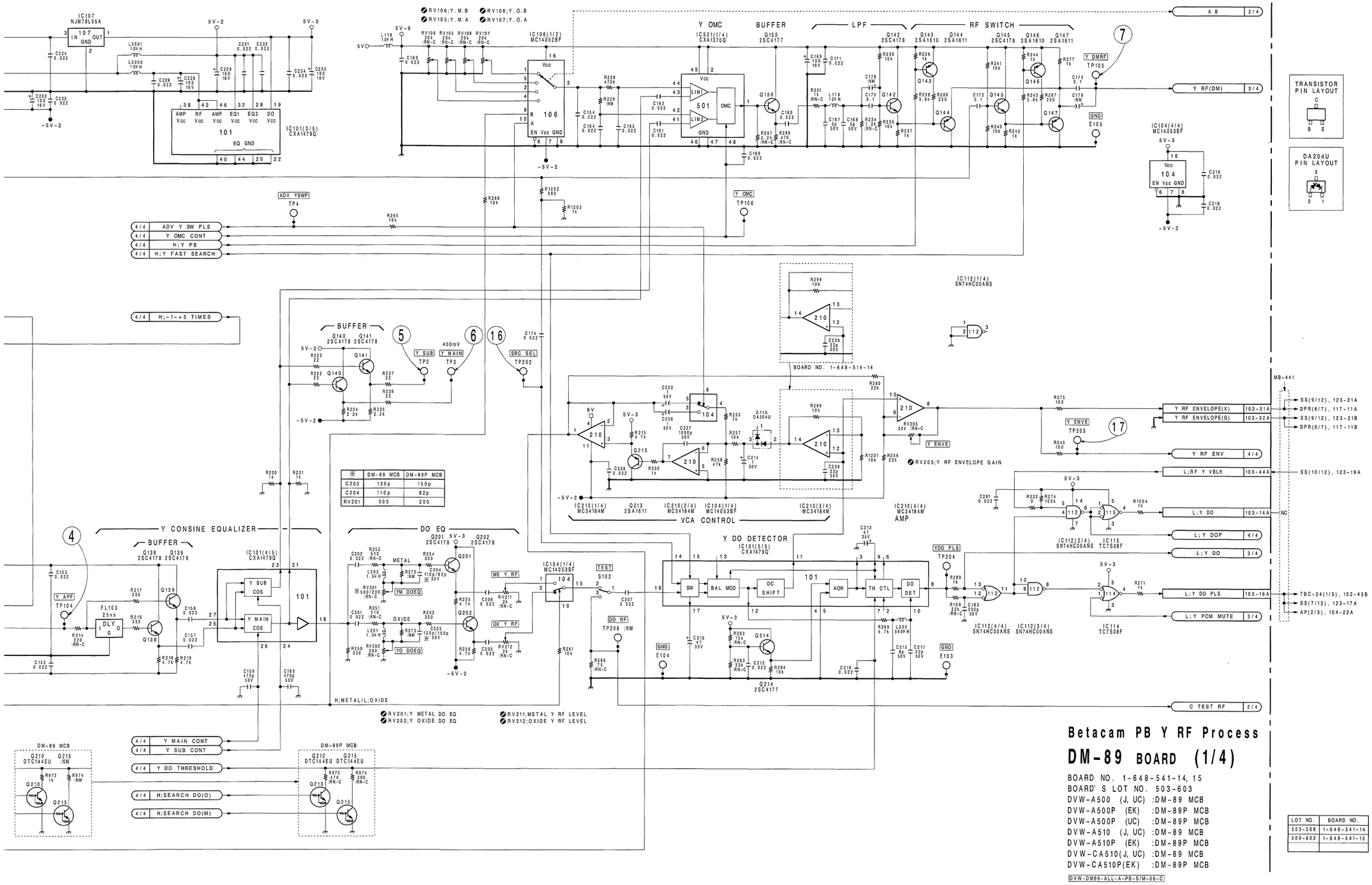


FWD SEARCH LPF	TAPE	SPEED	3MHz	5MHz	8MHz
NTSC	METAL	———	—	—	—
		+42 to +27	L	H	L
		+26 to +13	L	L	H
	OXIDE	———	—	—	—
		+42 to +22	L	H	L
		+21 to +13	L	L	H
PAL	METAL	———	—	—	—
		+42 to +33	L	H	L
		+32 to +18	L	L	H
	OXIDE	+42 to +37	H	L	L
		+36 to +27	L	H	L
		+26 to +13	L	L	H

SEARCH SWITCH	TAPE	SPEED	LOW	MID	FLAT
NTSC	METAL	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +18	H	L	L
		+17 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H

SEARCH TUNE	TAPE	SPEED	3MHz	6MHz	14MHz
NTSC	METAL	———	—	—	—
		+42 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



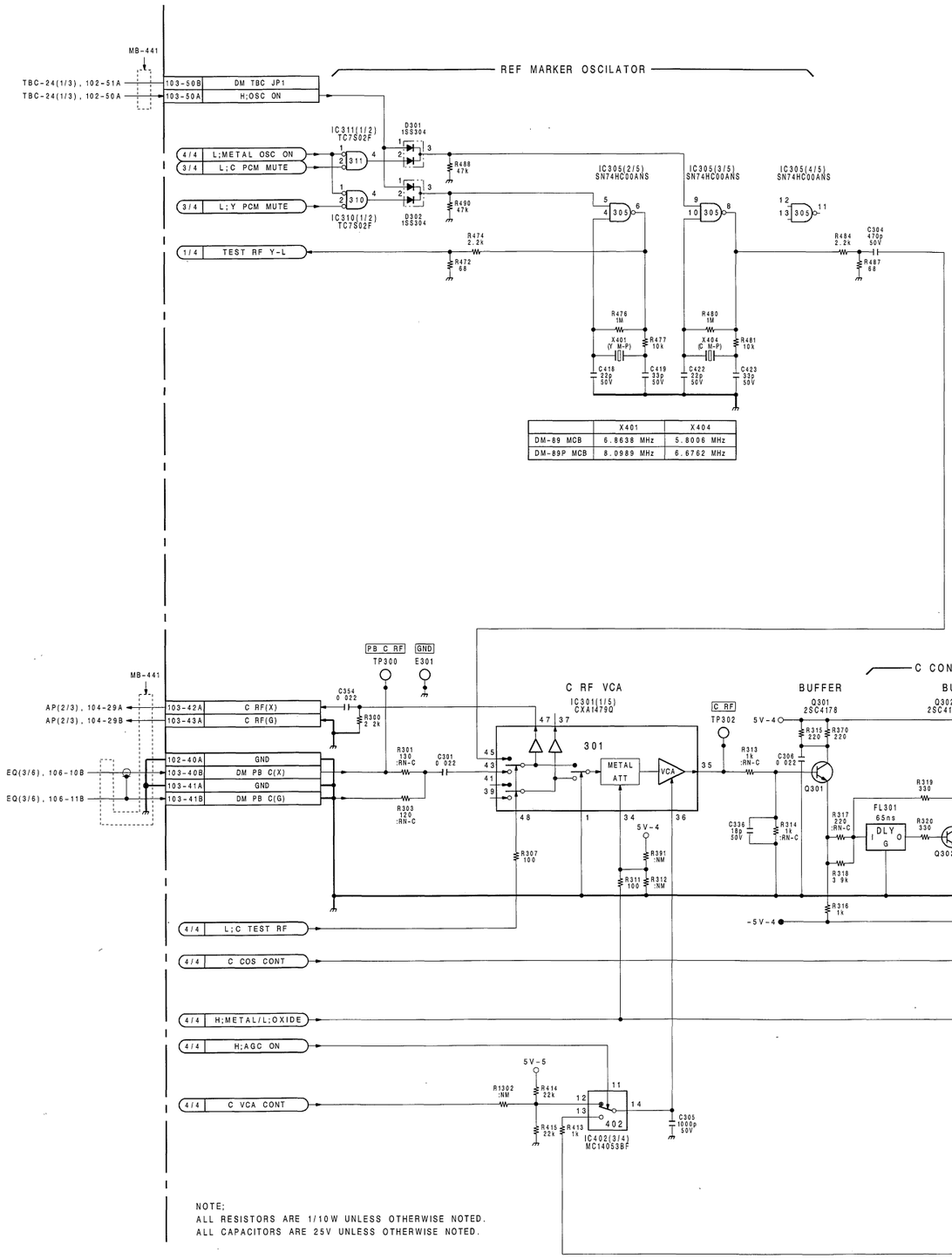
Betacam PB Y RF Process

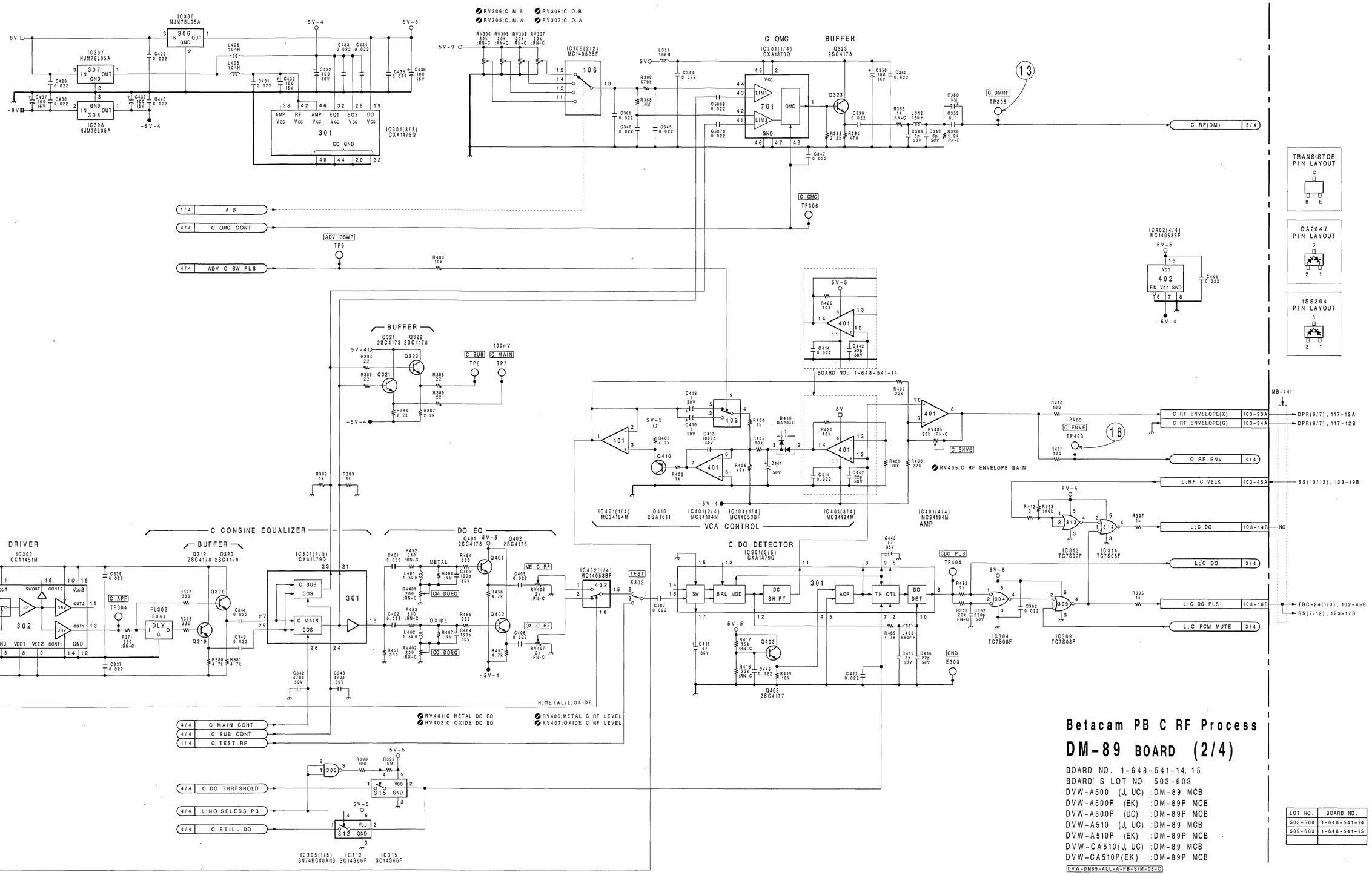
DM-89 BOARD (1/4)

BOARD NO. 1-648-541-14, 15
BOARD' S LOT NO. 503-603
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

DVW-DM89-ALL-A-PB-S/M-06-C

LOT NO.	BOARD NO.
503-508	1-648-541-14
509-603	1-648-541-15


REF MARKER OSCILATOR
MB-441
TBC-24(1/3), 102-51A
TBC-24(1/3), 102-50A
103-50B DM TBC JP1
103-50A H;OSC ON
IC311(1/2) TC7S02F
D301 1SS304
4/4 L;METAL OSC ON
3/4 L;C PCM MUTE
3/4 L;Y PCM MUTE
1/4 TEST RF Y-L
R488 47k
R490 47k
D302 1SS304
IC310(1/2) TC7S02F
R474 2.2k
R472 68
IC305(2/5) SN74HC00ANS
IC305(3/5) SN74HC00ANS
IC305(4/5) SN74HC00ANS
R484 2.2k
C304 470p 50V
R487 68
R476 1M
R480 1M
X401 (Y M-P)
X404 (C M-P)
R477 10k
R481 10k
C418 22p 50V
C419 33p 50V
C422 22p 50V
C423 33p 50V
X401 X404
DM-89 MCB 6.8638 MHz 5.8006 MHz
DM-89P MCB 8.0989 MHz 6.6762 MHz
L404 100μH
5V
IC305(5/5) SN74HC00ANS
IC310(2/2) TC7S02F
IC311(2/2) TC7S02F
C426 100 16V
C427 0.022
METAL RF LPF
METAL PHASE EQ1
METAL PHASE EQ2
Q304 2SC4178
Q305 2SC4178
Q306 2SC4178
Q307 2SA1610
Q308 2SC4178
Q309 2SA1610
5V-4
R326 220
R372 220
R325 100
Q304
R395 :NM
C310 0.022
L301 6.8μH
L302 6.8μH
R330 100
Q305
AFM TRAP
R327 3.3k
C311 0.022
R328 300 :RN-C
C312 39p 50V
C313 82p 50V
C314 39p 50V
R329 300 :RN-C
R331 4.7k
R332 470
C315 150p 50V
C356 5p 50V
C316 470p 50V
L303 470μH
L304 470μH
R333 220
R334 470 :RN-C
C317 0.022
C319 51p 50V
L305 8.2μH
CM EQ1
RV301 1k :RN-C
R335 390 :RN-C
R336 470
C318 0.022
R337 100
Q307
R338 4.7k
R339 100
Q308
R340 220
R341 510 :RN-C
C320 0.022
C322 24p 50V
L306 8.2μH
CM EQ2
RV302 1k :RN-C
R342 390 :RN-C
R343 470
C321 0.022
R344 100
Q309
R345 4.7k
C323 0.022
-5V-4
RV301;C METAL RF PHASE EQ #1
RV302;C METAL RF PHASE EQ #2
OXIDE RF LPF
OXIDE PHASE EQ1
OXIDE PHASE EQ2
Q310 2SC4178
Q311 2SC4178
Q312 2SC4178
Q313 2SA1610
Q314 2SC4178
Q315 2SA1610
R347 220
R375 220
R346 470
Q310
R369 1k
C324 0.022
MAIN
C325 0.022
R349 300 :RN-C
L307 8.2μH
L308 8.2μH
R351 100
Q311
C326 510 50V
C327 1000 50V
C328 510 50V
R350 300 :RN-C
R353 100
R352 4.7k
R348 3.3k
C331 DM-89 MCB; 91p DM-89P MCB; 100p
R354 220
R376 220
R355 510 :RN-C
C329 0.022
L309 8.2μH
CO EQ1
RV303 1k :RN-C
R310 :NM
R356 430 :RN-C
C330 0.022
R357 470
R358 100
Q313
R359 4.7k
R360 100
Q314
R361 220
R377 220
R362 510 :RN-C
C332 0.022
C334 51p 50V
L310 8.2μH
CO EQ2
RV304 1k :RN-C
R363 360 :RN-C
C333 0.022
R364 470
R365 100
Q315
R366 4.7k
C335 0.022
R367 10k
RV303;C OXIDE RF PHASE EQ #1
RV304;C OXIDE RF PHASE EQ #2
C CONSINE EQUALIZER
C RF VCA
IC301(1/5) CXA1479Q
PB C RF
GND
TP300
E301
C354 0.022
R300 2.2k
MB-441
AP(2/3), 104-29A
AP(2/3), 104-29B
EQ(3/6), 106-10B
EQ(3/6), 106-11B
103-42A C RF(X)
103-43A C RF(G)
102-40A GND
103-40B DM PB C(X)
103-41A GND
103-41B DM PB C(G)
R301 130 :RN-C
R303 120 :RN-C
C301 0.022
R307 100
301
METAL ATT
VCA
R391 :NM
R311 100
R312 :NM
C RF
TP302
BUFFER
Q301 2SC4178
R315 220
R370 220
R313 1k :RN-C
C306 0.022
Q301
C336 18p 50V
R314 1k :RN-C
R317 220 :RN-C
R318 3.9k
R316 1k
FL301 65ns
DLY
BUFFER
Q302 2SC4178
Q303 2SC4178
R319 330
Q303
R320 330
Q302
C307 0.022
C308 0.022
C309 470p 50V
R321 4.7k
R322 4.7k
IC301(2/5) CXA1479Q
301
C COS
TEST
C EQ1
TP303
S301
R323 2.2k
R324 75 :RN-C
GND
E302
4/4 L;C TEST RF
4/4 C COS CONT
4/4 H;METAL/L;OXIDE
4/4 H;AGC ON
4/4 C VCA CONT
5V-5
R1302 :NM
R414 22k
R415 22k
R413 1k
IC402(3/4) MC14053BF
C305 1000p 50V
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

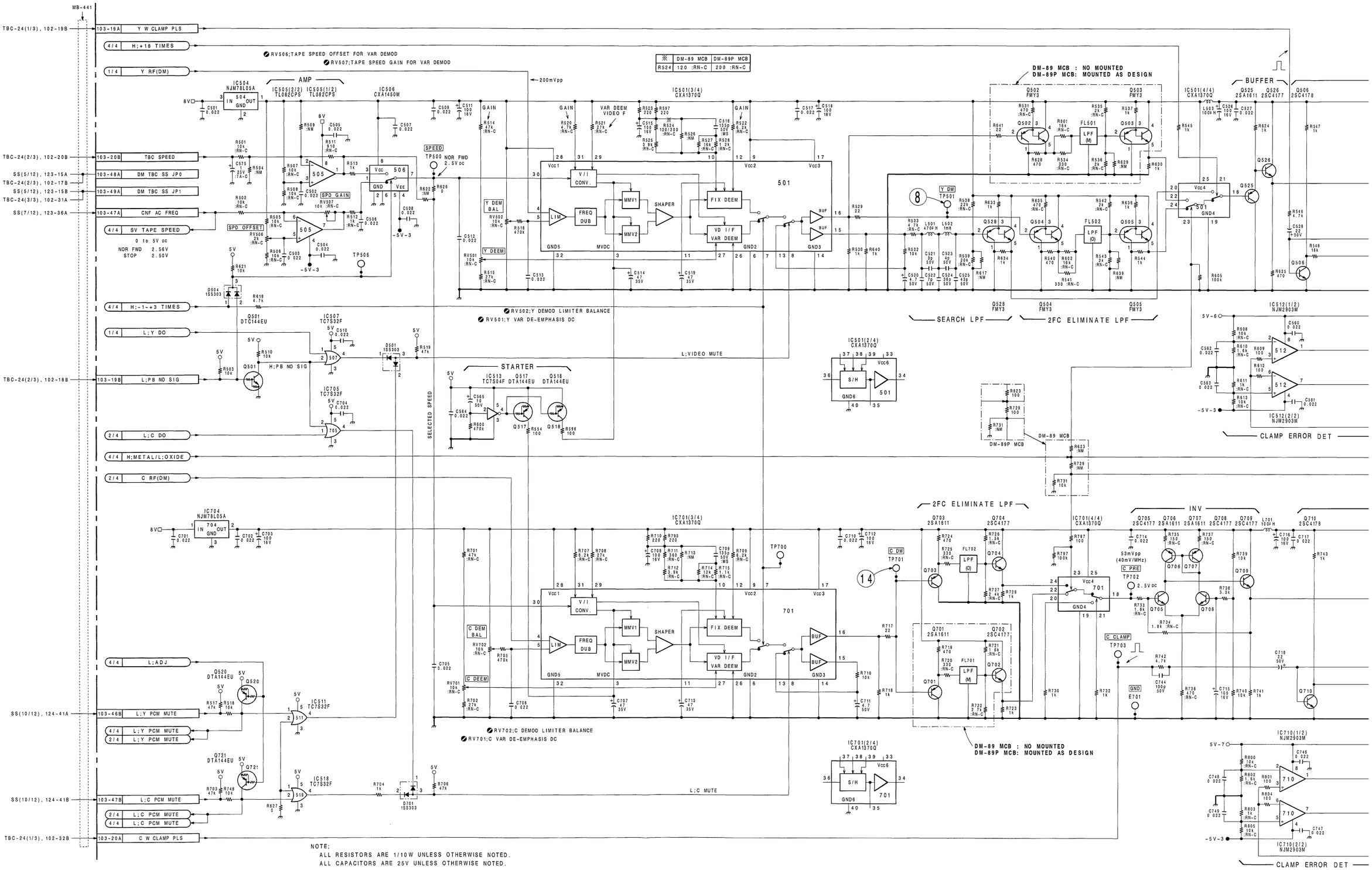


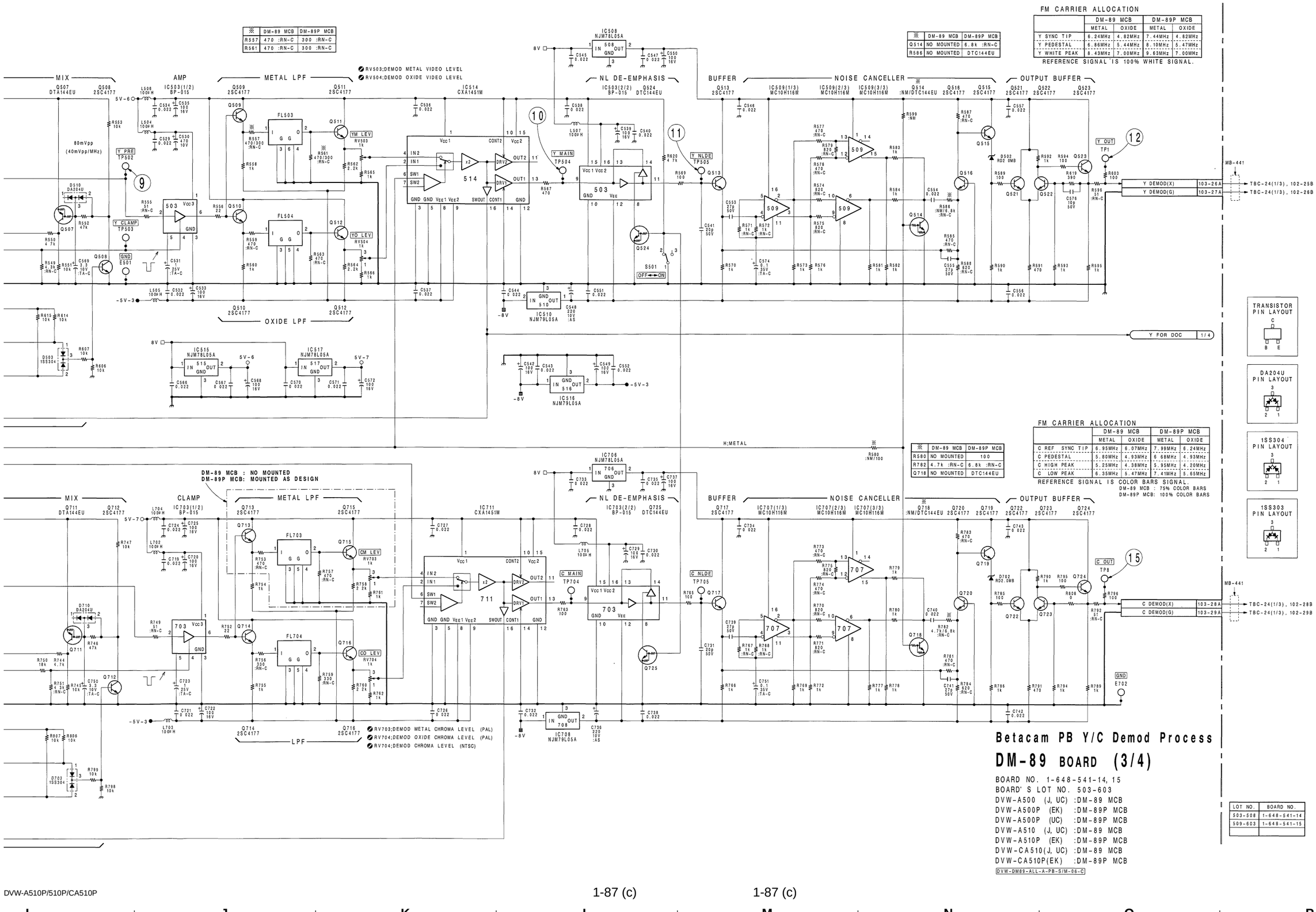
Betacam PB C RF Process

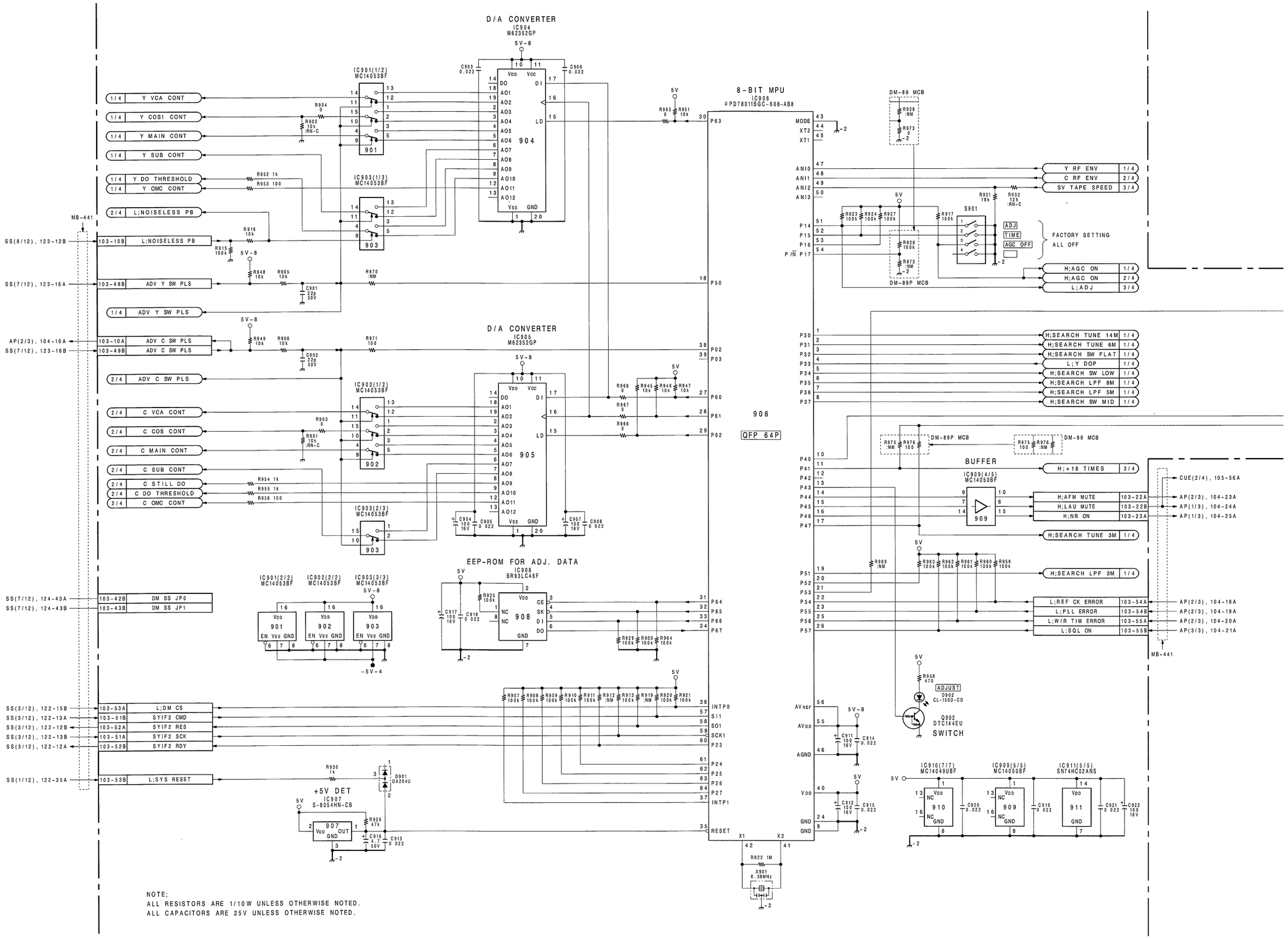
DM-89 BOARD (2/4)

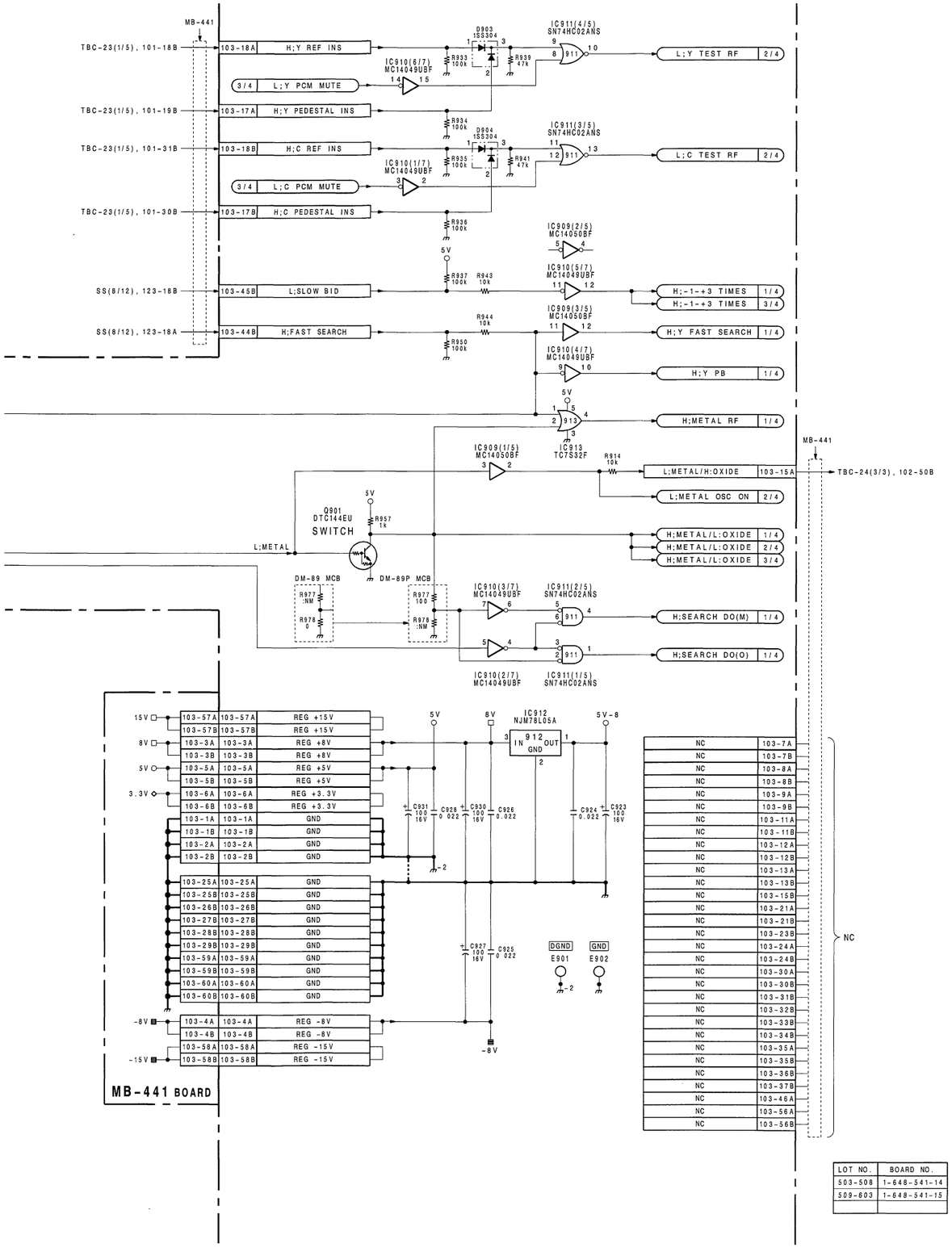
BOARD NO. 1-648-541-14, 15
BOARD' S LOT NO. 503-603
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB
DVW-DM89-ALL-A-PB-S/M-06-C

LOT NO.	BOARD NO.
503-508	1-648-541-14
509-603	1-648-541-15


MB-441
TBC-24(1/3), 102-19B
103-19A Y W CLAMP PLS
4/4 H;+18 TIMES
RV506;TAPE SPEED OFFSET FOR VAR DEMOD
RV507;TAPE SPEED GAIN FOR VAR DEMOD
1/4 Y RF(DM)
200mVpp
AMP
IC504 NJM78L05A
IC505(2/2) TL082CPS
IC505(1/2) TL082CPS
IC506 CXA1450M
IC501(3/4) CXA1370Q
TBC-24(2/3), 102-20B
103-20B TBC SPEED
SS(5/12), 123-15A
103-48A DM TBC SS JP0
TBC-24(2/3), 102-17B
SS(5/12), 123-15B
103-49A DM TBC SS JP1
TBC-24(3/3), 102-31A
SS(7/12), 123-36A
103-47A CNF AC FREQ
4/4 SV TAPE SPEED
0 to 5V DC
NOR FWD 2.56V
STOP 2.50V
SPD OFFSET
SPD GAIN
SPEED
TP500 NOR FWD 2.5Vdc
TP506
-5V-3
Y DEM BAL
Y DEM
4/4 H;-1~+3 TIMES
RV502;Y DEMOD LIMITER BALANCE
RV501;Y VAR DE-EMPHASIS DC
1/4 L;Y DO
L;VIDEO MUTE
TBC-24(2/3), 102-18B
103-19B L;PB NO SIG
H;PB NO SIG
STARTER
IC513 TC7S04F
Q517 DTA144EU
Q518 DTA144EU
SELECTED SPEED
IC507 TC7S32F
IC705 TC7S32F
2/4 L;C DO
4/4 H;METAL/L;OXIDE
2/4 C RF(DM)
IC704 NJM78L05A
IC701(3/4) CXA1370Q
C DEM BAL
C DEEM
RV702;C DEMOD LIMITER BALANCE
RV701;C VAR DE-EMPHASIS DC
4/4 L;ADJ
SS(10/12), 124-41A
103-46B L;Y PCM MUTE
4/4 L;Y PCM MUTE
2/4 L;Y PCM MUTE
Q520 DTA144EU
Q721 DTA144EU
IC511 TC7S32F
IC518 TC7S32F
SS(10/12), 124-41B
103-47B L;C PCM MUTE
2/4 L;C PCM MUTE
4/4 L;C PCM MUTE
TBC-24(1/3), 102-32B
103-20A C W CLAMP PLS
L;C MUTE
IC701(2/4) CXA1370Q
S/H
501
701
C DM
TP701
C PRE
TP702
C CLAMP
TP703
GND
E701
DM-89 MCB : NO MOUNTED
DM-89P MCB: MOUNTED AS DESIGN
DM-89 MCB
DM-89P MCB
SEARCH LPF
2FC ELIMINATE LPF
BUFFER
CLAMP ERROR DET
INV
Y DM
TP501
IC512(1/2) NJM2903M
IC512(2/2) NJM2903M
IC710(1/2) NJM2903M
IC710(2/2) NJM2903M
R524 120 :RN-C 200 :RN-C
53mVpp (40mV/MHz)
2.5V DC
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.


※ DM-89 MCB DM-89P MCB
R557 470 :RN-C 300 :RN-C
R561 470 :RN-C 300 :RN-C
RV503;DEMOD METAL VIDEO LEVEL
RV504;DEMOD OXIDE VIDEO LEVEL
※ DM-89 MCB DM-89P MCB
Q514 NO MOUNTED 6.8k :RN-C
R586 NO MOUNTED DTC144EU
FM CARRIER ALLOCATION
DM-89 MCB DM-89P MCB
METAL OXIDE METAL OXIDE
Y SYNC TIP 6.24MHz 4.82MHz 7.44MHz 4.82MHz
Y PEDESTAL 6.86MHz 5.44MHz 8.10MHz 5.47MHz
Y WHITE PEAK 6.43MHz 7.00MHz 9.63MHz 7.00MHz
REFERENCE SIGNAL IS 100% WHITE SIGNAL.
MIX
AMP
METAL LPF
NL DE-EMPHASIS
BUFFER
NOISE CANCELLER
OUTPUT BUFFER
OXIDE LPF
80mVpp (40mVpp/MHz)
Y PRE TP502
Y CLAMP TP503
Y MAIN TP504
Y NLDE TP505
Y OUT TP1
Y DEMOD(X) 103-26A
Y DEMOD(G) 103-27A
MB-441
TBC-24(1/3), 102-25B
TBC-24(1/3), 102-26B
Y FOR DOC 1/4
TRANSISTOR PIN LAYOUT
DA204U PIN LAYOUT
1SS304 PIN LAYOUT
1SS303 PIN LAYOUT
DM-89 MCB : NO MOUNTED
DM-89P MCB: MOUNTED AS DESIGN
CLAMP
LPF
H:METAL
※ DM-89 MCB DM-89P MCB
R580 NO MOUNTED 100
R782 4.7k :RN-C 6.8k :RN-C
Q718 NO MOUNTED DTC144EU
FM CARRIER ALLOCATION
DM-89 MCB DM-89P MCB
METAL OXIDE METAL OXIDE
C REF. SYNC TIP 6.95MHz 6.07MHz 7.99MHz 6.24MHz
C PEDESTAL 5.00MHz 4.93MHz 6.68MHz 4.93MHz
C HIGH PEAK 5.25MHz 4.38MHz 5.95MHz 4.20MHz
C LOW PEAK 6.35MHz 5.47MHz 7.41MHz 5.65MHz
REFERENCE SIGNAL IS COLOR BARS SIGNAL.
DM-89 MCB : 75% COLOR BARS
DM-89P MCB: 100% COLOR BARS
C OUT TP8
C DEMOD(X) 103-28A
C DEMOD(G) 103-29A
MB-441
TBC-24(1/3), 102-28B
TBC-24(1/3), 102-29B
RV703;DEMOD METAL CHROMA LEVEL (PAL)
RV704;DEMOD OXIDE CHROMA LEVEL (PAL)
RV704;DEMOD CHROMA LEVEL (NTSC)
Betacam PB Y/C Demod Process
DM-89 BOARD (3/4)
BOARD NO. 1-648-541-14, 15
BOARD' S LOT NO. 503-603
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB
DVW-DM89-ALL-A-PB-S/M-06-C
LOT NO. BOARD NO.
503-508 1-648-541-14
509-603 1-648-541-15


D/A CONVERTER
IC904
M62352GP
IC901(1/2)
MC14053BF
IC903(1/3)
MC14053BF
IC902(1/2)
MC14053BF
IC903(2/3)
MC14053BF
D/A CONVERTER
IC905
M62352GP
8-BIT MPU
IC906
μPD78011BGC-608-AB8
906
QFP 64P
EEP-ROM FOR ADJ. DATA
IC908
BR93LC46F
IC901(2/2) MC14053BF
IC902(2/2) MC14053BF
IC903(3/3) MC14053BF
MB-441
1/4 Y VCA CONT
1/4 Y COS1 CONT
1/4 Y MAIN CONT
1/4 Y SUB CONT
1/4 Y DO THRESHOLD
1/4 Y OMC CONT
2/4 L;NOISELESS PB
103-10B L;NOISELESS PB
SS(8/12), 123-12B
103-48B ADV Y SW PLS
SS(7/12), 123-16A
1/4 ADV Y SW PLS
AP(2/3), 104-10A
SS(7/12), 123-16B
103-10A ADV C SW PLS
103-49B ADV C SW PLS
2/4 ADV C SW PLS
2/4 C VCA CONT
2/4 C COS CONT
2/4 C MAIN CONT
2/4 C SUB CONT
2/4 C STILL DO
2/4 C DO THRESHOLD
2/4 C OMC CONT
SS(7/12), 124-43A
SS(7/12), 124-43B
103-42B DM SS JP0
103-43B DM SS JP1
SS(3/12), 122-15B
SS(3/12), 122-13A
SS(3/12), 122-12B
SS(3/12), 122-13B
SS(3/12), 122-12A
103-53A L;DM CS
103-51B SYIF2 CMD
103-52A SYIF2 RES
103-51A SYIF2 SCK
103-52B SYIF2 RDY
SS(1/12), 122-35A
103-53B L;SYS RESET
+5V DET
IC907
S-8054HN-CB
D901
DA204U
Y RF ENV 1/4
C RF ENV 2/4
SV TAPE SPEED 3/4
S901
ADJ
TIME
AGC OFF
FACTORY SETTING
ALL OFF
H;AGC ON 1/4
H;AGC ON 2/4
L;ADJ 3/4
H;SEARCH TUNE 14M 1/4
H;SEARCH TUNE 6M 1/4
H;SEARCH SW FLAT 1/4
L;Y DOP 1/4
H;SEARCH SW LOW 1/4
H;SEARCH LPF 8M 1/4
H;SEARCH LPF 5M 1/4
H;SEARCH SW MID 1/4
BUFFER
IC909(4/5)
MC14050BF
H;+18 TIMES 3/4
H;AFM MUTE 103-22A
H;LAU MUTE 103-22B
H;NR ON 103-23A
H;SEARCH TUNE 3M 1/4
H;SEARCH LPF 3M 1/4
L;REF CK ERROR 103-54A
L;PLL ERROR 103-54B
L;W/R TIM ERROR 103-55A
L;SQL ON 103-55B
CUE(2/4), 105-56A
AP(2/3), 104-23A
AP(1/3), 104-24A
AP(1/3), 104-25A
AP(2/3), 104-18A
AP(2/3), 104-19A
AP(2/3), 104-20A
AP(3/3), 104-21A
ADJUST
D902
CL-150D-CD
Q902
DTC144EU
SWITCH
IC910(7/7)
MC14049UBF
IC909(5/5)
MC14050BF
IC911(5/5)
SN74HC02ANS
X901
8.38MHz
DM-89 MCB
DM-89P MCB
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



LOT NO.	BOARD NO.
503-508	1-648-541-14
509-603	1-648-541-15

TRANSISTOR PIN LAYOUT (C, B, E)

DA204U PIN LAYOUT (3; 2, 1)

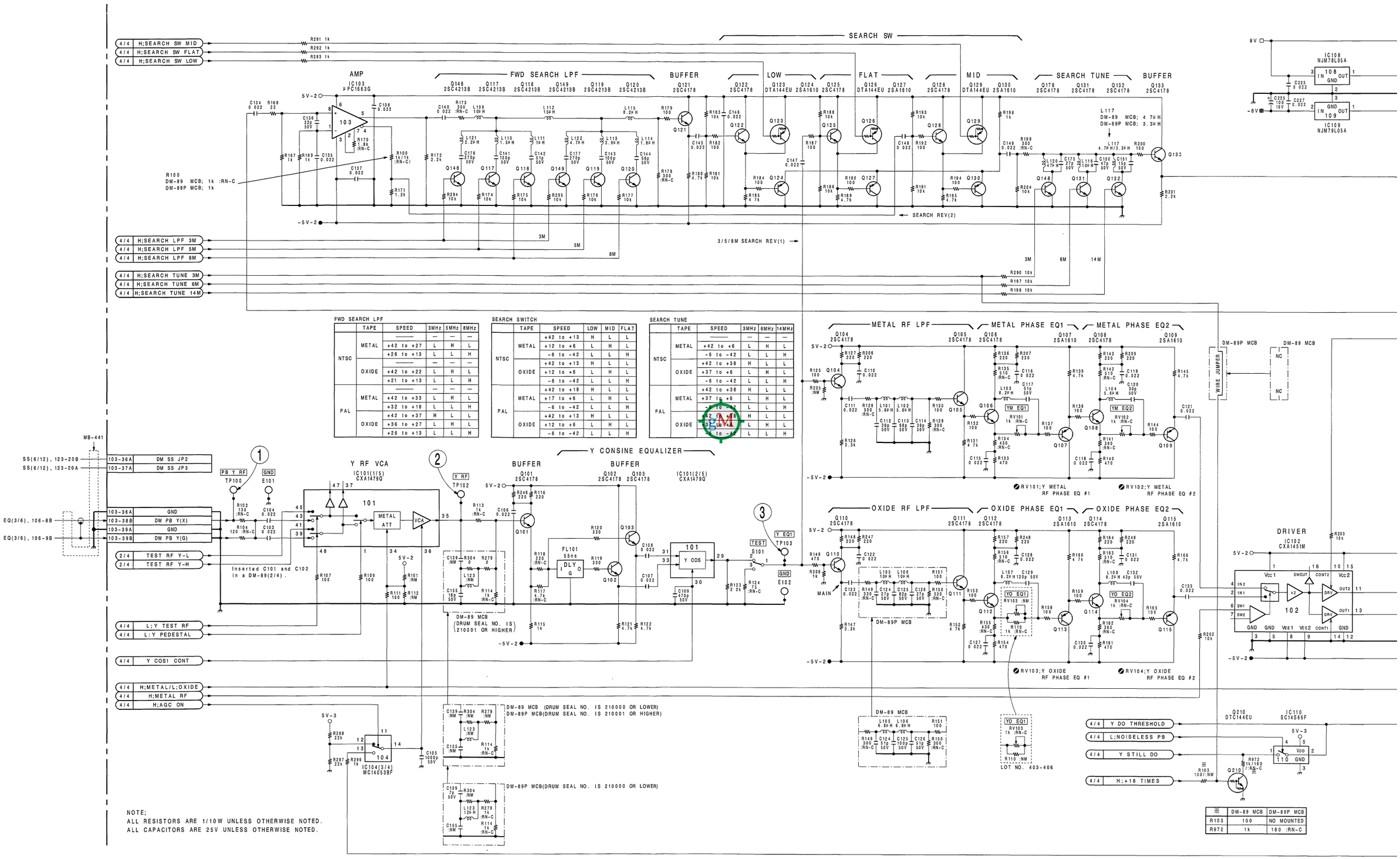
1SS304 PIN LAYOUT (3; 2, 1)

Betacam PB Control

DM-89 BOARD (4/4)

BOARD NO. 1-648-541-14, 15
BOARD' S LOT NO. 503-603
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

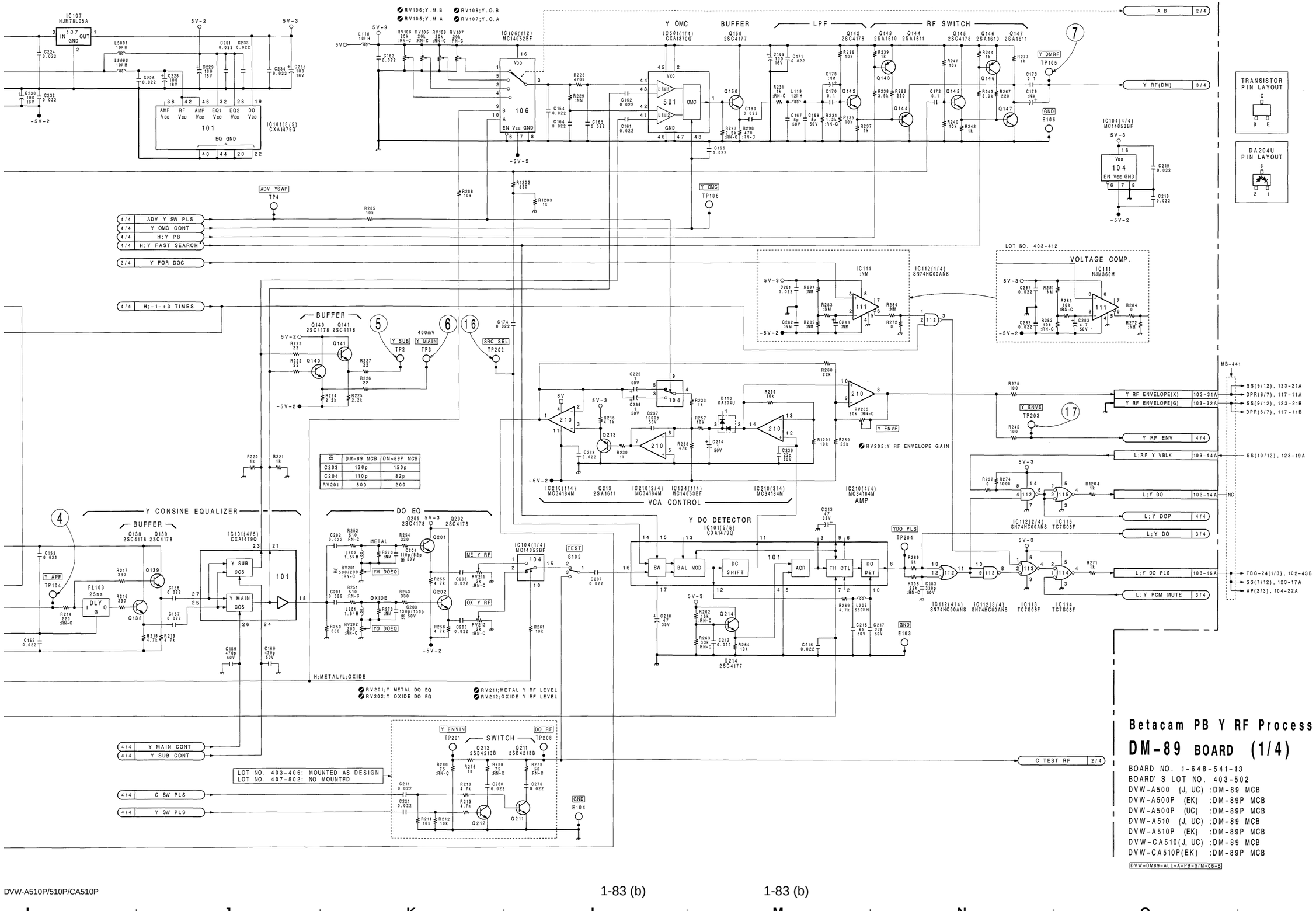
DVW-DM89-ALL-A-PB-S/M-06-C

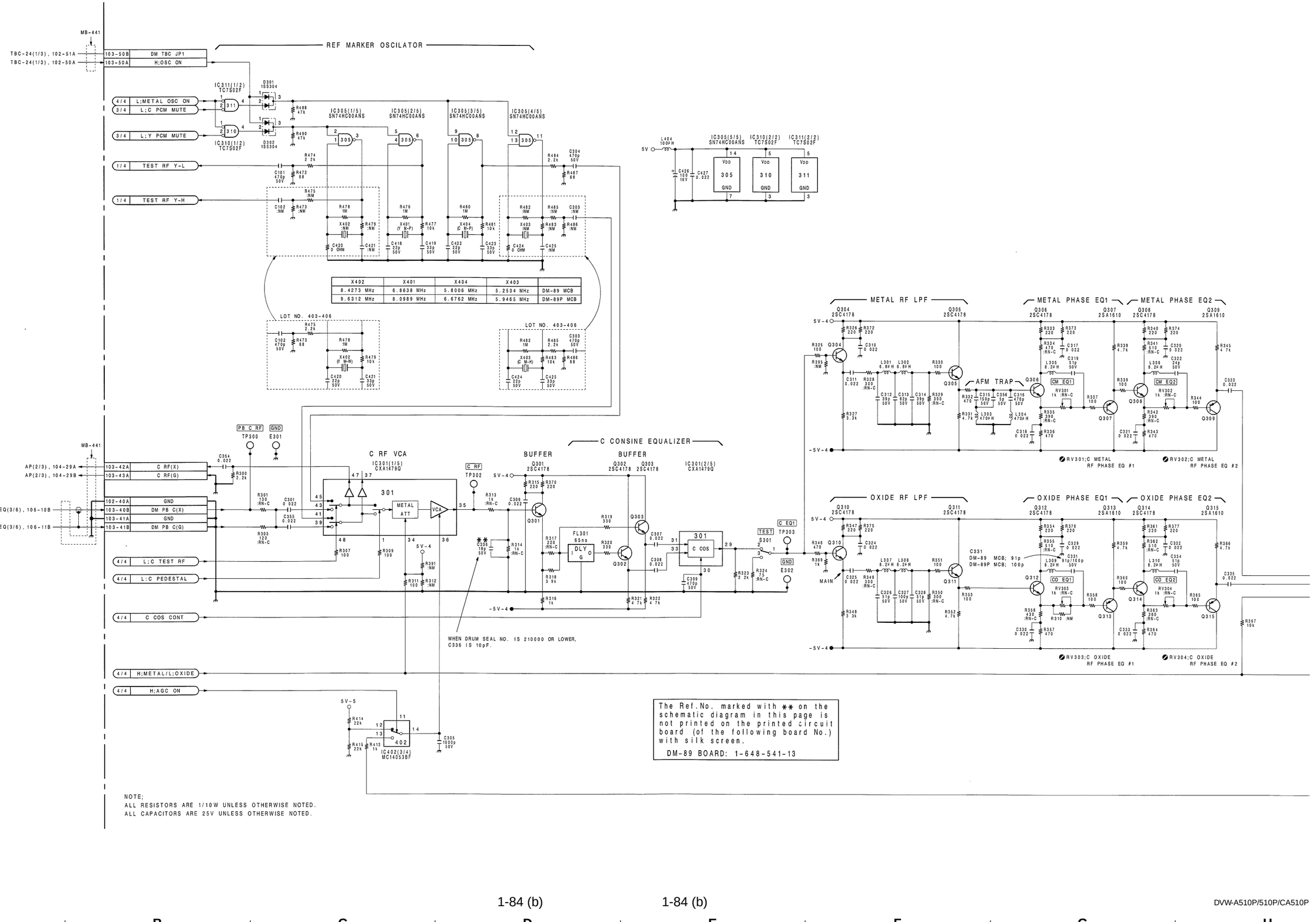


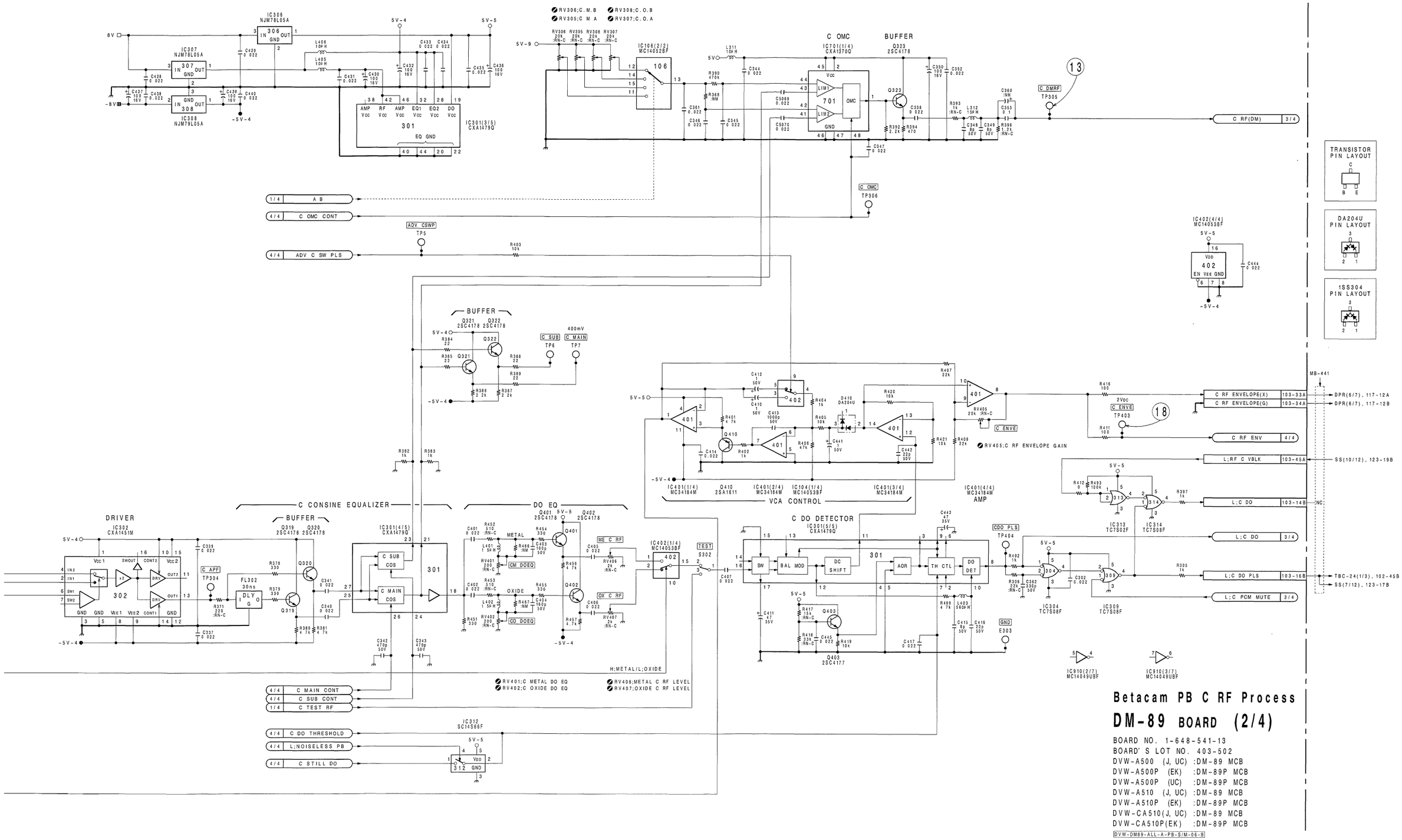
FWD SEARCH LPF	TAPE	SPEED	3MHz	5MHz	8MHz
NTSC	METAL	———	—	—	—
		+42 to +27	L	H	L
		+26 to +13	L	L	H
	OXIDE	———	—	—	—
		+42 to +22	L	H	L
		+21 to +13	L	L	H
PAL	METAL	———	—	—	—
		+42 to +33	L	H	L
		+32 to +18	L	L	H
	OXIDE	+42 to +37	H	L	L
		+36 to +27	L	H	L
		+26 to +13	L	L	H

SEARCH SWITCH	TAPE	SPEED	LOW	MID	FLAT
NTSC	METAL	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +18	H	L	L
		+17 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H

SEARCH TUNE	TAPE	SPEED	3MHz	6MHz	14MHz
NTSC	METAL	———	—	—	—
		+42 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H


IC107 NJM78L05A
IC101(3/5) CXA1479Q
IC106(1/2) MC14052BF
Y OMC
BUFFER
LPF
RF SWITCH
A B 2/4
Y RF(DM) 3/4
Y DMRF
TP105
GND
E105
TRANSISTOR PIN LAYOUT
DA204U PIN LAYOUT
IC104(4/4) MC14053BF
ADV YSWP
TP4
Y OMC
TP106
4/4 ADV Y SW PLS
4/4 Y OMC CONT
4/4 H;Y PB
4/4 H;Y FAST SEARCH
3/4 Y FOR DOC
4/4 H;-1-+3 TIMES
LOT NO. 403-412
VOLTAGE COMP.
IC111 :NM
IC111 NJM360M
IC112(1/4) SN74HC00ANS
BUFFER
Y SUB
Y MAIN
400mV
SRC SEL
TP2
TP3
TP202
MB-441
SS(9/12), 123-21A
DPR(6/7), 117-11A
SS(9/12), 123-21B
DPR(6/7), 117-11B
Y RF ENVELOPE(X) 103-31A
Y RF ENVELOPE(G) 103-32A
Y ENVE
TP203
Y RF ENV 4/4
L;RF Y VBLK 103-44A
SS(10/12), 123-19A
L;Y DO 103-14A
L;Y DOP 4/4
L;Y DO 3/4
L;Y DO PLS 103-16A
TBC-24(1/3), 102-43B
SS(7/12), 123-17A
AP(2/3), 104-22A
L;Y PCM MUTE 3/4
NC
IC112(2/4) SN74HC00ANS
IC115 TC7S08F
IC112(4/4) SN74HC00ANS
IC112(3/4) SN74HC00ANS
IC113 TC7S08F
IC114 TC7S08F
RV205;Y RF ENVELOPE GAIN
IC210(1/4) MC34184M
Q213 2SA1611
IC210(2/4) MC34184M
IC104(1/4) MC14053BF
IC210(3/4) MC34184M
VCA CONTROL
IC210(4/4) MC34184M AMP
Y DO DETECTOR
IC101(5/5) CXA1479Q
YDO PLS
TP204
Y CONSINE EQUALIZER
DO EQ
Y APF
TP104
FL103 25ns
DLY
METAL
OXIDE
YM DOEQ
YO DOEQ
ME Y RF
OX Y RF
TEST
S102
RV201;Y METAL DO EQ
RV202;Y OXIDE DO EQ
RV211;METAL Y RF LEVEL
RV212;OXIDE Y RF LEVEL
H;METAL/L;OXIDE
Y ENVIN
SWITCH
DO RF
TP201
TP208
Q212 2SB4213B
Q211 2SB4213B
LOT NO. 403-406: MOUNTED AS DESIGN
LOT NO. 407-502: NO MOUNTED
4/4 Y MAIN CONT
4/4 Y SUB CONT
4/4 C SW PLS
4/4 Y SW PLS
C TEST RF 2/4
Q214 2SC4177
※ DM-89 MCB DM-89P MCB
C203 130p 150p
C204 110p 82p
RV201 500 200
Betacam PB Y RF Process
DM-89 BOARD (1/4)
BOARD NO. 1-648-541-13
BOARD'S LOT NO. 403-502
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB
DVW-DM89-ALL-A-PB-S/M-06-B


REF MARKER OSCILATOR
MB-441
TBC-24(1/3), 102-51A
TBC-24(1/3), 102-50A
103-50B DM TBC JP1
103-50A H;OSC ON
4/4 L;METAL OSC ON
3/4 L;C PCM MUTE
3/4 L;Y PCM MUTE
1/4 TEST RF Y-L
1/4 TEST RF Y-H
IC311(1/2) TC7S02F
IC310(1/2) TC7S02F
D301 1SS304
D302 1SS304
IC305(1/5) SN74HC00ANS
IC305(2/5) SN74HC00ANS
IC305(3/5) SN74HC00ANS
IC305(4/5) SN74HC00ANS
IC305(5/5) SN74HC00ANS
L404 100μH
C426 100 16V
C427 0.022
LOT NO. 403-406
X402 X401 X404 X403
8.4273 MHz 6.8638 MHz 5.8006 MHz 5.2534 MHz DM-89 MCB
9.6312 MHz 8.0989 MHz 6.6762 MHz 5.9465 MHz DM-89P MCB
PB C RF
GND
TP300
E301
MB-441
AP(2/3), 104-29A
AP(2/3), 104-29B
103-42A C RF(X)
103-43A C RF(G)
102-40A GND
103-40B DM PB C(X)
103-41A GND
103-41B DM PB C(G)
EQ(3/6), 106-10B
EQ(3/6), 106-11B
C RF VCA
IC301(1/5) CXA1479Q
METAL ATT
VCA
C CONSINE EQUALIZER
BUFFER
BUFFER
IC301(2/5) CXA1479Q
C RF
TP302
Q301 2SC4178
Q302 2SC4178
Q303 2SC4178
FL301 65ns
DLY
C COS
C EQ1
TEST
TP303
S301
GND
E302
4/4 L;C TEST RF
4/4 L;C PEDESTAL
4/4 C COS CONT
4/4 H;METAL/L;OXIDE
4/4 H;AGC ON
WHEN DRUM SEAL NO. IS 210000 OR LOWER, C336 IS 10pF.
IC402(3/4) MC14053BF
METAL RF LPF
METAL PHASE EQ1
METAL PHASE EQ2
Q304 2SC4178
Q305 2SC4178
Q306 2SC4178
Q307 2SA1610
Q308 2SC4178
Q309 2SA1610
AFM TRAP
CM EQ1
CM EQ2
RV301;C METAL RF PHASE EQ #1
RV302;C METAL RF PHASE EQ #2
OXIDE RF LPF
OXIDE PHASE EQ1
OXIDE PHASE EQ2
Q310 2SC4178
Q311 2SC4178
Q312 2SC4178
Q313 2SA1610
Q314 2SC4178
Q315 2SA1610
MAIN
CO EQ1
CO EQ2
C331 DM-89 MCB; 91p DM-89P MCB; 100p
RV303;C OXIDE RF PHASE EQ #1
RV304;C OXIDE RF PHASE EQ #2
The Ref.No. marked with ** on the schematic diagram in this page is not printed on the printed circuit board (of the following board No.) with silk screen.
DM-89 BOARD: 1-648-541-13
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

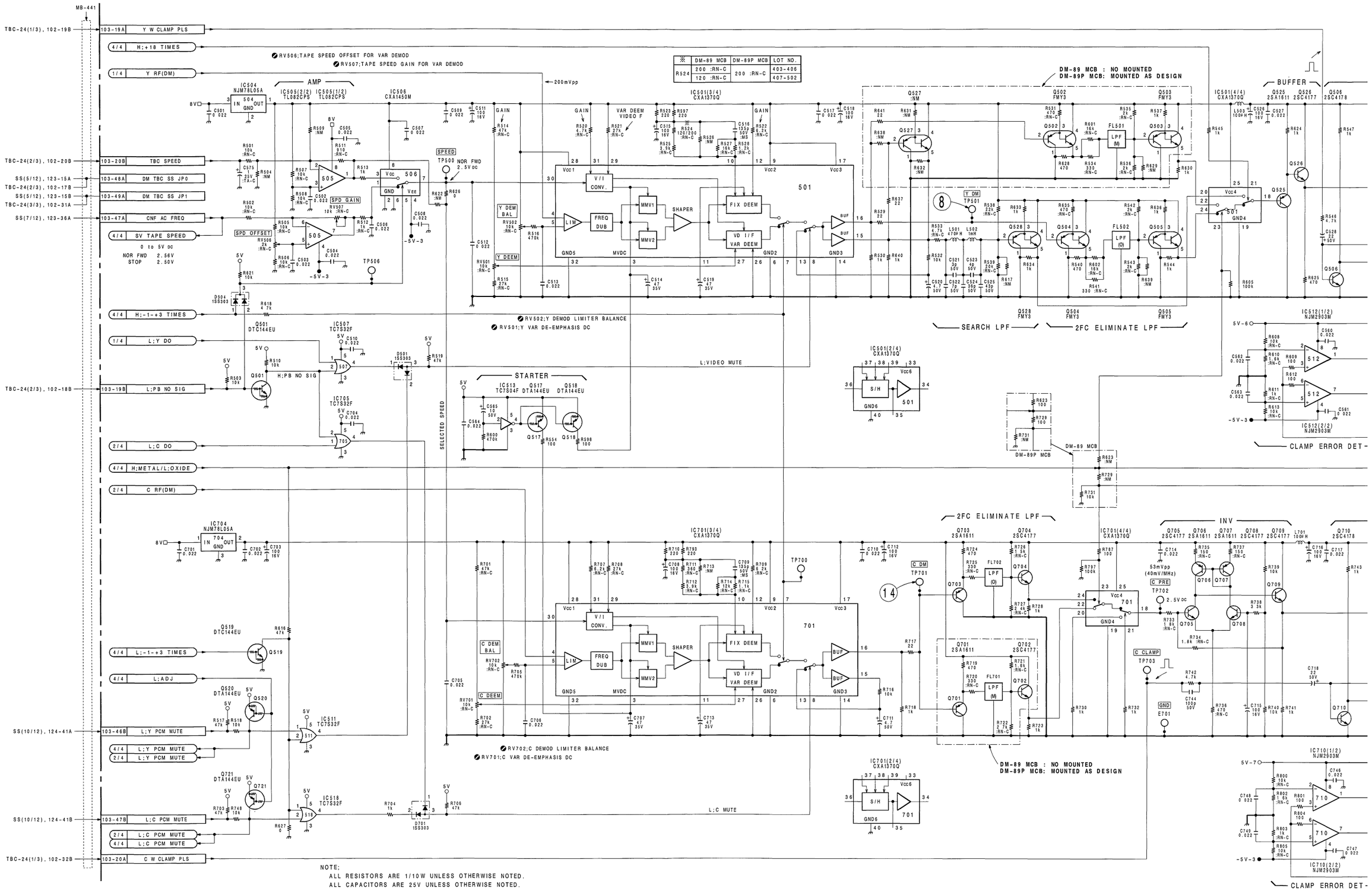


Betacam PB C RF Process

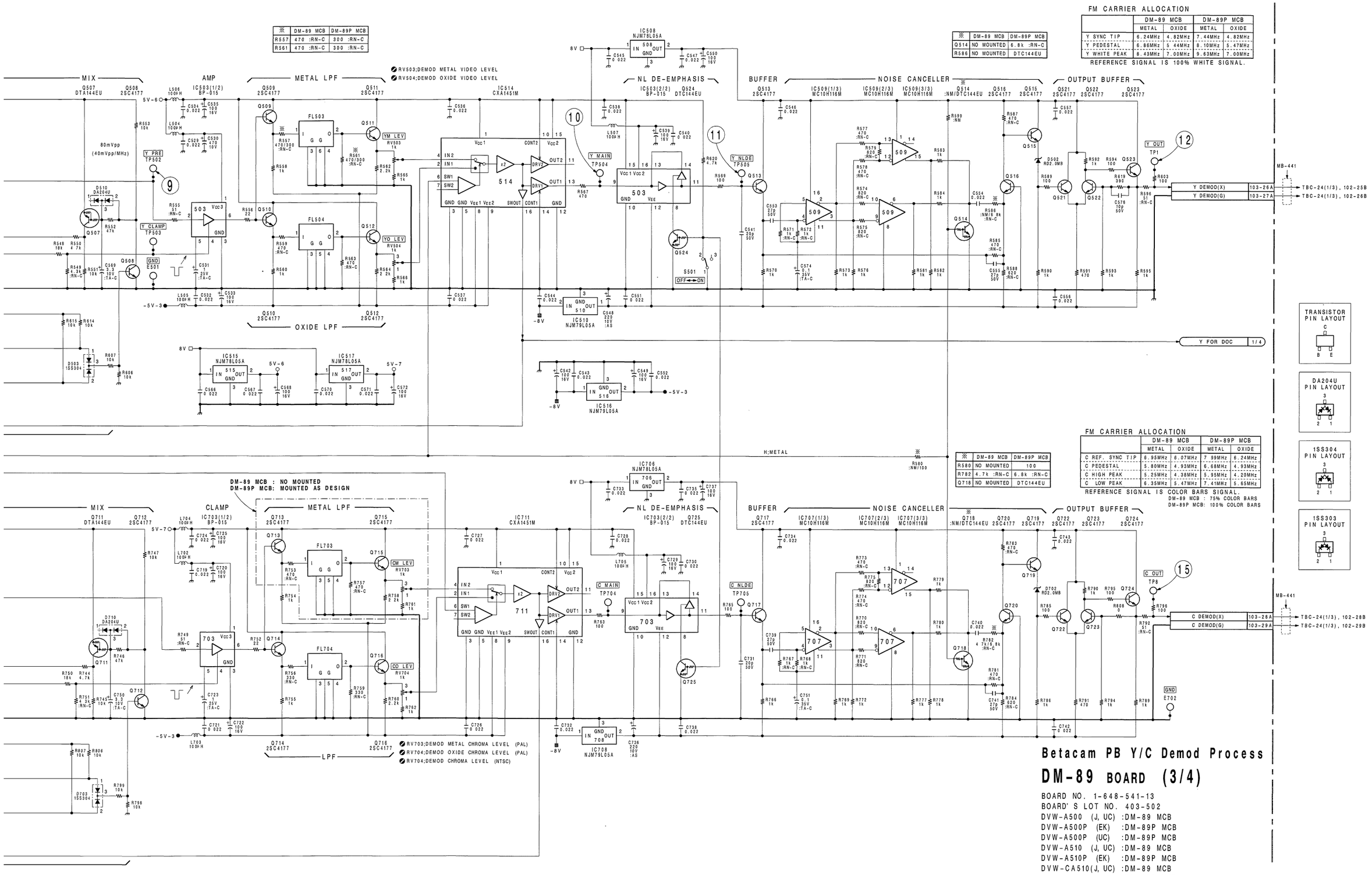
DM-89 BOARD (2/4)

BOARD NO. 1-648-541-13
BOARD' S LOT NO. 403-502
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

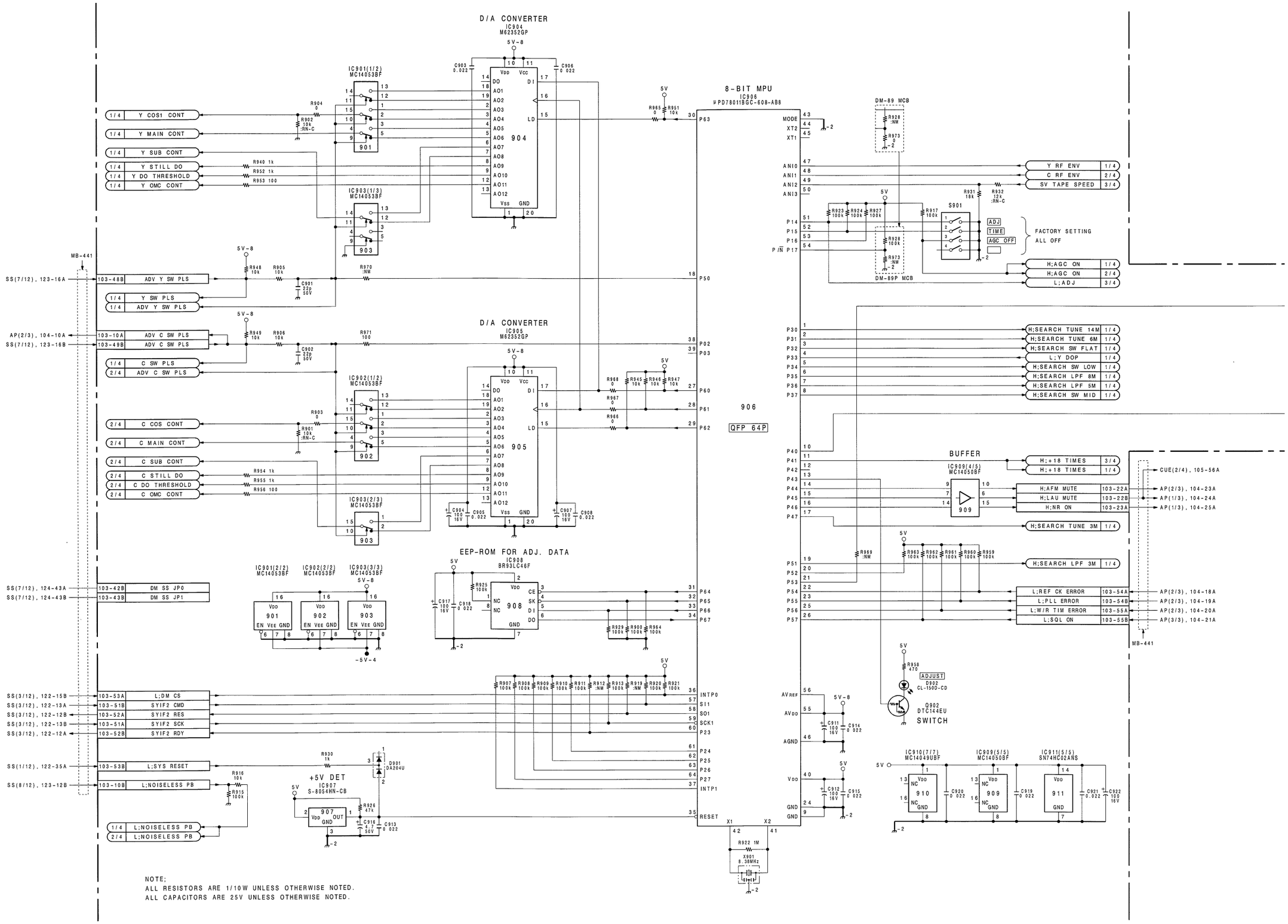
DVW-DM89-ALL-A-PB-S/M-06-B



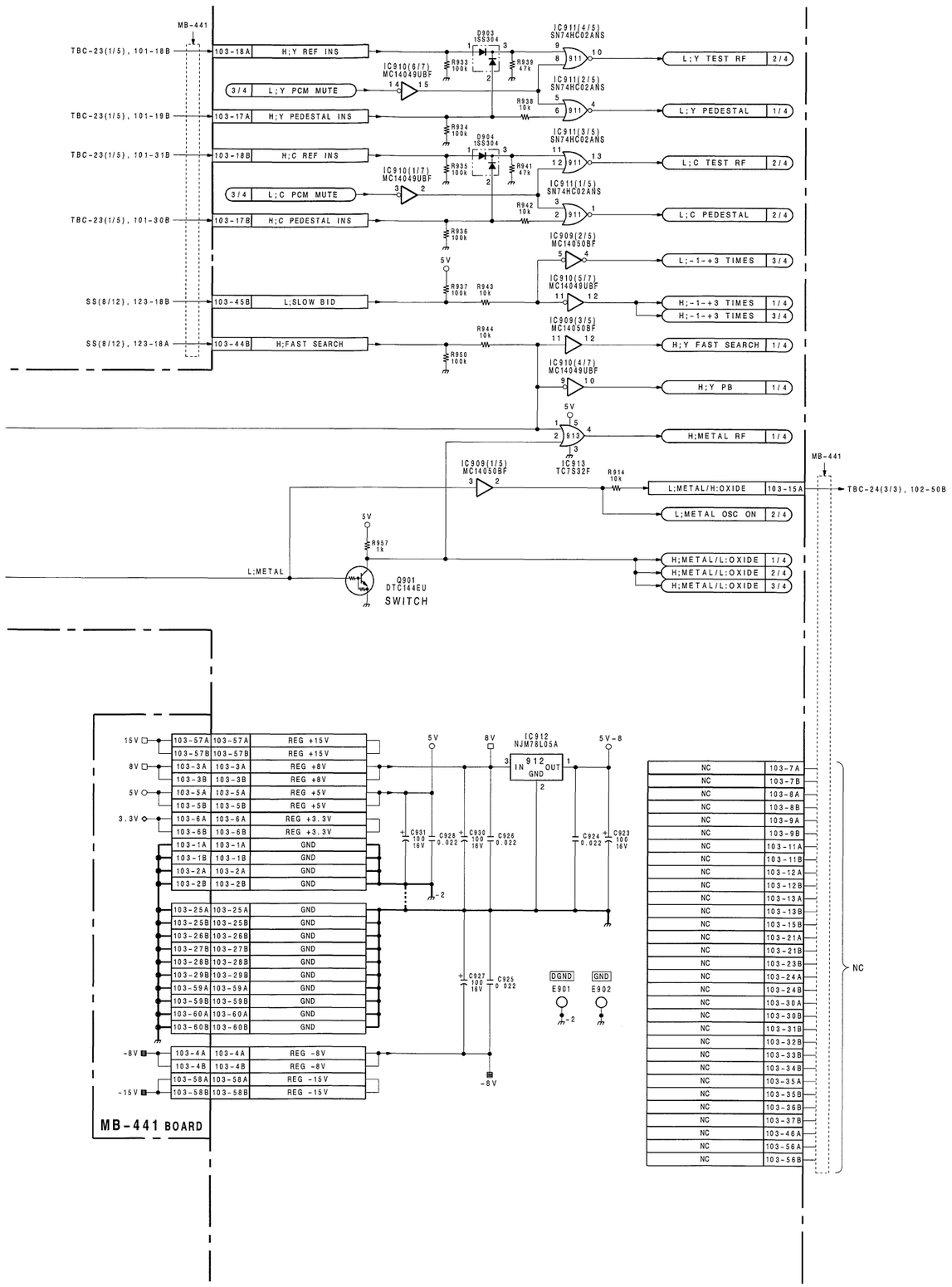
※	DM-89 MCB	DM-89P MCB	LOT NO.
R524	200 :RN-C	200 :RN-C	403-406
	120 :RN-C		407-502

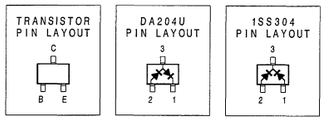

※ DM-89 MCB DM-89P MCB
R557 470 :RN-C 300 :RN-C
R561 470 :RN-C 300 :RN-C
※ DM-89 MCB DM-89P MCB
Q514 NO MOUNTED 6.8k :RN-C
R586 NO MOUNTED DTC144EU
FM CARRIER ALLOCATION
DM-89 MCB DM-89P MCB
METAL OXIDE METAL OXIDE
Y SYNC TIP 6.24MHz 4.92MHz 7.44MHz 4.82MHz
Y PEDESTAL 6.86MHz 5.44MHz 8.10MHz 5.47MHz
Y WHITE PEAK 8.43MHz 7.00MHz 9.63MHz 7.00MHz
REFERENCE SIGNAL IS 100% WHITE SIGNAL.
RV503;DEMOD METAL VIDEO LEVEL
RV504;DEMOD OXIDE VIDEO LEVEL
MIX
AMP
METAL LPF
NL DE-EMPHASIS
BUFFER
NOISE CANCELLER
OUTPUT BUFFER
OXIDE LPF
Y PRE TP502
Y CLAMP TP503
Y MAIN TP504
Y NLDE TP505
Y OUT TP1
Y DEMOD(X) 103-26A
Y DEMOD(G) 103-27A
MB-441
TBC-24(1/3), 102-25B
TBC-24(1/3), 102-26B
Y FOR DOC 1/4
TRANSISTOR PIN LAYOUT
DA204U PIN LAYOUT
1SS304 PIN LAYOUT
1SS303 PIN LAYOUT
FM CARRIER ALLOCATION
DM-89 MCB DM-89P MCB
METAL OXIDE METAL OXIDE
C REF. SYNC TIP 6.95MHz 6.07MHz 7.99MHz 6.24MHz
C PEDESTAL 5.80MHz 4.93MHz 6.68MHz 4.93MHz
C HIGH PEAK 5.25MHz 4.38MHz 5.95MHz 4.20MHz
C LOW PEAK 6.35MHz 5.47MHz 7.41MHz 5.65MHz
REFERENCE SIGNAL IS COLOR BARS SIGNAL.
DM-89 MCB : 75% COLOR BARS
DM-89P MCB: 100% COLOR BARS
※ DM-89 MCB DM-89P MCB
R580 NO MOUNTED 100
R782 4.7k :RN-C 6.8k :RN-C
Q718 NO MOUNTED DTC144EU
DM-89 MCB : NO MOUNTED
DM-89P MCB: MOUNTED AS DESIGN
CLAMP
C MAIN TP704
C NLDE TP705
C OUT TP8
C DEMOD(X) 103-28A
C DEMOD(G) 103-29A
MB-441
TBC-24(1/3), 102-28B
TBC-24(1/3), 102-29B
RV703;DEMOD METAL CHROMA LEVEL (PAL)
RV704;DEMOD OXIDE CHROMA LEVEL (PAL)
RV704;DEMOD CHROMA LEVEL (NTSC)
LPF
Betacam PB Y/C Demod Process
DM-89 BOARD (3/4)
BOARD NO. 1-648-541-13
BOARD' S LOT NO. 403-502
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB
DVW-DM89-ALL-A-PB-S/M-06-B

I J K L M N O P


D/A CONVERTER
IC904
M62352GP
IC901(1/2)
MC14053BF
IC903(1/3)
MC14053BF
IC902(1/2)
MC14053BF
IC903(2/3)
MC14053BF
D/A CONVERTER
IC905
M62352GP
IC902(2/2)
MC14053BF
IC903(3/3)
MC14053BF
IC901(2/2)
MC14053BF
EEP-ROM FOR ADJ. DATA
IC908
BR93LC46F
8-BIT MPU
IC906
μPD78011BGC-608-AB8
QFP 64P
Y COS1 CONT
Y MAIN CONT
Y SUB CONT
Y STILL DO
Y DO THRESHOLD
Y OMC CONT
C COS CONT
C MAIN CONT
C SUB CONT
C STILL DO
C DO THRESHOLD
C OMC CONT
ADV Y SW PLS
Y SW PLS
ADV C SW PLS
C SW PLS
DM SS JP0
DM SS JP1
L;DM CS
SYIF2 CMD
SYIF2 RES
SYIF2 SCK
SYIF2 RDY
L;SYS RESET
L;NOISELESS PB
+5V DET
IC907
S-8054HN-CB
DM-89 MCB
DM-89P MCB
Y RF ENV
C RF ENV
SV TAPE SPEED
S901
ADJ
TIME
AGC OFF
FACTORY SETTING
ALL OFF
H;AGC ON
H;AGC ON
L;ADJ
H;SEARCH TUNE 14M
H;SEARCH TUNE 6M
H;SEARCH SW FLAT
L;Y DOP
H;SEARCH SW LOW
H;SEARCH LPF 8M
H;SEARCH LPF 5M
H;SEARCH SW MID
BUFFER
IC909(4/5)
MC14050BF
H;+18 TIMES
H;+18 TIMES
H;AFM MUTE
H;LAU MUTE
H;NR ON
H;SEARCH TUNE 3M
H;SEARCH LPF 3M
L;REF CK ERROR
L;PLL ERROR
L;W/R TIM ERROR
L;SQL ON
ADJUST
D902
CL-150D-CD
Q902
DTC144EU
SWITCH
IC910(7/7)
MC14049UBF
IC909(5/5)
MC14050BF
IC911(5/5)
SN74HC02ANS
X901
8.38MHz
MB-441
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

DM-89 (4/4)





Betacam PB Control

DM-89 BOARD (4/4)

BOARD NO. 1-648-541-13
BOARD' S LOT NO. 403-502
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510(J, UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

DVW-DM89-ALL-A-PB-S/M-06-B

SEARCH LPF			
TAPE	SPEED	5MHz	8MHz
METAL	+42 to +37	H	L
	+36 to +27	L	H
OXIDE	+42 to +32	H	L
	+31 to +19	L	H

SEARCH SWITCH				
TAPE	SPEED	LOW	MID	FLAT
METAL	+42 to +27	H	L	L
	+26 to +12	L	H	L
	-13 to -42	L	L	H
OXIDE	+42 to +19	H	L	L
	+18 to -17	L	H	L
	-18 to -42	L	L	H

SEARCH TUNE				
TAPE	SPEED	3MHz	6MHz	14MHz
METAL	+42 to +38	H	L	L
	+37 to +19	L	H	L
	+18 to -42	L	L	H
OXIDE	+42 to +35	H	L	L
	+34 to +19	L	H	L
	+18 to -42	L	L	H

LOT NO. 302-303

4/4 H;SEARCH SW MID
4/4 H;SEARCH SW FLAT
4/4 H;SEARCH SW LOW
R291 1k
R292 1k
R293 1k

SEARCH SW

AMP — IC103 μPC1663G

FWD SEARCH LPF — Q148 2SC4213B, Q117 2SC4213B, Q118 2SC4213B, Q149 2SC4213B, Q119 2SC4213B, Q120 2SC4213B

BUFFER — Q121 2SC4178

LOW — Q122 2SC4178, Q123 DTA144EU, Q124 2SA1610

FLAT — Q125 2SC4178, Q126 DTA144EU, Q127 2SA1610

MID — Q128 2SC4178, Q129 DTA144EU, Q130 2SA1610

SEARCH TUNE — Q178 2SC4178, Q131 2SC4178, Q132 2SC4178

BUFFER — Q133 2SC4178

L117 DM-89 MCB; 4.7μH
DM-89P MCB; 3.3μH

SEARCH REV(2)

3/5/8M SEARCH REV(1)

LOT NO. 302-304
R205 3.3k**
R187 100

3M
5M
8M
6M
14M

4/4 H;SEARCH LPF 3M
4/4 H;SEARCH LPF 5M
4/4 H;SEARCH LPF 8M
4/4 H;SEARCH TUNE 3M
4/4 H;SEARCH TUNE 6M
4/4 H;SEARCH TUNE 14M
R290 10k
R197 10k
R198 10k

8V
-8V
IC108 NJM78L05A
IC109 NJM79L05A

SEARCH LPF				
	TAPE	SPEED	3MHz	5MHz	8MHz
NTSC	METAL	+42 to +27	L	H	L
		+26 to +13	L	L	H
	OXIDE	+42 to +22	L	H	L
		+21 to +13	L	L	H
PAL	METAL	+42 to +33	L	H	L
		+32 to +18	L	L	H
	OXIDE	+42 to +37	H	L	L
		+36 to +27	L	H	L
		+26 to +13	L	L	H

SEARCH SWITCH				
	TAPE	SPEED	LOW	MID	FLAT
NTSC	METAL	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +18	H	L	L
		+17 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +13	H	L	L
		+12 to +6	L	H	L
		-6 to -42	L	L	H

SEARCH TUNE				
	TAPE	SPEED	3MHz	6MHz	14MHz
NTSC	METAL	+42 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
PAL	METAL	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H
	OXIDE	+42 to +38	H	L	L
		+37 to +6	L	H	L
		-6 to -42	L	L	H

METAL RF LPF — Q104 2SC4178, Q105 2SC4178

METAL PHASE EQ1 — Q106 2SC4178, Q107 2SA1610

METAL PHASE EQ2 — Q108 2SC4178, Q109 2SA1610

RV101;Y METAL RF PHASE EQ #1
RV102;Y METAL RF PHASE EQ #2

OXIDE RF LPF — Q110 2SC4178, Q111 2SC4178

OXIDE PHASE EQ1 — Q112 2SC4178, Q113 2SA1610

OXIDE PHASE EQ2 — Q114 2SC4178, Q115 2SA1610

RV103;Y OXIDE RF PHASE EQ #1
RV104;Y OXIDE RF PHASE EQ #2

DRIVER — IC102 CXA1451M

MB-441

SS(6/12), 123-20B — 103-36A DM SS JP2
SS(6/12), 123-20A — 103-37A DM SS JP3

EQ(3/6), 106-8B — 103-38A GND, 103-38B DM PB Y(X)
EQ(3/6), 106-9B — 103-39A GND, 103-39B DM PB Y(G)

2/4 TEST RF Y-H
2/4 TEST RF Y-L

150mVpp
GND E101
Y RFIN TP101

Y RF VCA — IC101(1/5) CXA1479Q

Inserted C101 and C102 in a DM-89(2/4).

R304 AND R279 ARE MOUNTED 0Ω ON DM-89 MCB OF LOT NO. 302-304.

Y RF TP102

BUFFER — Q101 2SC4178

BUFFER — Q102 2SC4178, Q103 2SC4178

IC101(2/5) CXA1479Q

Y CONSINE EQUALIZER

FL101 55ns DLY

Y COS

TEST S101

Y EQ1 TP103

GND E102

DM-89 MCB

4/4 L;Y TEST RF
4/4 L;Y PEDESTAL
R107 100
R109 100

4/4 Y VCA CONT
4/4 Y COS1 CONT

4/4 H;METAL/L;OXIDE
4/4 H;METAL RF

BOARD NO 1-648-541-11

4/4 L;Y TEST RF
4/4 H;Y PEDESTAL
R107 :NM
R109 100

DM-89P MCB

L123 ON SOME MCB OF LOT NO. 302-311 IS NOT 12μH.
LOT NO 302-304; 22μH OR NO MOUNTED
LOT NO 305 ; 18μH OR NO MOUNTED
LOT NO 306-310; NO MOUNTED
LOT NO 311 ; NO MOUNTED OR 12μH

R279 ON SOME MCB OF LOT NO. 302-311 IS 2.2kΩ.
LOT NO. 302-310; 2.2k :RN-C
LOT NO 311 ; 2.2k :RN-C OR 1k :RN-C

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

DM-89 BOARD: 1-648-541-11

The Ref.Nos.marked with *** are not printed on the printed circuit board (of the following board No.) with silk screen.

DM-89 BOARD: 1-648-541-11, 12

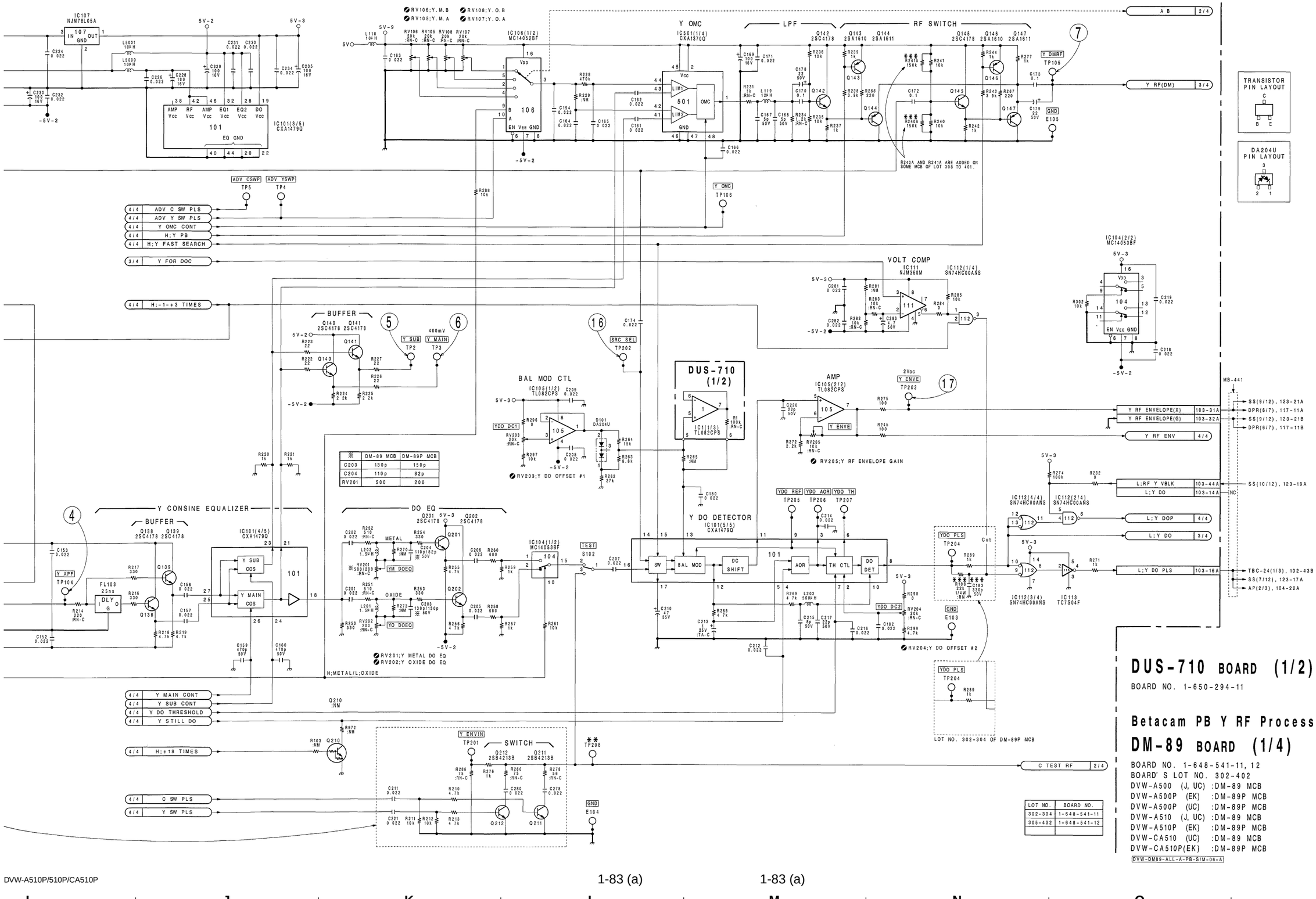
DM-89P MCB

BOARD NO 1-648-541-11

Y ENVIN TP201 — SWITCH — Q212 DTC114EU, Q211 DTC114EU

BOARD NO. 1-648-541-11

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



DUS-710 BOARD (1/2)

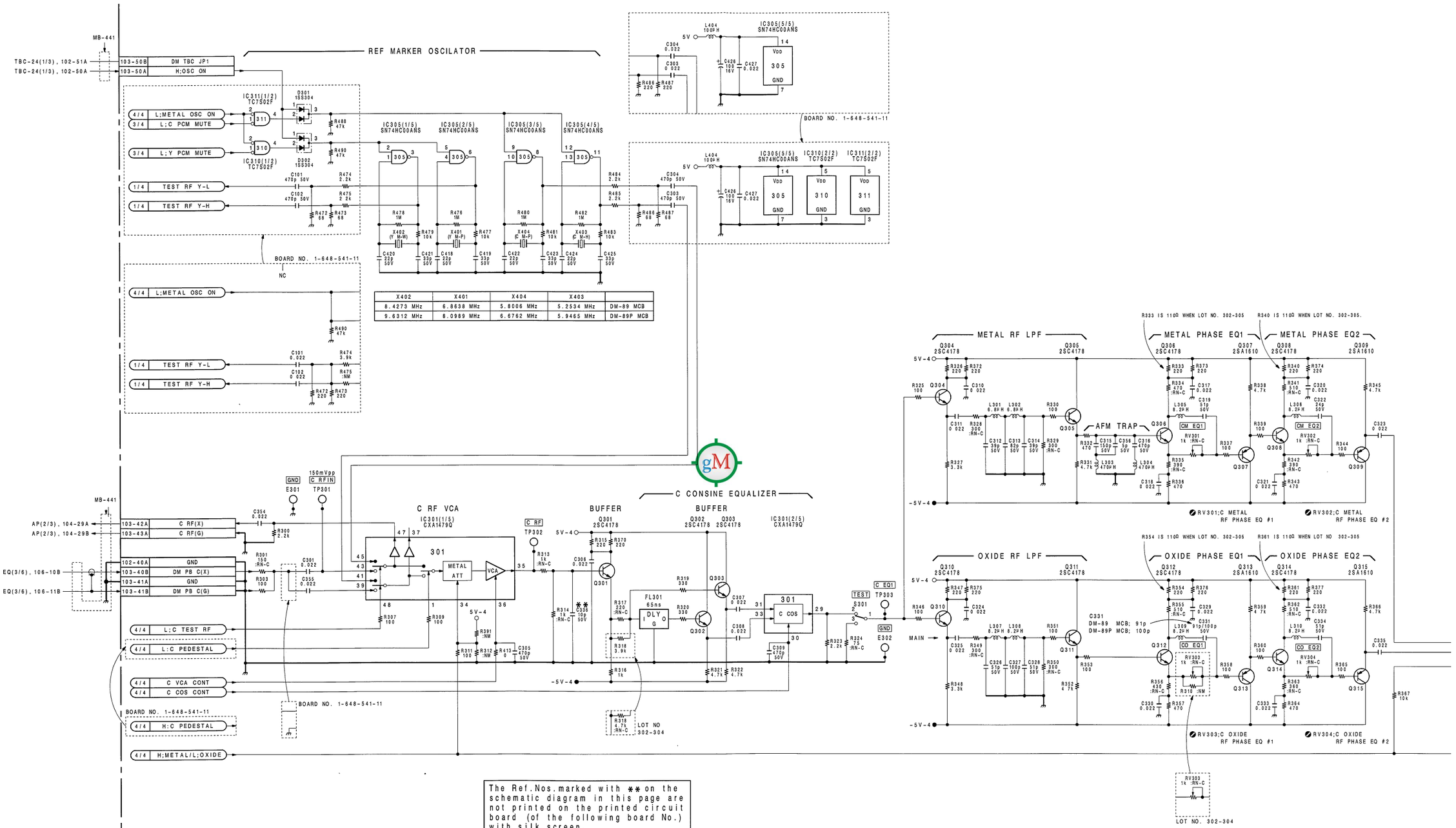
BOARD NO. 1-650-294-11

Betacam PB Y RF Process

DM-89 BOARD (1/4)

BOARD NO. 1-648-541-11, 12
BOARD' S LOT NO. 302-402
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89 MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510 (UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

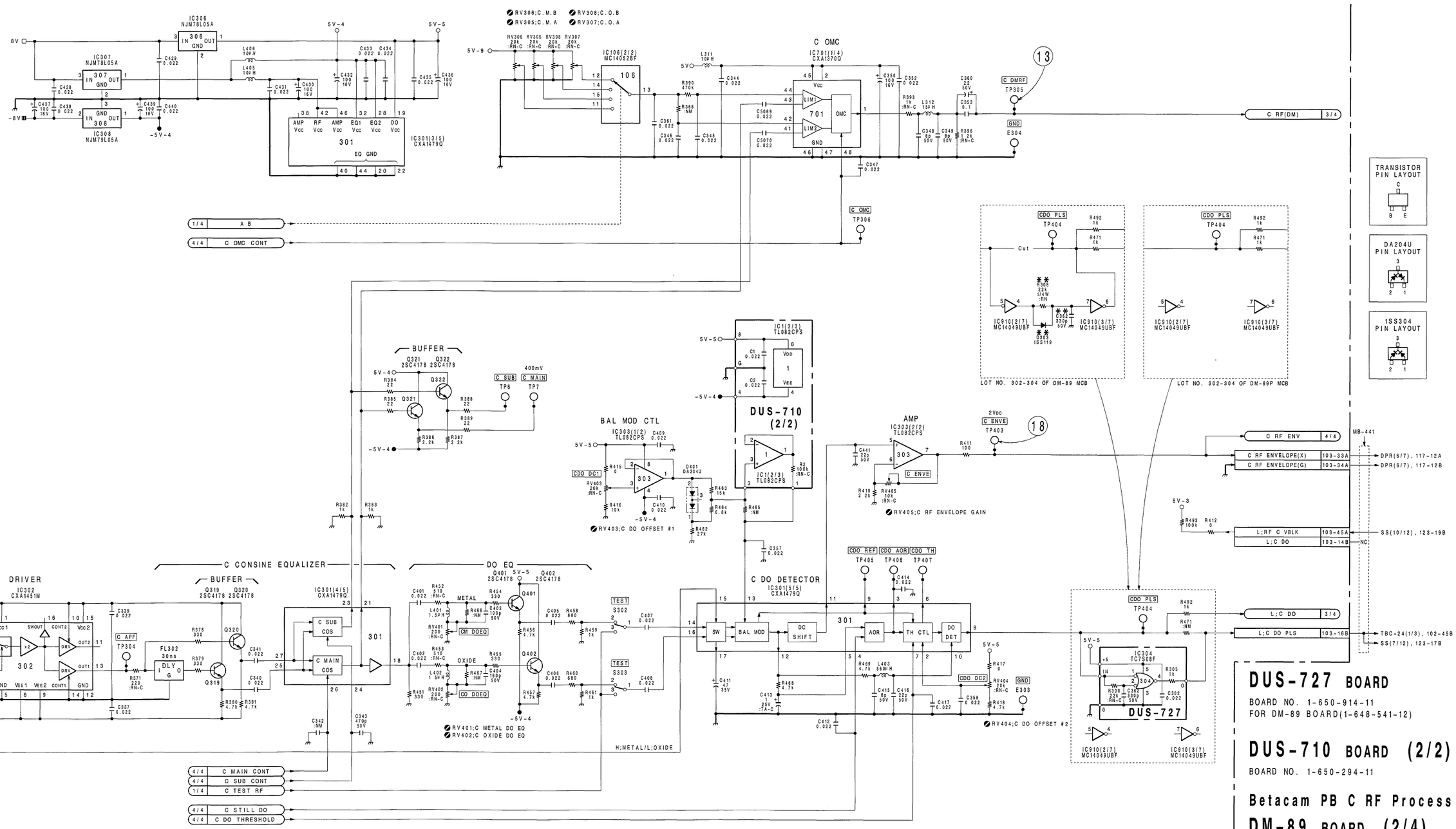
DVW-DM89-ALL-A-PB-S/M-06-A



The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

DM-89 BOARD: 1-648-541-11

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



DUS-727 BOARD

BOARD NO. 1-650-914-11
FOR DM-89 BOARD(1-648-541-12)

DUS-710 BOARD (2/2)

BOARD NO. 1-650-294-11

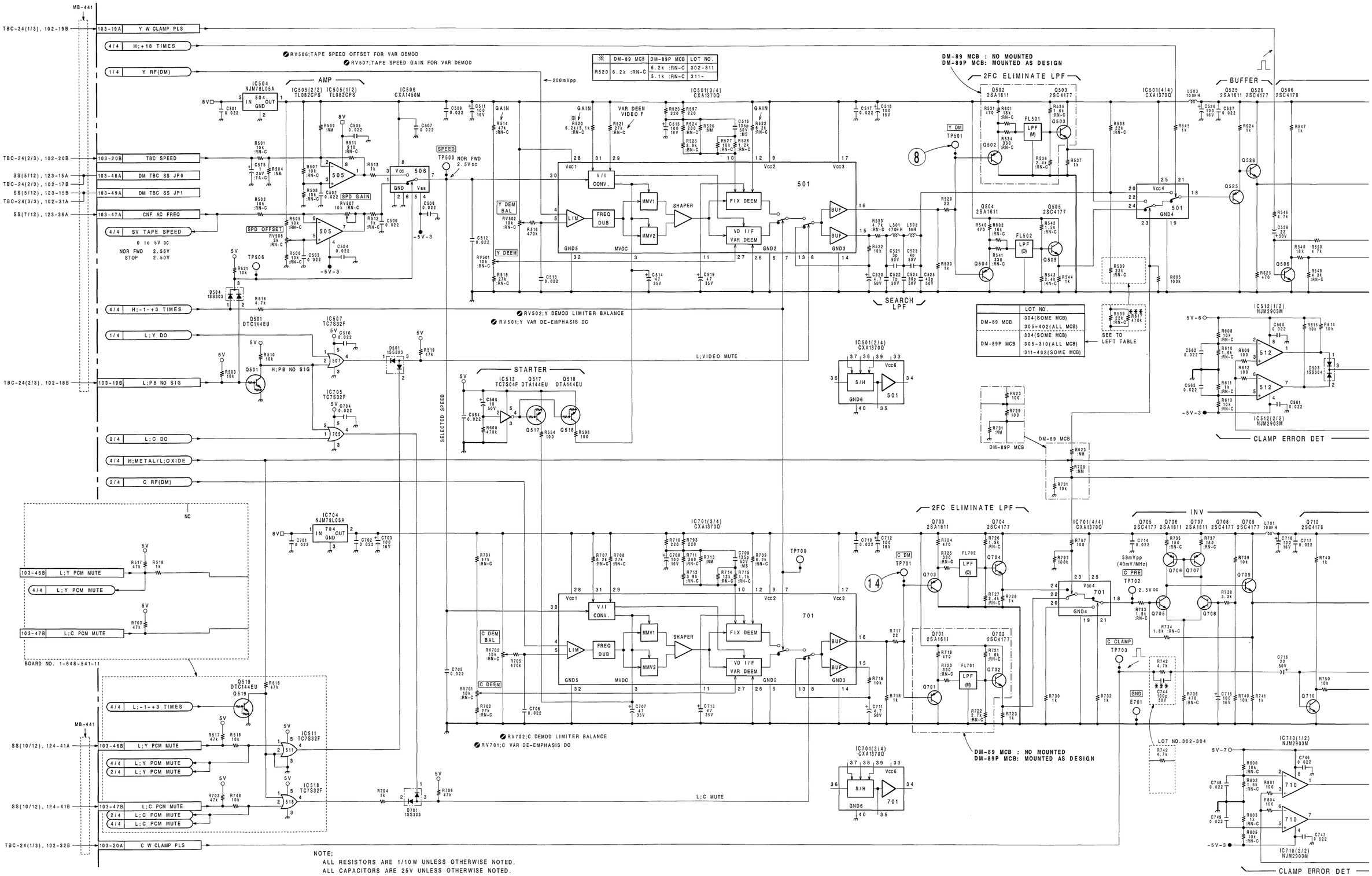
Betacam PB C RF Process

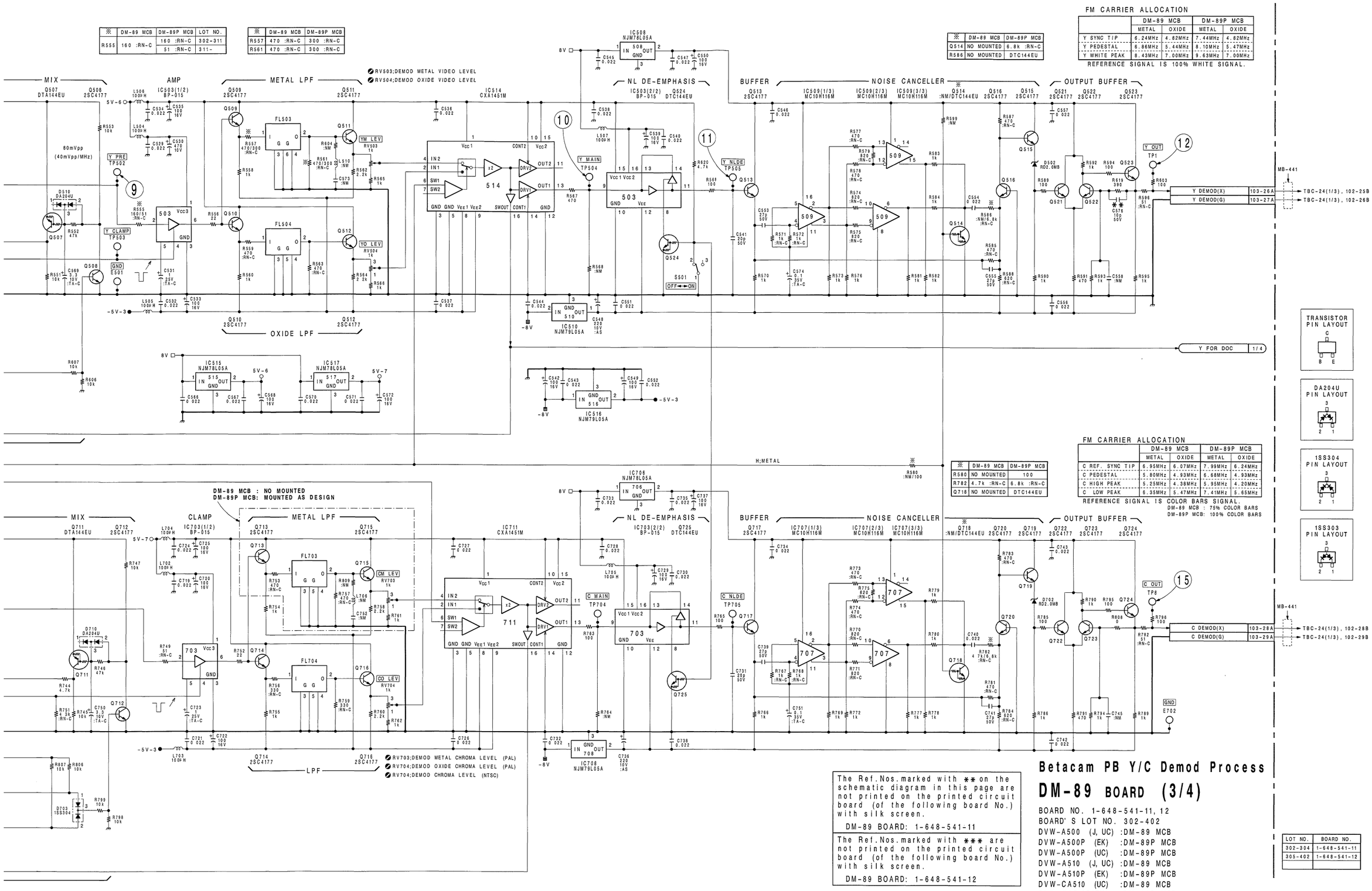
DM-89 BOARD (2/4)

BOARD NO. 1-648-541-11, 12
BOARD' S LOT NO. 302-402
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510 (UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

DVW-DM89-ALL-A-PB-S/M-06-A

LOT NO.	BOARD NO.
302-304	1-648-541-11
305-402	1-648-541-12


MB-441
TBC-24(1/3), 102-19B
103-19A Y W CLAMP PLS
4/4 H;+18 TIMES
RV506;TAPE SPEED OFFSET FOR VAR DEMOD
RV507;TAPE SPEED GAIN FOR VAR DEMOD
1/4 Y RF(DM)
200mVpp
※ DM-89 MCB DM-89P MCB LOT NO.
R520 6.2k :RN-C 5.2k :RN-C 302-311
5.1k :RN-C 311-
DM-89 MCB : NO MOUNTED
DM-89P MCB: MOUNTED AS DESIGN
IC504 NJM78L05A
IC505(2/2) TL082CPS
IC505(1/2) TL082CPS
IC506 CXA1450M
IC501(3/4) CXA1370Q
IC501(4/4) CXA1370Q
AMP
2FC ELIMINATE LPF
BUFFER
TBC-24(2/3), 102-20B
103-20B TBC SPEED
SS(5/12), 123-15A
103-48A DM TBC SS JP0
TBC-24(2/3), 102-17B
SS(5/12), 123-15B
103-49A DM TBC SS JP1
TBC-24(3/3), 102-31A
SS(7/12), 123-36A
103-47A CNF AC FREQ
4/4 SV TAPE SPEED
0 to 5V DC
NOR FWD 2.56V
STOP 2.50V
SPEED
TP500 NOR FWD 2.5V DC
SPD GAIN
SPD OFFSET
Y DEM BAL
Y DEM
GAIN
VAR DEEM VIDEO F
V/I CONV.
FREQ DUB
LIM
MMV1
MMV2
SHAPER
FIX DEEM
VD I/F VAR DEEM
BUF
501
MVDC
Y DM
TP501
SEARCH LPF
SEE TO LEFT TABLE
LOT NO.
DM-89 MCB 304(SOME MCB) 305-402(ALL MCB)
DM-89P MCB 304(SOME MCB) 305-310(ALL MCB) 311-402(SOME MCB)
IC512(1/2) NJM2903M
IC512(2/2) NJM2903M
CLAMP ERROR DET
4/4 H;-1-+3 TIMES
RV502;Y DEMOD LIMITER BALANCE
RV501;Y VAR DE-EMPHASIS DC
1/4 L;Y DO
H;PB NO SIG
L;VIDEO MUTE
IC507 TC7S32F
IC705 TC7S32F
IC501(2/4) CXA1370Q
S/H
TBC-24(2/3), 102-18B
103-19B L;PB NO SIG
STARTER
IC513 TC7S04F
Q517 DTA144EU
Q518 DTA144EU
SELECTED SPEED
2/4 L;C DO
4/4 H;METAL/L;OXIDE
2/4 C RF(DM)
NC
IC704 NJM78L05A
103-46B L;Y PCM MUTE
4/4 L;Y PCM MUTE
103-47B L;C PCM MUTE
BOARD NO. 1-648-541-11
C DEM BAL
C DEM
RV702;C DEMOD LIMITER BALANCE
RV701;C VAR DE-EMPHASIS DC
C DM
TP701
C PRE
TP702
C CLAMP
TP703
53mVpp (40mV/MHz)
2.5V DC
2FC ELIMINATE LPF
INV
DM-89 MCB : NO MOUNTED
DM-89P MCB: MOUNTED AS DESIGN
LOT NO.302-304
L;C MUTE
4/4 L;-1-+3 TIMES
SS(10/12), 124-41A
103-46B L;Y PCM MUTE
4/4 L;Y PCM MUTE
2/4 L;Y PCM MUTE
SS(10/12), 124-41B
103-47B L;C PCM MUTE
2/4 L;C PCM MUTE
4/4 L;C PCM MUTE
TBC-24(1/3), 102-32B
103-20A C W CLAMP PLS
IC511 TC7S32F
IC518 TC7S32F
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

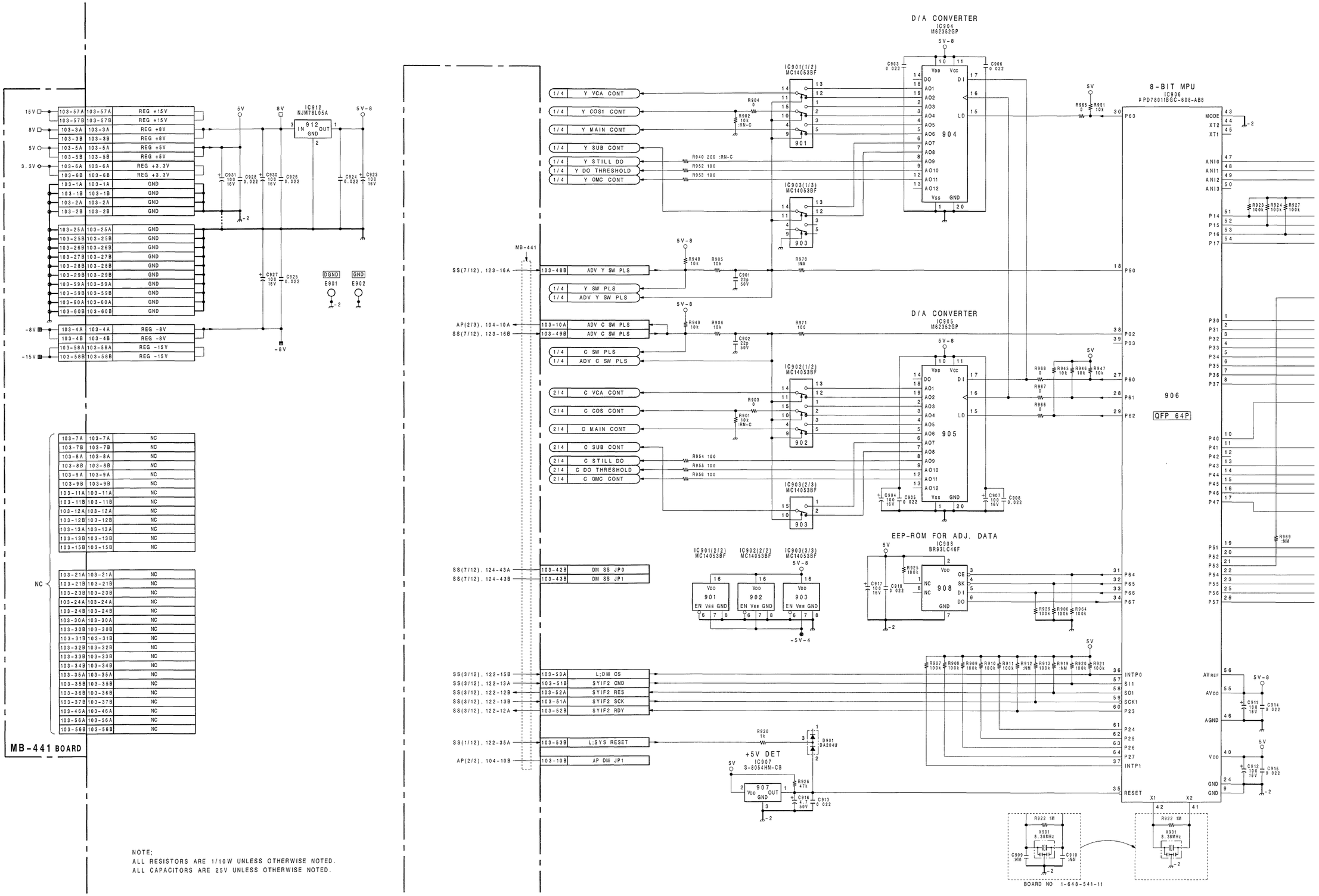


Betacam PB Y/C Demod Process

DM-89 BOARD (3/4)

BOARD NO. 1-648-541-11, 12
BOARD' S LOT NO. 302-402
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510 (UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

DVW-DM89-ALL-A-PB-S/M-06-A


MB-441 BOARD
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.
D/A CONVERTER
IC904 M62352GP
D/A CONVERTER
IC905 M62352GP
8-BIT MPU
IC906 μPD78011BGC-608-AB8
906
QFP 64P
EEP-ROM FOR ADJ. DATA
IC908 BR93LC46F
+5V DET
IC907 S-8054HN-CB
BOARD NO 1-648-541-11

FACTORY SETTING OF S901

	1	2	3	4
	ADJ	TIME	RF SW	P/N
DM-89 MCB	OFF	OFF	OFF	ON
DM-89P MCB	OFF	OFF	OFF	OFF

Y RF ENV 1/4
C RF ENV 2/4
SV TAPE SPEED 3/4

5V R928 100k
S901 (ADJ, TIME, RF SW, P/N)
R931 18k
R932 12k :RN-C
R973 :NM
NC

LOT NO 302 OF DM-89P MCB, WHEN VERSION OF IC906 IS 1.00.

BOARD NO 1-648-541-11

H;SEARCH TUNE 14M 1/4
H;SEARCH TUNE 6M 1/4
H;SEARCH SW FLAT 1/4
L;Y DOP 1/4
H;SEARCH SW LOW 1/4
H;SEARCH LPF 8M 1/4
H;SEARCH LPF 5M 1/4
H;SEARCH SW MID 1/4

BUFFER
IC909(4/5) MC14050BF

H;+18 TIMES 3/4
H;+18 TIMES 1/4
H;AFM MUTE 103-22A → AP(2/3), 104-23A
H;LAU MUTE 103-22B → AP(1/3), 104-24A
H;NR ON 103-23A → AP(1/3), 104-25A
H;SEARCH TUNE 3M 1/4
H;SEARCH LPF 3M 1/4
L;REF CK ERROR 103-54A → AP(2/3), 104-18A
L;PLL ERROR 103-54B → AP(2/3), 104-19A
L;W/R TIM ERROR 103-55A → AP(2/3), 104-20A
L;SQL ON 103-55B → AP(3/3), 104-21A

5V R963 100k, R962 100k, R961 100k, R960 100k, R959 100k

CUE(2/4), 105-56A

MB-441

5V R958 470 ADJUST D902 CL-150D-CD Q902 DTC144EU SWITCH

IC910(7/7) MC14049UBF
IC909(5/5) MC14050BF
IC911(5/5) SN74HC02ANS
C920 0.022, C919 0.022, C921 0.022, C922 100 16V

BOARD NO. 1-648-541-11

TBC-23(1/5), 101-18B → 103-18A H;Y REF INS
3/4 L;Y PCM MUTE
TBC-23(1/5), 101-19B → 103-17A H;Y PEDESTAL INS
TBC-23(1/5), 101-31B → 103-18B H;C REF INS
3/4 L;C PCM MUTE
TBC-23(1/5), 101-30B → 103-17B H;C PEDESTAL INS
SS(8/12), 123-18B → 103-45B L;SLOW BID
SS(8/12), 123-18A → 103-44B H;FAST SEARCH

IC910(6/7) MC14049UBF
D903 1SS304, D904 1SS304
R933 100k, R934 100k, R935 100k, R936 100k, R937 100k, R938 10k, R939 47k, R941 47k, R942 10k, R943 10k, R944 10k, R950 100k

IC911(4/5) SN74HC02ANS → L;Y TEST RF 2/4
IC911(2/5) SN74HC02ANS → L;Y PEDESTAL 1/4
IC911(3/5) SN74HC02ANS → L;C TEST RF 2/4
IC911(1/5) SN74HC02ANS → L;C PEDESTAL 2/4
IC909(2/5) MC14050BF → L;-1-+3 TIMES 3/4
IC910(5/7) MC14049UBF → H;-1-+3 TIMES 1/4, H;-1-+3 TIMES 3/4
IC909(3/5) MC14050BF → H;Y FAST SEARCH 1/4
IC910(4/7) MC14049UBF → H;Y PB 1/4
IC913 TC7S32F → H;METAL RF 1/4
IC909(1/5) MC14050BF → L;METAL/H:OXIDE 103-15A → MB-441 → TBC-24(3/3), 102-50B
L;METAL OSC ON 2/4
H;METAL/L:OXIDE 1/4
H;METAL/L:OXIDE 2/4
H;METAL/L:OXIDE 3/4

5V R957 1k, Q901 DTC144EU SWITCH, L;METAL

BOARD NO 1-648-541-11

TBC-23(1/5), 101-18B → 103-18A H;Y REF INS
3/4 L;Y PCM MUTE
TBC-23(1/5), 101-19B → 103-17A H;Y PEDESTAL INS (Cut)
TBC-23(1/5), 101-31B → 103-18B H;C REF INS
TBC-23(1/5), 101-30B → 103-17B H;C PEDESTAL INS
SS(8/12), 123-18B → 103-45B L;SLOW BID
SS(8/12), 123-18A → 103-44B H;FAST SEARCH

R939 :NM, R934 :NM

IC911(4/5) SN74HC02ANS → L;Y TEST RF 2/4, L;METAL OSC ON 2/4
IC909(1/5) MC14050BF → H;Y PEDESTAL 1/4
IC911(3/5) SN74HC02ANS → L;C TEST RF 2/4
IC909(2/5) MC14050BF → H;C PEDESTAL 2/4
IC910(5/7) MC14049UBF → H;-1-+3 TIMES 1/4, H;-1-+3 TIMES 3/4
IC909(3/5) MC14050BF → H;Y FAST SEARCH 1/4
IC910(4/7) MC14049UBF → H;Y PB 1/4
IC911(1/5) SN74HC02ANS, IC910(6/7) MC14049UBF → H;METAL RF 1/4
IC910(1/7) MC14049UBF → L;METAL/H:OXIDE 103-15A → MB-441 → TBC-24(3/3), 102-50B
IC911(2/5) SN74HC02ANS → H;METAL/L:OXIDE 1/4, H;METAL/L:OXIDE 2/4, H;METAL/L:OXIDE 3/4

5V R957 2.2k, Q901 DTC144EU SWITCH, L;METAL

TRANSISTOR PIN LAYOUT (C, B, E)
DA204U PIN LAYOUT (3, 2, 1)
1SS304 PIN LAYOUT (3, 2, 1)

Betacam PB Control

DM-89 BOARD (4/4)

BOARD NO. 1-648-541-11, 12
BOARD' S LOT NO. 302-402
DVW-A500 (J, UC) :DM-89 MCB
DVW-A500P (EK) :DM-89P MCB
DVW-A500P (UC) :DM-89P MCB
DVW-A510 (J, UC) :DM-89 MCB
DVW-A510P (EK) :DM-89P MCB
DVW-CA510 (UC) :DM-89 MCB
DVW-CA510P(EK) :DM-89P MCB

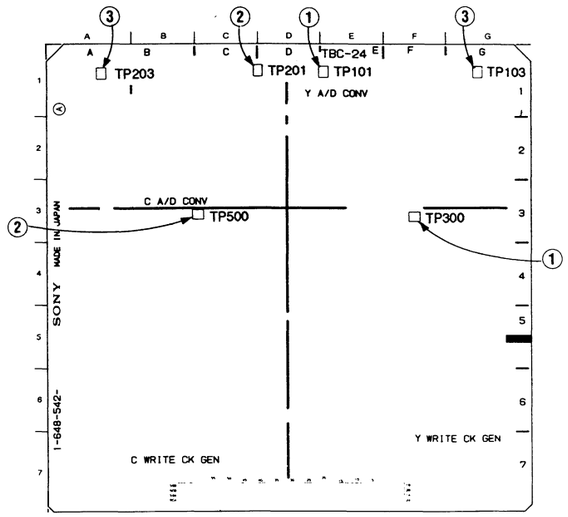
DVW-DM89-ALL-A-PB-S/M-06-A

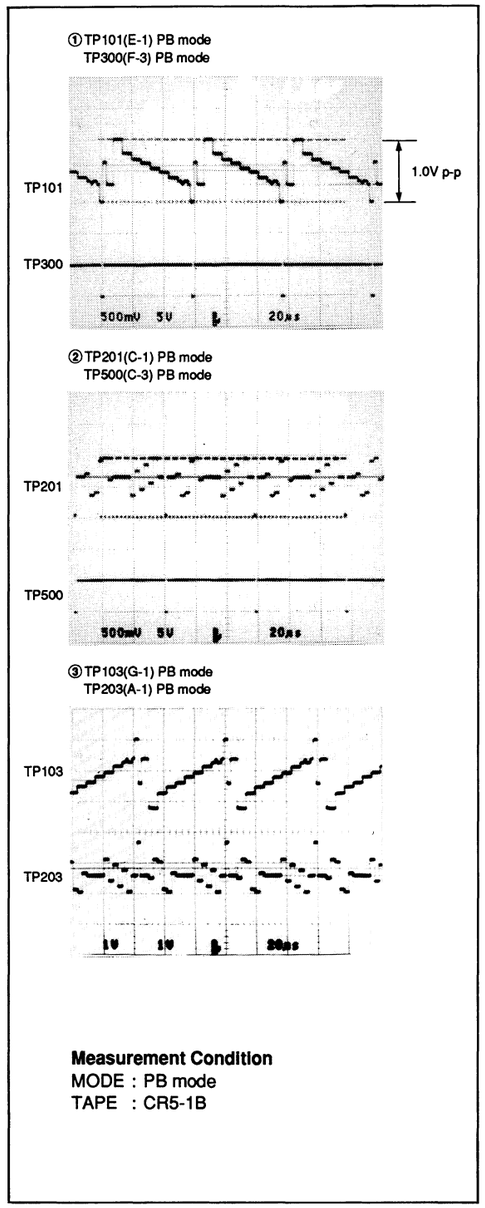
LOT NO.	BOARD NO.
302-304	1-648-541-11
305-402	1-648-541-12

I J K L M N O P

1 2 3 4 5

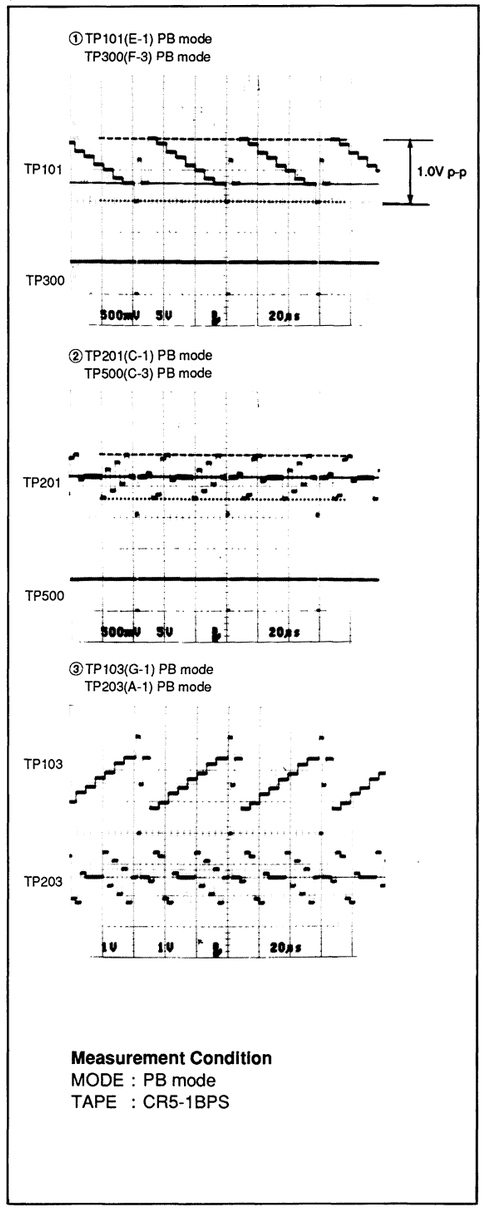
TBC-24 Board -A Side-





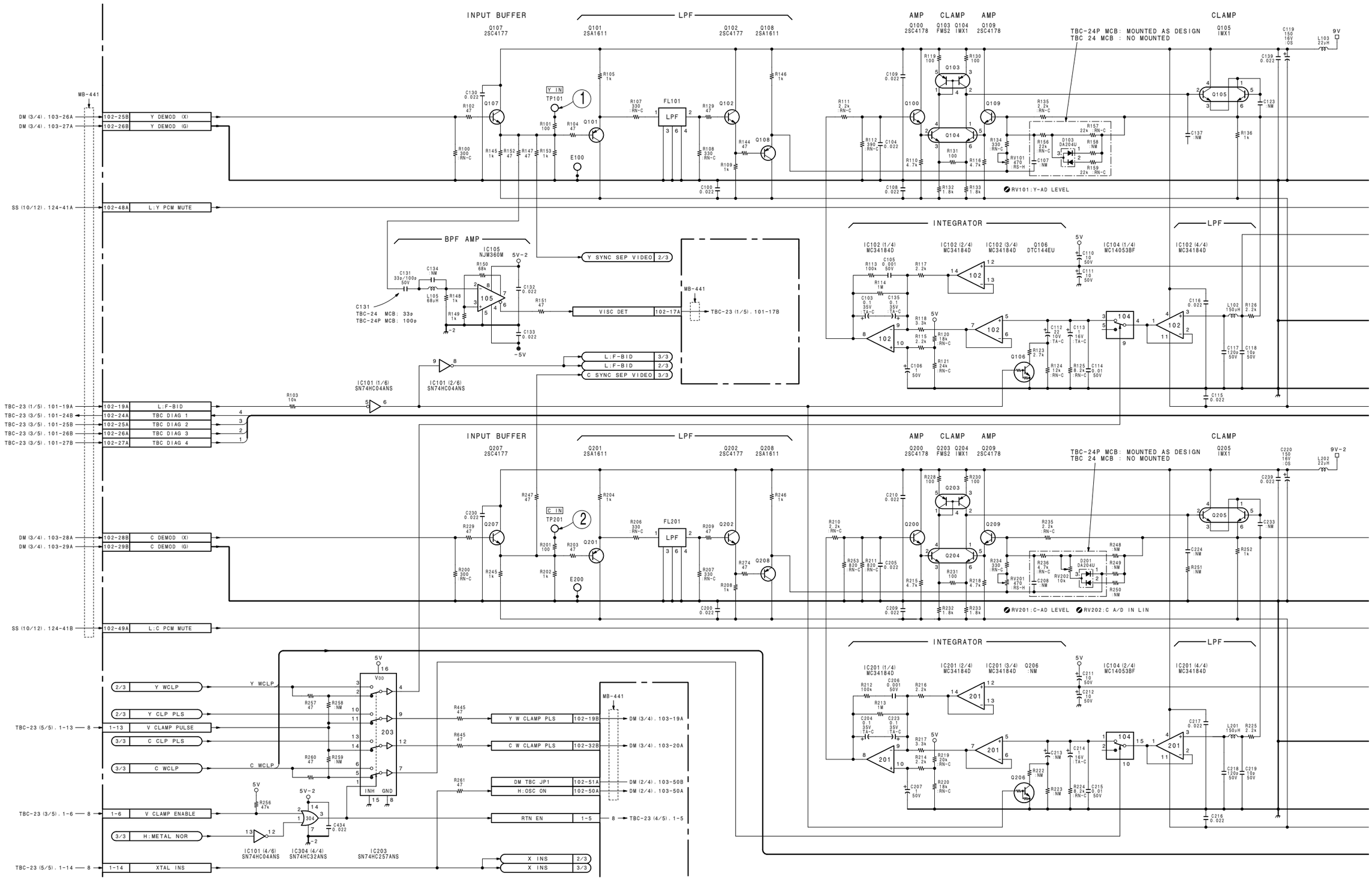
Measurement Condition
MODE : PB mode
TAPE : CR5-1B

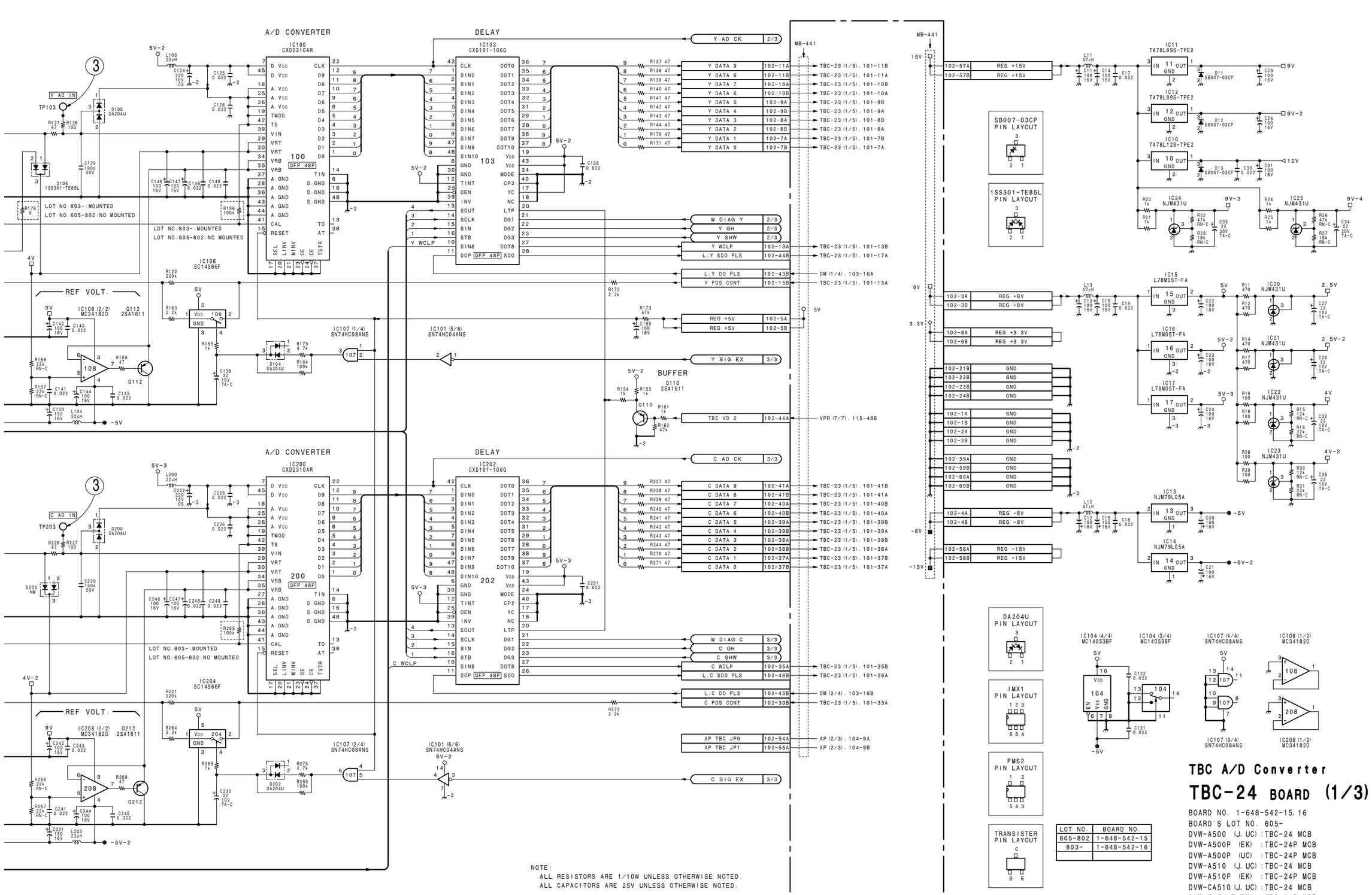
For DVW-A500/A510/CA510



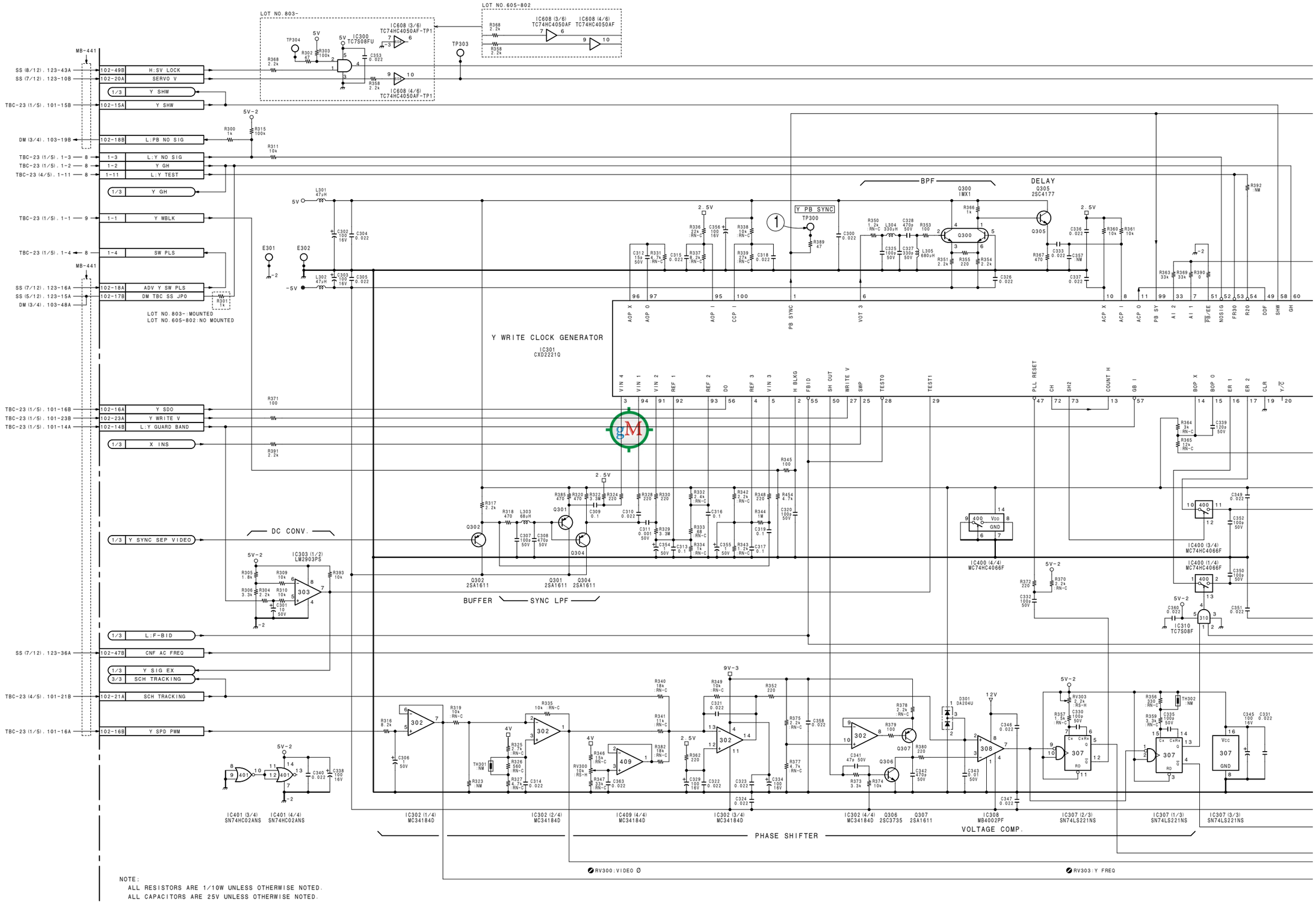
Measurement Condition
MODE : PB mode
TAPE : CR5-1BPS

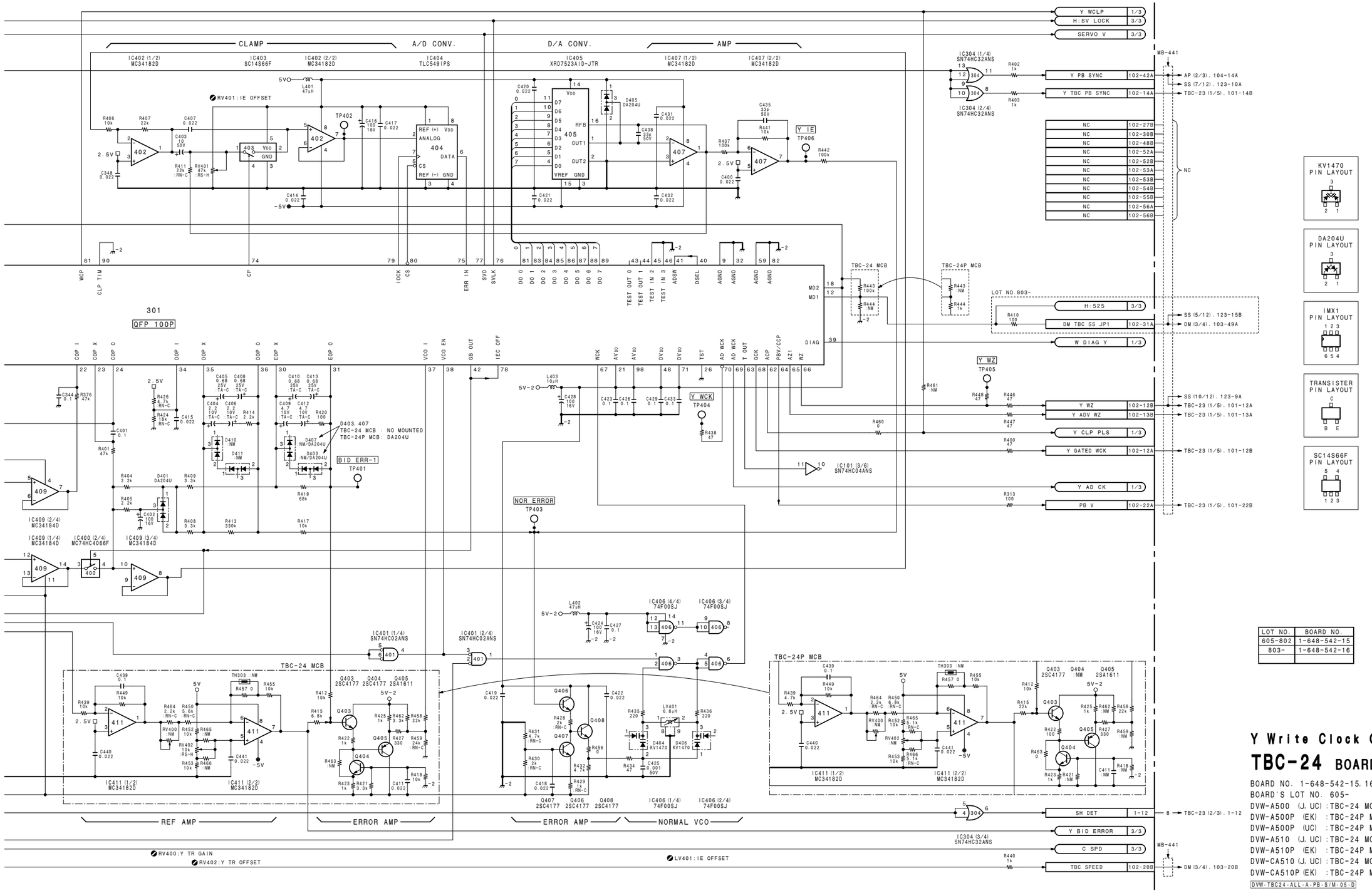
For DVW-A500P/A510P/CA510P


INPUT BUFFER
LPF
AMP
CLAMP
AMP
CLAMP
Q107 2SC4177
Q101 2SA1611
Q102 2SC4177
Q108 2SA1611
Q100 2SC4178
Q103 Q104 FMS2 IMX1
Q109 2SC4178
Q105 IMX1
TBC-24P MCB: MOUNTED AS DESIGN
TBC 24 MCB : NO MOUNTED
MB-441
DM (3/4), 103-26A
DM (3/4), 103-27A
102-25B Y DEMOD (X)
102-26B Y DEMOD (G)
SS (10/12), 124-41A
102-48A L:Y PCM MUTE
RV101:Y-AD LEVEL
BPF AMP
IC105 NJM360M
INTEGRATOR
LPF
IC102 (1/4) MC34184D
IC102 (2/4) MC34184D
IC102 (3/4) MC34184D
Q106 DTC144EU
IC104 (1/4) MC14053BF
IC102 (4/4) MC34184D
Y SYNC SEP VIDEO 2/3
VISC DET 102-17A
TBC-23 (1/5), 101-17B
L:F-BID 3/3
L:F-BID 2/3
C SYNC SEP VIDEO 3/3
C131 TBC-24 MCB: 33p TBC-24P MCB: 100p
IC101 (1/6) SN74HC04ANS
IC101 (2/6) SN74HC04ANS
TBC-23 (1/5), 101-19A
TBC-23 (3/5), 101-24B
TBC-23 (3/5), 101-25B
TBC-23 (3/5), 101-26B
TBC-23 (3/5), 101-27B
102-19A L:F-BID
102-24A TBC DIAG 1
102-25A TBC DIAG 2
102-26A TBC DIAG 3
102-27A TBC DIAG 4
INPUT BUFFER
LPF
AMP
CLAMP
AMP
CLAMP
Q207 2SC4177
Q201 2SA1611
Q202 2SC4177
Q208 2SA1611
Q200 2SC4178
Q203 Q204 FMS2 IMX1
Q209 2SC4178
Q205 IMX1
TBC-24P MCB: MOUNTED AS DESIGN
TBC 24 MCB : NO MOUNTED
DM (3/4), 103-28A
DM (3/4), 103-29A
102-28B C DEMOD (X)
102-29B C DEMOD (G)
SS (10/12), 124-41B
102-49A L:C PCM MUTE
RV201:C-AD LEVEL
RV202:C A/D IN LIN
INTEGRATOR
LPF
IC201 (1/4) MC34184D
IC201 (2/4) MC34184D
IC201 (3/4) MC34184D
Q206 :NM
IC104 (2/4) MC14053BF
IC201 (4/4) MC34184D
2/3 Y WCLP
2/3 Y CLP PLS
TBC-23 (5/5), 1-13 — 8 1-13 V CLAMP PULSE
3/3 C CLP PLS
3/3 C WCLP
TBC-23 (3/5), 1-6 — 8 1-6 V CLAMP ENABLE
3/3 H:METAL NOR
TBC-23 (5/5), 1-14 — 8 1-14 XTAL INS
Y WCLP
C WCLP
IC101 (4/6) SN74HC04ANS
IC304 (4/4) SN74HC32ANS
IC203 SN74HC257ANS
Y W CLAMP PLS 102-19B
C W CLAMP PLS 102-32B
DM TBC JP1 102-51A
H:OSC ON 102-50A
RTN EN 1-5
X INS 2/3
X INS 3/3
DM (3/4), 103-19A
DM (3/4), 103-20A
DM (2/4), 103-50B
DM (2/4), 103-50A
TBC-23 (4/5), 1-5


A/D CONVERTER
IC100 CXD2310AR
DELAY
IC103 CXD101-106Q
Y AD CK 2/3
Y AD IN
TP103
D100 DA204U
Y DATA 9 102-11A → TBC-23 (1/5), 101-11B
Y DATA 8 102-11B → TBC-23 (1/5), 101-11A
Y DATA 7 102-10A → TBC-23 (1/5), 101-10B
Y DATA 6 102-10B → TBC-23 (1/5), 101-10A
Y DATA 5 102-9A → TBC-23 (1/5), 101-9B
Y DATA 4 102-9B → TBC-23 (1/5), 101-9A
Y DATA 3 102-8A → TBC-23 (1/5), 101-8B
Y DATA 2 102-8B → TBC-23 (1/5), 101-8A
Y DATA 1 102-7A → TBC-23 (1/5), 101-7B
Y DATA 0 102-7B → TBC-23 (1/5), 101-7A
W DIAG Y 2/3
Y GH 2/3
Y SHW 2/3
Y WCLP 102-13A → TBC-23 (1/5), 101-13B
L:Y SDO PLS 102-44B → TBC-23 (1/5), 101-17A
L:Y DO PLS 102-43B → DM (1/4), 103-16A
Y PDS CONT 102-15B → TBC-23 (1/5), 101-15A
LOT NO. 803-:MOUNTED
LOT NO. 605-802:NO MOUNTED
REF VOLT.
IC106 SC14S66F
IC108 (2/2) MC34182D
Q112 2SA1611
IC107 (1/4) SN74HC08ANS
IC101 (5/6) SN74HC04ANS
REG +5V 102-5A
REG +5V 102-5B
Y SIG EX 2/3
BUFFER
Q110 2SA1611
TBC VD 2 102-44A → VPR (7/7), 115-48B
A/D CONVERTER
IC200 CXD2310AR
DELAY
IC202 CXD101-106Q
C AD CK 3/3
C AD IN
TP203
D200 DA204U
C DATA 9 102-41A → TBC-23 (1/5), 101-41B
C DATA 8 102-41B → TBC-23 (1/5), 101-41A
C DATA 7 102-40A → TBC-23 (1/5), 101-40B
C DATA 6 102-40B → TBC-23 (1/5), 101-40A
C DATA 5 102-39A → TBC-23 (1/5), 101-39B
C DATA 4 102-39B → TBC-23 (1/5), 101-39A
C DATA 3 102-38A → TBC-23 (1/5), 101-38B
C DATA 2 102-38B → TBC-23 (1/5), 101-38A
C DATA 1 102-37A → TBC-23 (1/5), 101-37B
C DATA 0 102-37B → TBC-23 (1/5), 101-37A
W DIAG C 3/3
C GH 3/3
C SHW 3/3
C WCLP 102-35A → TBC-23 (1/5), 101-35B
L:C SDO PLS 102-46B → TBC-23 (1/5), 101-28A
L:C DO PLS 102-45B → DM (2/4), 103-16B
C PDS CONT 102-33B → TBC-23 (1/5), 101-33A
AP TBC JP0 102-54A → AP (2/3), 104-9A
AP TBC JP1 102-55A → AP (2/3), 104-9B
C SIG EX 3/3
LOT NO. 803-:MOUNTED
LOT NO. 605-802:NO MOUNTED
REF VOLT.
IC204 SC14S66F
IC208 (2/2) MC34182D
Q212 2SA1611
IC107 (2/4) SN74HC08ANS
IC101 (6/6) SN74HC04ANS
MB-441
REG +15V 102-57A
REG +15V 102-57B
REG +8V 102-3A
REG +8V 102-3B
REG +3.3V 102-6A
REG +3.3V 102-6B
GND 102-21B
GND 102-22B
GND 102-23B
GND 102-24B
GND 102-1A
GND 102-1B
GND 102-2A
GND 102-2B
GND 102-59A
GND 102-59B
GND 102-60A
GND 102-60B
REG -8V 102-4A
REG -8V 102-4B
REG -15V 102-58A
REG -15V 102-58B
SB007-03CP PIN LAYOUT
1SS301-TE85L PIN LAYOUT
IC11 TA78L09S-TPE2
IC12 TA78L09S-TPE2
IC10 TA78L12S-TPE2
IC15 L78M05T-FA
IC16 L78M05T-FA
IC17 L78M05T-FA
IC13 NJM79L05A
IC14 NJM79L05A
IC24 NJM431U
IC25 NJM431U
IC20 NJM431U
IC21 NJM431U
IC22 NJM431U
IC23 NJM431U
9V
9V-2
12V
9V-3
9V-4
2.5V
2.5V-2
4V
4V-2
5V
5V-2
5V-3
-5V
-5V-2
DA204U PIN LAYOUT
IMX1 PIN LAYOUT
FMS2 PIN LAYOUT
TRANSISTER PIN LAYOUT
IC104 (4/4) MC14053BF
IC104 (3/4) MC14053BF
IC107 (4/4) SN74HC08ANS
IC107 (3/4) SN74HC08ANS
IC108 (1/2) MC34182D
IC108 (2/2) MC34182D
TBC A/D Converter
TBC-24 BOARD (1/3)
BOARD NO. 1-648-542-15, 16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : TBC-24 MCB
DVW-A500P (EK) : TBC-24P MCB
DVW-A500P (UC) : TBC-24P MCB
DVW-A510 (J, UC) : TBC-24 MCB
DVW-A510P (EK) : TBC-24P MCB
DVW-CA510 (J, UC) : TBC-24 MCB
DVW-CA510P (EK) : TBC-24P MCB
DVW-TBC24-ALL-A-PB-S/M-05-D
LOT NO. BOARD NO.
605-802 1-648-542-15
803- 1-648-542-16
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

TBC-24 (2/3)


LOT NO.803-
LOT NO.605-802
MB-441
SS (8/12), 123-43A
SS (7/12), 123-10B
TBC-23 (1/5), 101-15B
DM (3/4), 103-19B
TBC-23 (1/5), 1-3
TBC-23 (1/5), 1-2
TBC-23 (4/5), 1-11
TBC-23 (1/5), 1-1
TBC-23 (1/5), 1-4
SS (7/12), 123-16A
SS (5/12), 123-15A
DM (3/4), 103-48A
TBC-23 (1/5), 101-16B
TBC-23 (1/5), 101-23B
TBC-23 (1/5), 101-14A
SS (7/12), 123-36A
TBC-23 (4/5), 101-21B
TBC-23 (1/5), 101-16A
102-49B H:SV LOCK
102-20A SERVO V
1/3 Y SHW
102-15A Y SHW
102-18B L:PB NO SIG
1-3 L:Y NO SIG
1-2 Y GH
1-11 L:Y TEST
1/3 Y GH
1-1 Y WBLK
1-4 SW PLS
102-18A ADV Y SW PLS
102-17B DM TBC SS JP0
LOT NO.803-:MOUNTED
LOT NO.605-802:NO MOUNTED
102-16A Y SDO
102-23A Y WRITE V
102-14B L:Y GUARD BAND
1/3 X INS
1/3 Y SYNC SEP VIDEO
1/3 L:F-BID
102-47B CNF AC FREQ
1/3 Y SIG EX
3/3 SCH TRACKING
102-21A SCH TRACKING
102-16B Y SPD PWM
DC CONV.
IC303 (1/2) LM2903PS
IC300 TC7S08FU
IC608 (3/6) TC74HC4050AF-TP1
IC608 (4/6) TC74HC4050AF-TP1
IC608 (3/6) TC74HC4050AF
IC608 (4/6) TC74HC4050AF
Y WRITE CLOCK GENERATOR
IC301 CXD2221Q
BUFFER
SYNC LPF
PHASE SHIFTER
VOLTAGE COMP.
BPF
DELAY
Q300 IMX1
Q305 2SC4177
Y PB SYNC
TP300
TP303
TP304
IC400 (3/4) MC74HC4066F
IC400 (4/4) MC74HC4066F
IC400 (1/4) MC74HC4066F
IC310 TC7S08F
IC401 (3/4) SN74HC02ANS
IC401 (4/4) SN74HC02ANS
IC302 (1/4) MC34184D
IC302 (2/4) MC34184D
IC409 (4/4) MC34184D
IC302 (3/4) MC34184D
IC302 (4/4) MC34184D
IC308 MB4002PF
IC307 (2/3) SN74LS221NS
IC307 (1/3) SN74LS221NS
IC307 (3/3) SN74LS221NS
Q302 2SA1611
Q301 2SA1611
Q304 2SA1611
Q306 2SC3735
Q307 2SA1611
D301 DA204U
RV300:VIDEO Ø
RV303:Y FREQ
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



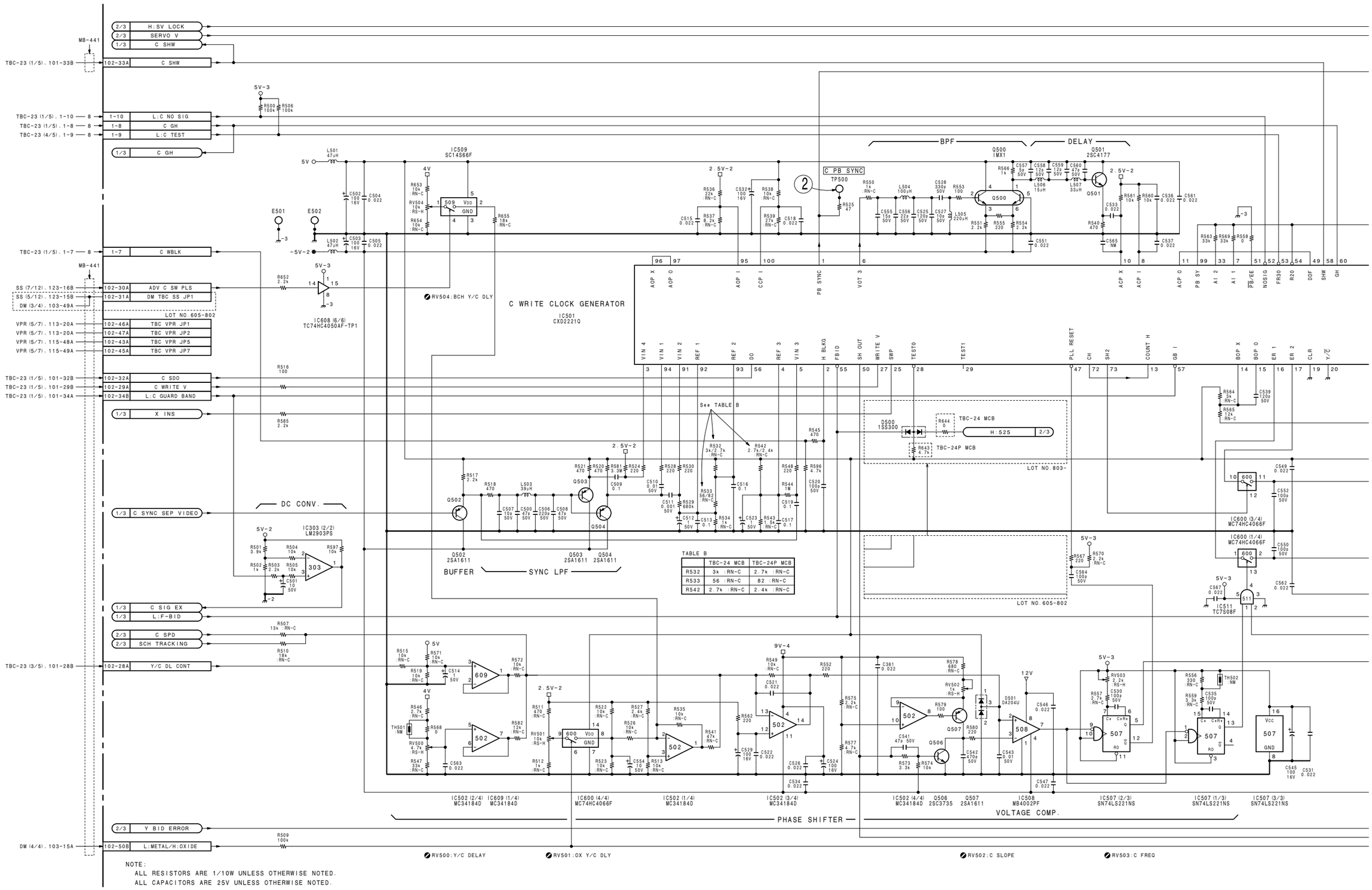
LOT NO.	BOARD NO.
605-802	1-648-542-15
803~	1-648-542-16

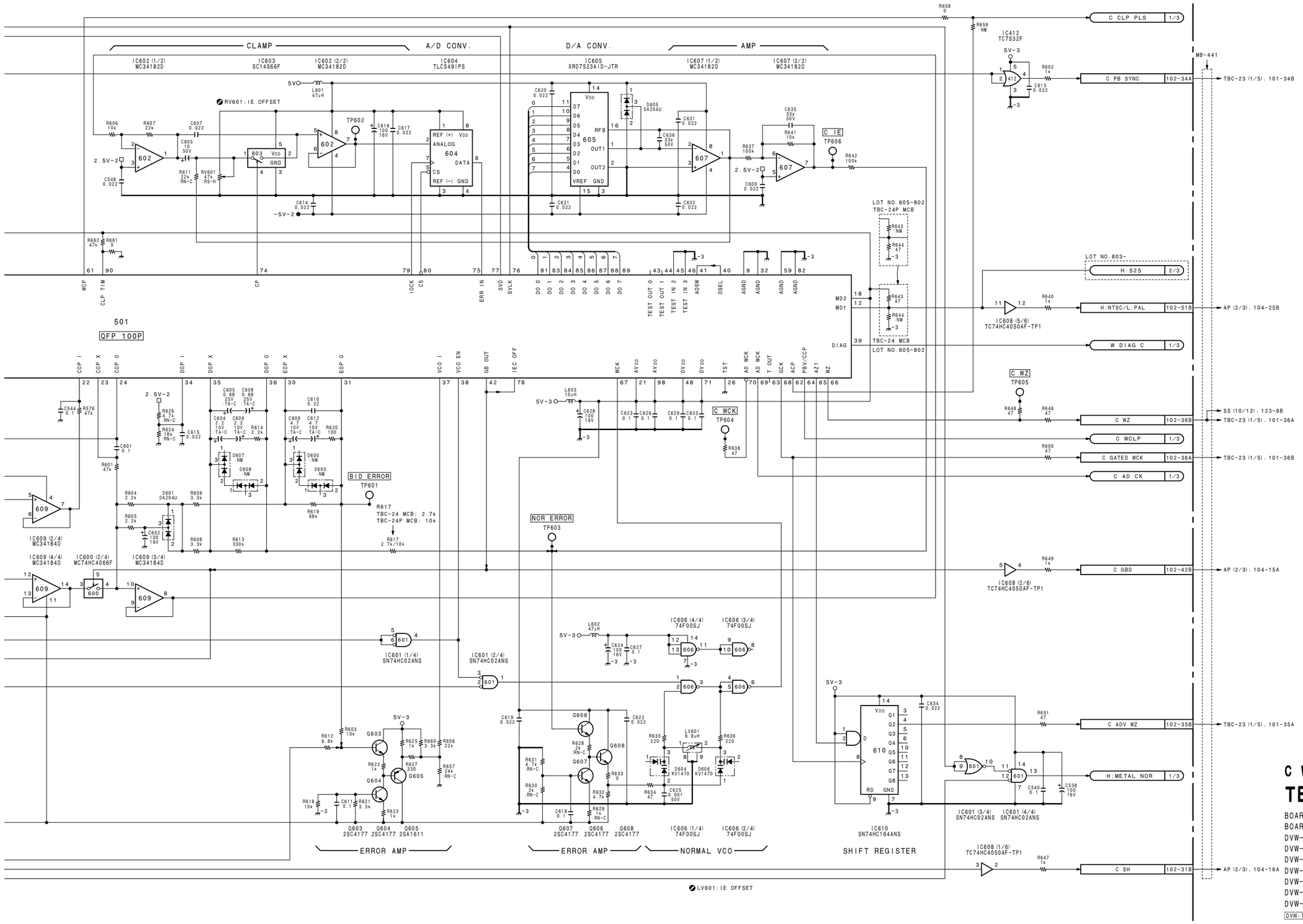
Y Write Clock Generator

TBC-24 BOARD (2/3)

BOARD NO. 1-648-542-15, 16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : TBC-24 MCB
DVW-A500P (EK) : TBC-24P MCB
DVW-A500P (UC) : TBC-24P MCB
DVW-A510 (J, UC) : TBC-24 MCB
DVW-A510P (EK) : TBC-24P MCB
DVW-CA510 (J, UC) : TBC-24 MCB
DVW-CA510P (EK) : TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-D


C WRITE CLOCK GENERATOR
IC501
CXD2221Q
PHASE SHIFTER
VOLTAGE COMP.
BUFFER
SYNC LPF
DC CONV.
BPF
DELAY
TABLE B
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



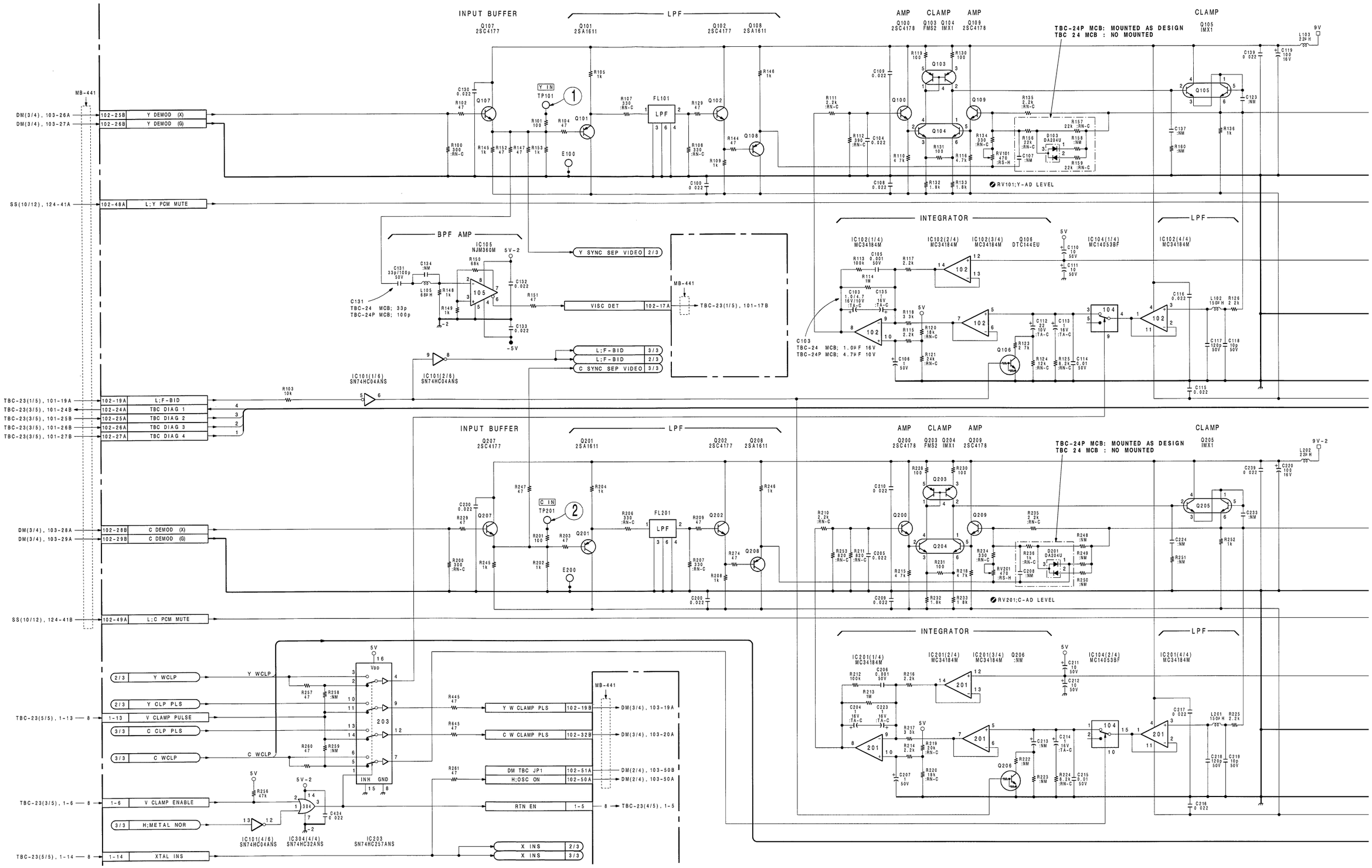
LOT NO.	BOARD NO.
605-802	1-648-542-15
803-	1-648-542-16

C Write Clock Generator

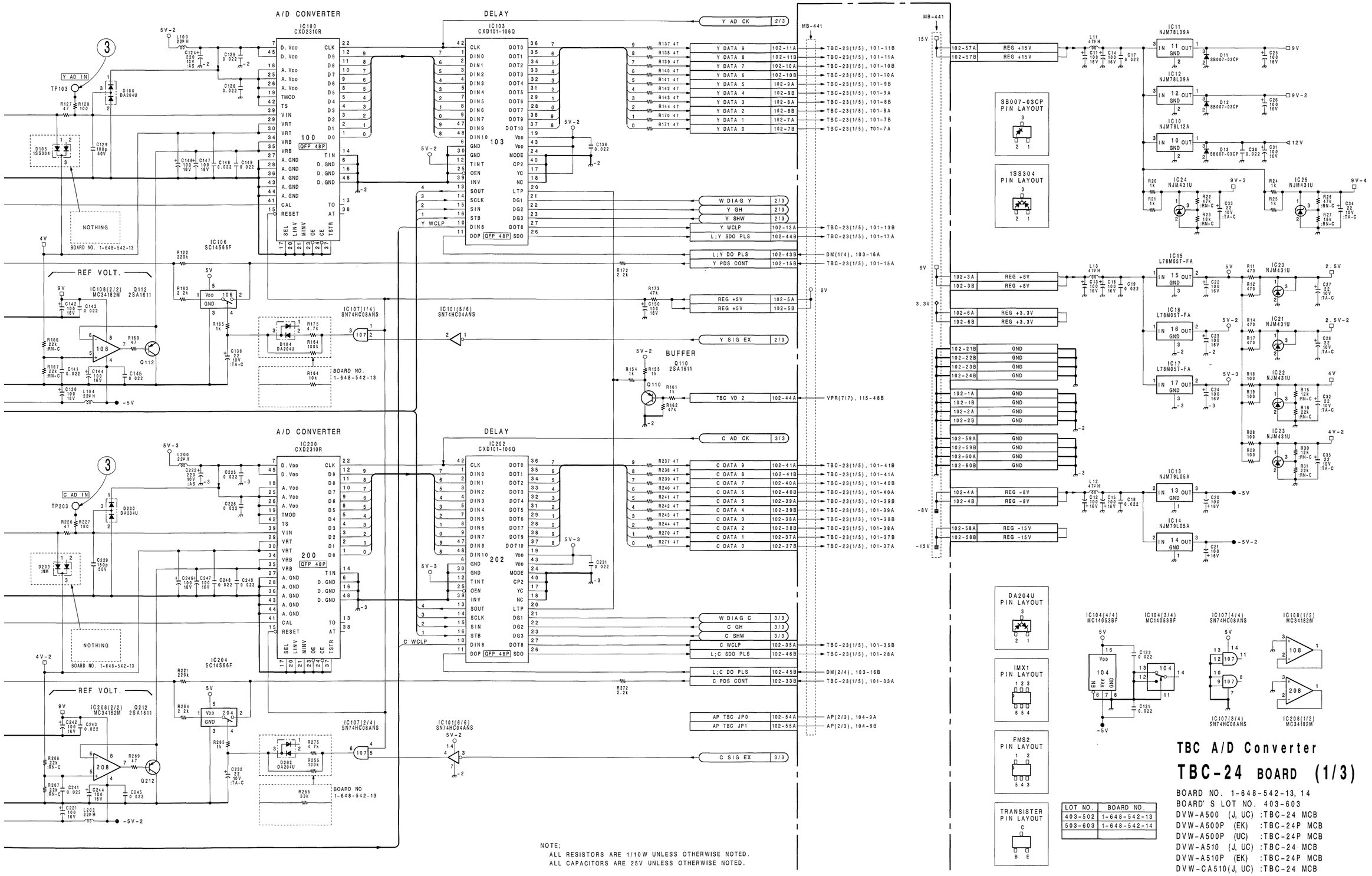
TBC-24 BOARD (3/3)

BOARD NO. 1-648-542-15, 16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : TBC-24 MCB
DVW-A500P (EK) : TBC-24P MCB
DVW-A500P (UC) : TBC-24P MCB
DVW-A510 (J, UC) : TBC-24 MCB
DVW-A510P (EK) : TBC-24P MCB
DVW-CA510 (J, UC) : TBC-24 MCB
DVW-CA510P (EK) : TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-D


INPUT BUFFER
LPF
AMP
CLAMP
AMP
CLAMP
TBC-24P MCB: MOUNTED AS DESIGN
TBC 24 MCB : NO MOUNTED
MB-441
DM(3/4), 103-26A
DM(3/4), 103-27A
102-25B Y DEMOD (X)
102-26B Y DEMOD (G)
SS(10/12), 124-41A
102-48A L;Y PCM MUTE
RV101;Y-AD LEVEL
BPF AMP
INTEGRATOR
LPF
Y SYNC SEP VIDEO 2/3
VISC DET 102-17A
TBC-23(1/5), 101-17B
L;F-BID 3/3
L;F-BID 2/3
C SYNC SEP VIDEO 3/3
C131 TBC-24 MCB: 33p TBC-24P MCB: 100p
C103 TBC-24 MCB; 1.0µF 16V TBC-24P MCB; 4.7µF 10V
TBC-23(1/5), 101-19A
TBC-23(3/5), 101-24B
TBC-23(3/5), 101-25B
TBC-23(3/5), 101-26B
TBC-23(3/5), 101-27B
102-19A L;F-BID
102-24A TBC DIAG 1
102-25A TBC DIAG 2
102-26A TBC DIAG 3
102-27A TBC DIAG 4
IC101(1/6) SN74HC04ANS
IC101(2/6) SN74HC04ANS
INPUT BUFFER
LPF
AMP
CLAMP
AMP
CLAMP
TBC-24P MCB: MOUNTED AS DESIGN
TBC 24 MCB : NO MOUNTED
DM(3/4), 103-28A
DM(3/4), 103-29A
102-28B C DEMOD (X)
102-29B C DEMOD (G)
SS(10/12), 124-41B
102-49A L;C PCM MUTE
RV201;C-AD LEVEL
INTEGRATOR
LPF
2/3 Y WCLP
2/3 Y CLP PLS
1-13 V CLAMP PULSE
3/3 C CLP PLS
3/3 C WCLP
1-6 V CLAMP ENABLE
3/3 H;METAL NOR
1-14 XTAL INS
TBC-23(5/5), 1-13
TBC-23(5/5), 1-14
TBC-23(3/5), 1-6
Y W CLAMP PLS 102-19B
C W CLAMP PLS 102-32B
DM TBC JP1 102-51A
H;OSC ON 102-50A
RTN EN 1-5
X INS 2/3
X INS 3/3
DM(3/4), 103-19A
DM(3/4), 103-20A
DM(2/4), 103-50B
DM(2/4), 103-50A
TBC-23(4/5), 1-5
IC101(4/6) SN74HC04ANS
IC304(4/4) SN74HC32ANS
IC203 SN74HC257ANS

A B C D E F G H



TBC A/D Converter

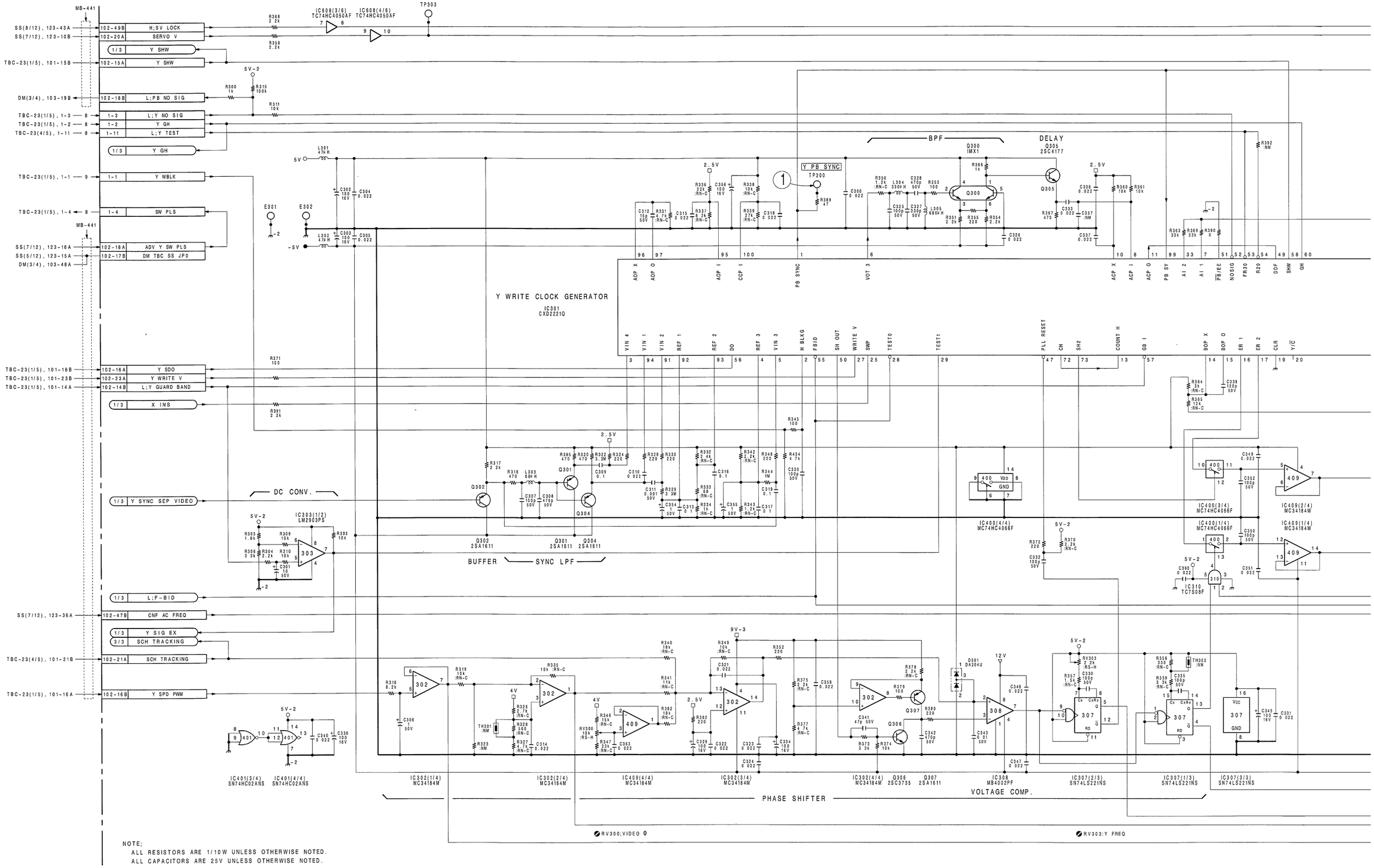
TBC-24 BOARD (1/3)

BOARD NO. 1-648-542-13, 14
BOARD' S LOT NO. 403-603

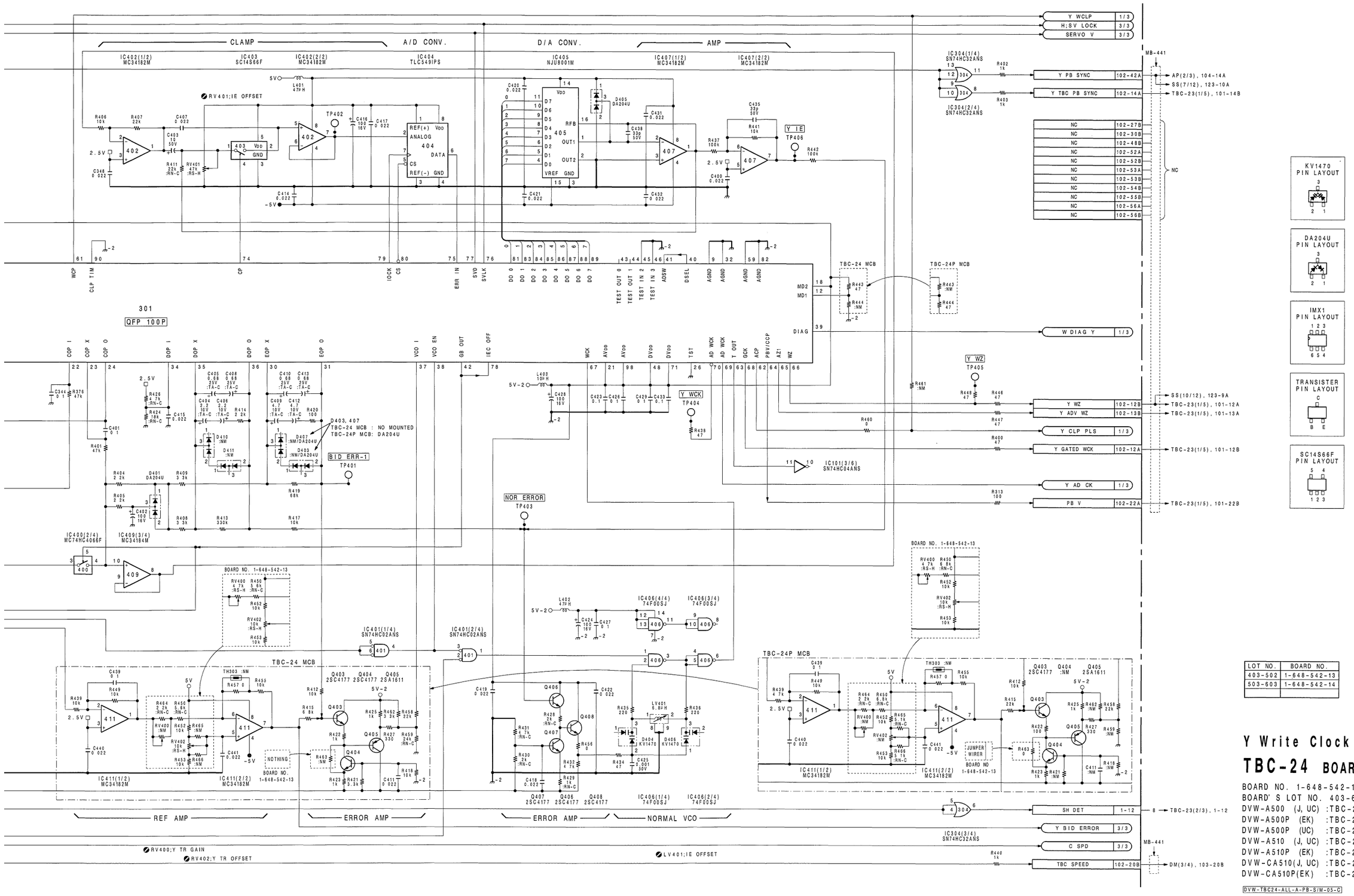
LOT NO.	BOARD NO.
403-502	1-648-542-13
503-603	1-648-542-14

DVW-A500 (J, UC) :TBC-24 MCB
DVW-A500P (EK) :TBC-24P MCB
DVW-A500P (UC) :TBC-24 MCB
DVW-A510 (J, UC) :TBC-24 MCB
DVW-A510P (EK) :TBC-24P MCB
DVW-CA510(J, UC) :TBC-24 MCB
DVW-CA510P(EK) :TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-C



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



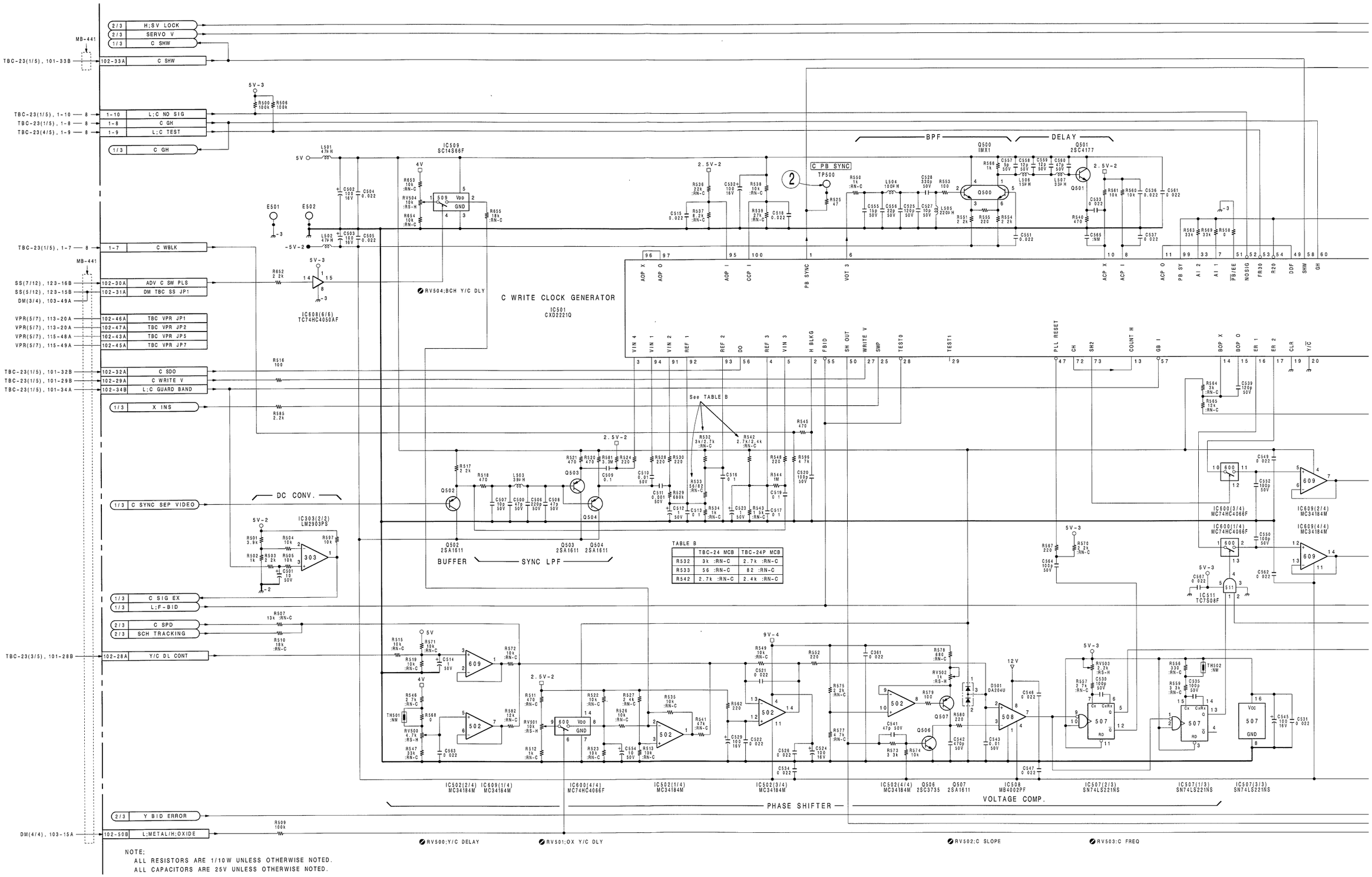
LOT NO.	BOARD NO.
403-502	1-648-542-13
503-603	1-648-542-14

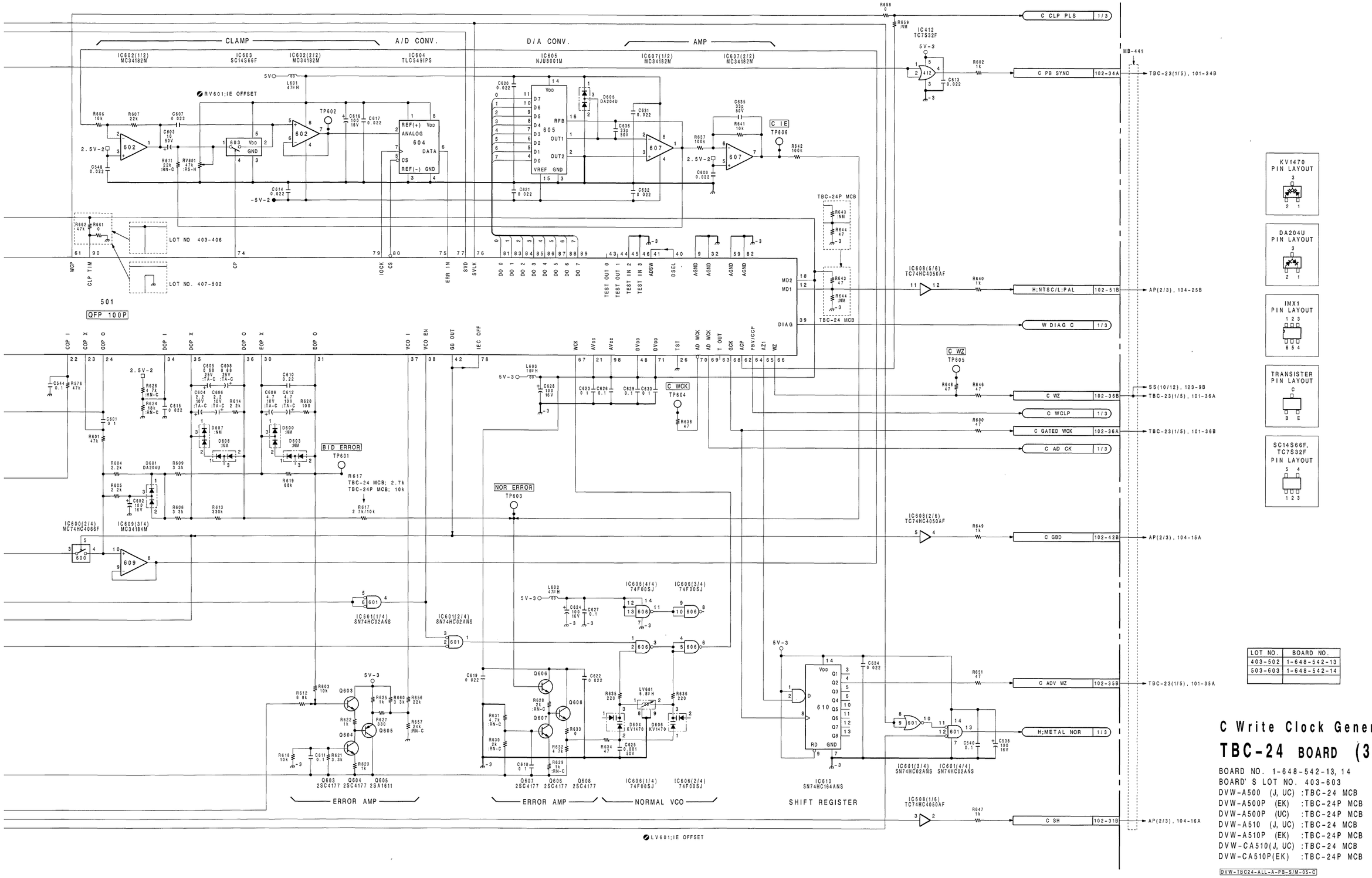
Y Write Clock Generator

TBC-24 BOARD (2/3)

BOARD NO. 1-648-542-13, 14
BOARD' S LOT NO. 403-603
DVW-A500 (J, UC) :TBC-24 MCB
DVW-A500P (EK) :TBC-24P MCB
DVW-A500P (UC) :TBC-24P MCB
DVW-A510 (J, UC) :TBC-24 MCB
DVW-A510P (EK) :TBC-24P MCB
DVW-CA510(J, UC) :TBC-24 MCB
DVW-CA510P(EK) :TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-C


C WRITE CLOCK GENERATOR
IC501
CXD2221Q
BPF
DELAY
PHASE SHIFTER
VOLTAGE COMP.
DC CONV.
BUFFER
SYNC LPF
C PB SYNC
RV504;BCH Y/C DLY
RV500;Y/C DELAY
RV501;OX Y/C DLY
RV502;C SLOPE
RV503;C FREQ
See TABLE B
2/3 H;SV LOCK
2/3 SERVO V
1/3 C SHW
102-33A C SHW
1-10 L;C NO SIG
1-8 C GH
1-9 L;C TEST
1/3 C GH
1-7 C WBLK
102-30A ADV C SW PLS
102-31A DM TBC SS JP1
102-46A TBC VPR JP1
102-47A TBC VPR JP2
102-43A TBC VPR JP5
102-45A TBC VPR JP7
102-32A C SDO
102-29A C WRITE V
102-34B L;C GUARD BAND
1/3 X INS
1/3 C SYNC SEP VIDEO
1/3 C SIG EX
1/3 L;F-BID
2/3 C SPD
2/3 SCH TRACKING
102-28A Y/C DL CONT
2/3 Y BID ERROR
102-50B L;METAL/H;OXIDE
TBC-23(1/5), 101-33B
TBC-23(1/5), 1-10
TBC-23(1/5), 1-8
TBC-23(4/5), 1-9
TBC-23(1/5), 1-7
SS(7/12), 123-16B
SS(5/12), 123-15B
DM(3/4), 103-49A
VPR(5/7), 113-20A
VPR(5/7), 113-20A
VPR(5/7), 115-48A
VPR(5/7), 115-49A
TBC-23(1/5), 101-32B
TBC-23(1/5), 101-29B
TBC-23(1/5), 101-34A
TBC-23(3/5), 101-28B
DM(4/4), 103-15A
MB-441
IC509 SC14566F
IC608(6/6) TC74HC4050AF
IC303(2/2) LM2903PS
IC502(2/4) MC34184M
IC609(1/4) MC34184M
IC600(4/4) MC74HC4066F
IC502(1/4) MC34184M
IC502(3/4) MC34184M
IC502(4/4) MC34184M
Q506 2SC3735
Q507 2SA1611
IC508 MB4002PF
IC507(2/3) SN74LS221NS
IC507(1/3) SN74LS221NS
IC507(3/3) SN74LS221NS
IC600(3/4) MC74HC4066F
IC600(1/4) MC74HC4066F
IC609(2/4) MC34184M
IC609(4/4) MC34184M
IC511 TC7S08F
Q500 IMX1
Q501 2SC4177
Q502 2SA1611
Q503 2SA1611
Q504 2SA1611
TABLE B
TBC-24 MCB
TBC-24P MCB
R532 3k :RN-C 2.7k :RN-C
R533 56 :RN-C 82 :RN-C
R542 2.7k :RN-C 2.4k :RN-C
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



KV1470 PIN LAYOUT

DA204U PIN LAYOUT

IMX1 PIN LAYOUT

TRANSISTER PIN LAYOUT

SC14S66F, TC7S32F PIN LAYOUT

LOT NO.	BOARD NO.
403-502	1-648-542-13
503-603	1-648-542-14

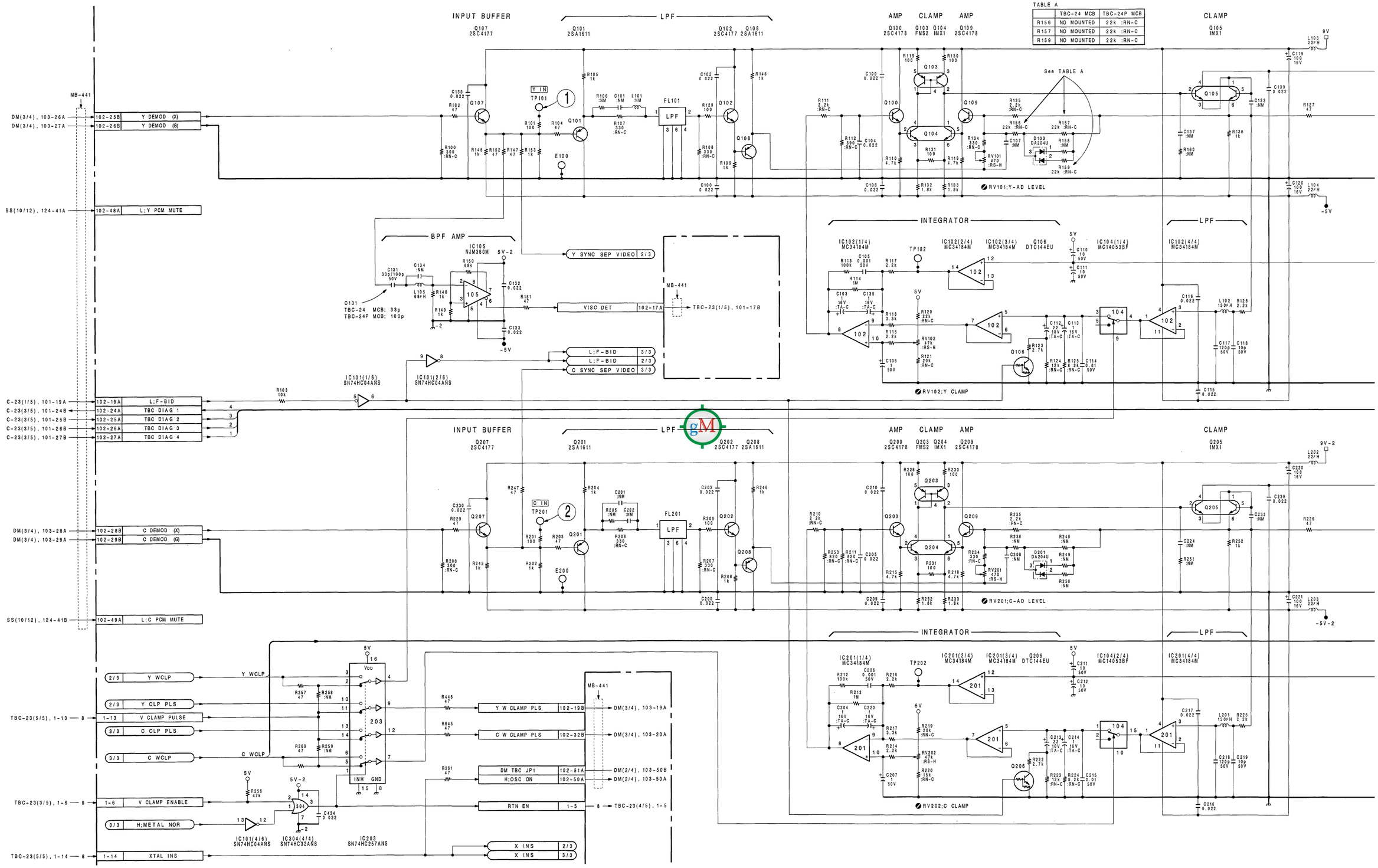
C Write Clock Generator

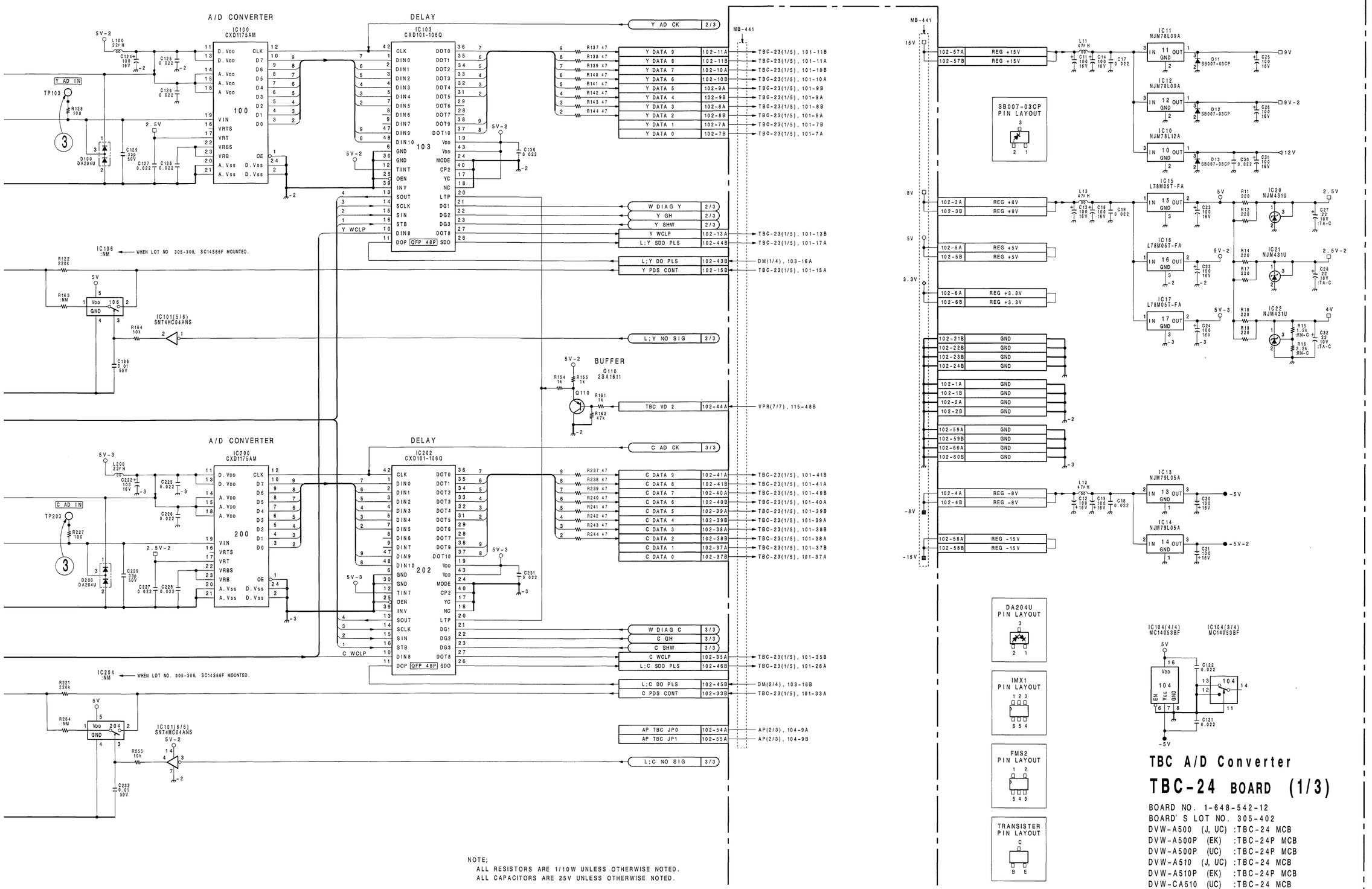
TBC-24 BOARD (3/3)

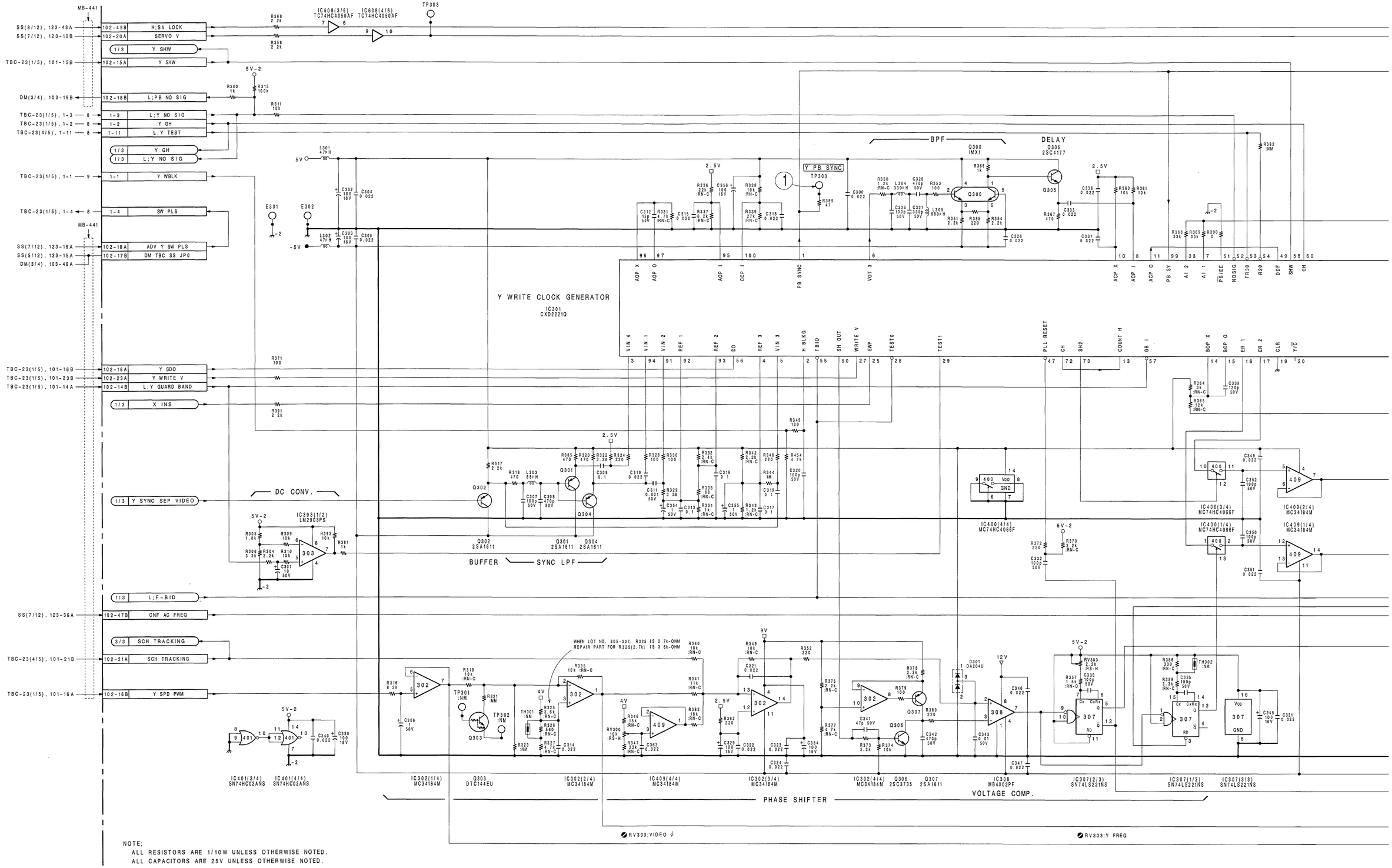
BOARD NO. 1-648-542-13, 14
BOARD' S LOT NO. 403-603
DVW-A500 (J, UC) :TBC-24 MCB
DVW-A500P (EK) :TBC-24P MCB
DVW-A500P (UC) :TBC-24P MCB
DVW-A510 (J, UC) :TBC-24 MCB
DVW-A510P (EK) :TBC-24P MCB
DVW-CA510(J, UC) :TBC-24 MCB
DVW-CA510P(EK) :TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-C

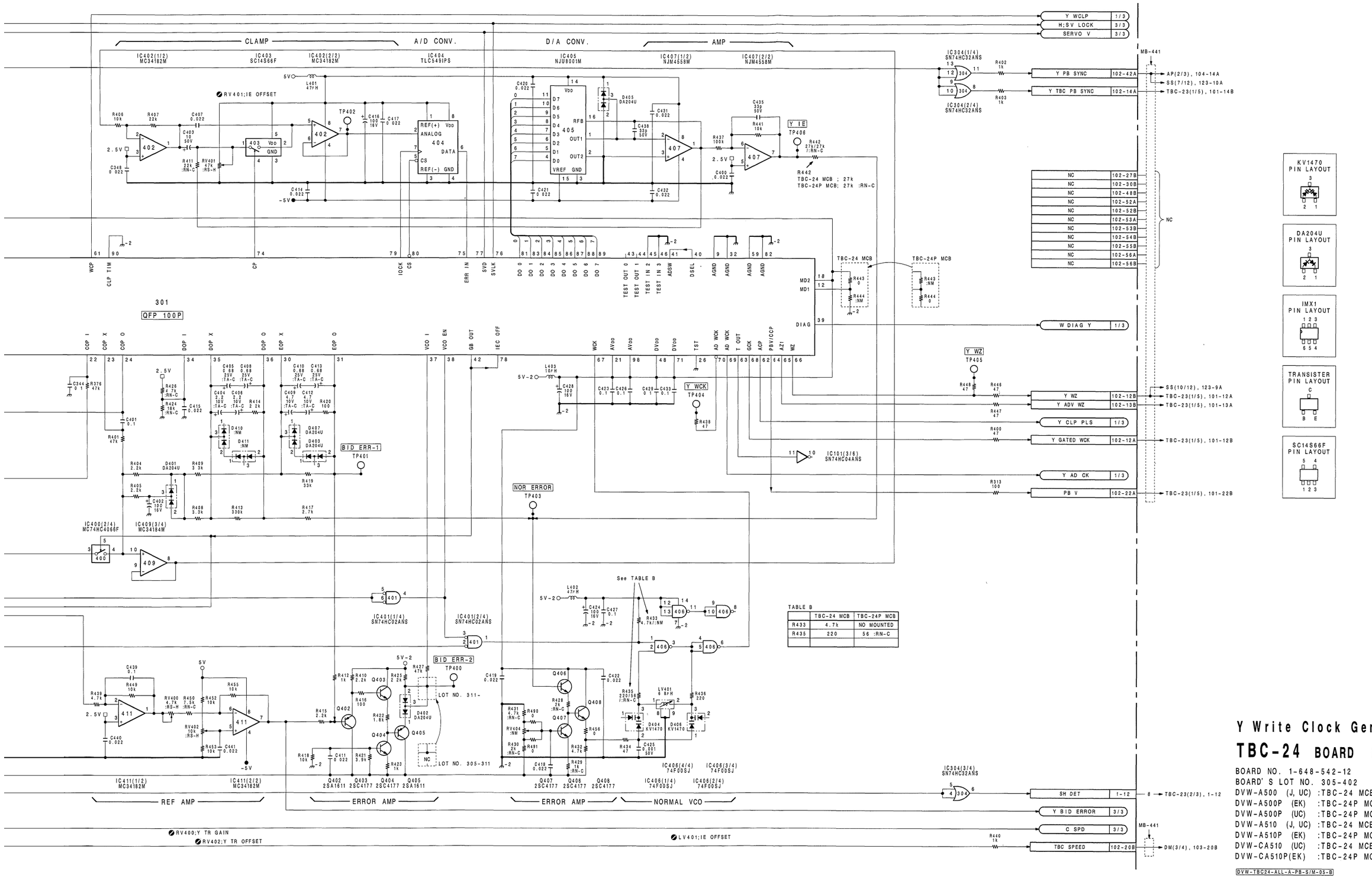
I J K L M N O P

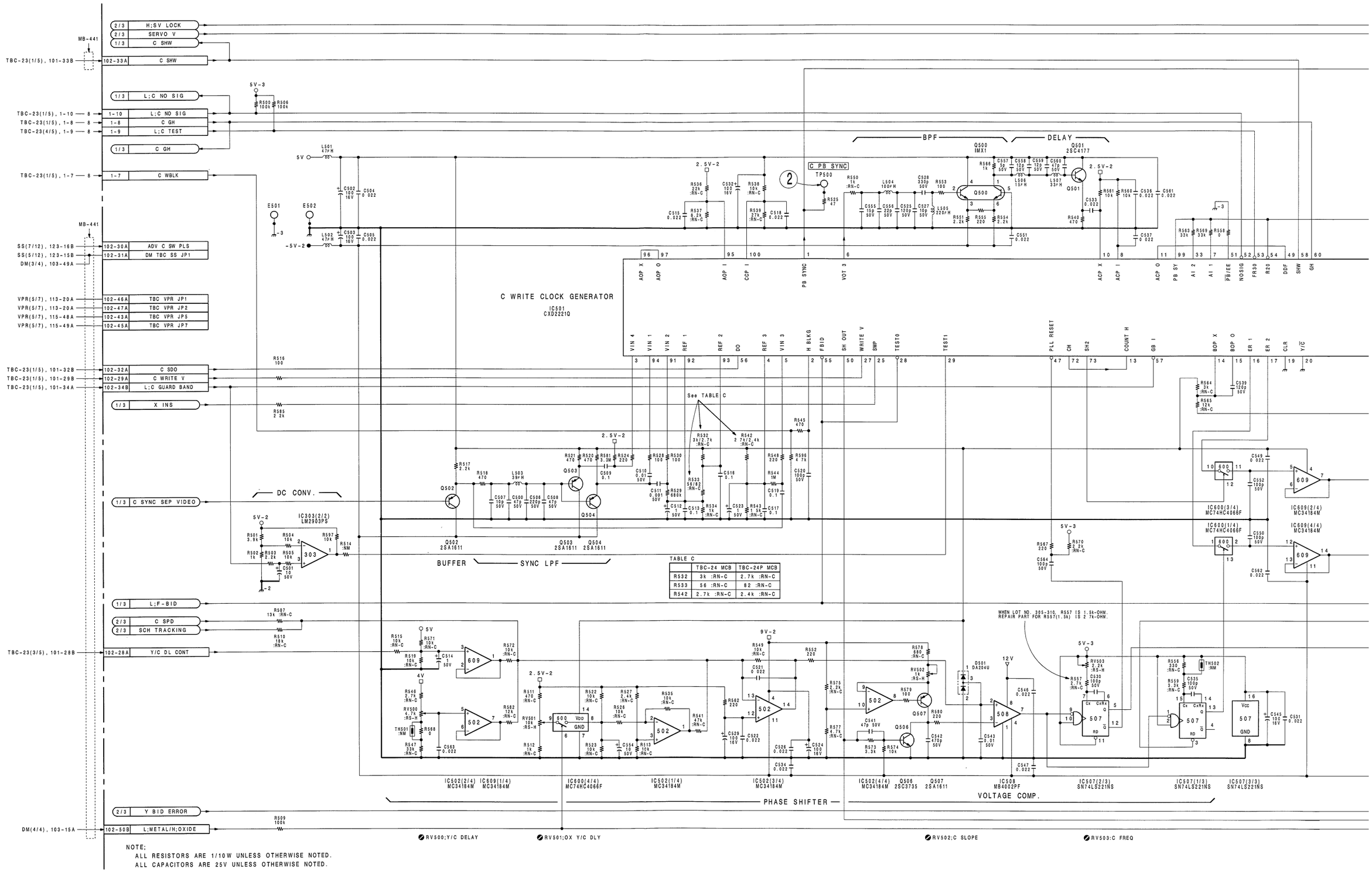

INPUT BUFFER
LPF
AMP
CLAMP
AMP
CLAMP
INTEGRATOR
LPF
BPF AMP
MB-441
DM(3/4), 103-26A
DM(3/4), 103-27A
102-25B Y DEMOD (X)
102-26B Y DEMOD (G)
SS(10/12), 124-41A
102-48A L;Y PCM MUTE
C-23(1/5), 101-19A
C-23(3/5), 101-24B
C-23(3/5), 101-25B
C-23(3/5), 101-26B
C-23(3/5), 101-27B
102-19A L;F-BID
102-24A TBC DIAG 1
102-25A TBC DIAG 2
102-26A TBC DIAG 3
102-27A TBC DIAG 4
DM(3/4), 103-28A
DM(3/4), 103-29A
102-28B C DEMOD (X)
102-29B C DEMOD (G)
SS(10/12), 124-41B
102-49A L;C PCM MUTE
TBC-23(5/5), 1-13
TBC-23(5/5), 1-6
TBC-23(5/5), 1-14
Y SYNC SEP VIDEO 2/3
VISC DET 102-17A
TBC-23(1/5), 101-17B
L;F-BID 3/3
L;F-BID 2/3
C SYNC SEP VIDEO 3/3
Y WCLP
Y CLP PLS
V CLAMP PULSE
C CLP PLS
C WCLP
V CLAMP ENABLE
H;METAL NOR
XTAL INS
Y W CLAMP PLS 102-19B
C W CLAMP PLS 102-32B
DM TBC JP1 102-51A
H;OSC ON 102-50A
RTN EN 1-5
X INS 2/3
X INS 3/3
TABLE A
TBC-24 MCB
TBC-24P MCB
R156 NO MOUNTED 22k :RN-C
R157 NO MOUNTED 22k :RN-C
R159 NO MOUNTED 22k :RN-C
See TABLE A
RV101;Y-AD LEVEL
RV102;Y CLAMP
RV201;C-AD LEVEL
RV202;C CLAMP
IC101(1/6) SN74HC04ANS
IC101(2/6) SN74HC04ANS
IC101(4/6) SN74HC04ANS
IC304(4/4) SN74HC32ANS
IC203 SN74HC257ANS
IC105 NJM360M
IC102(1/4) MC34184M
IC102(2/4) MC34184M
IC102(3/4) MC34184M
IC102(4/4) MC34184M
IC104(1/4) MC14053BF
IC201(1/4) MC34184M
IC201(2/4) MC34184M
IC201(3/4) MC34184M
IC201(4/4) MC34184M
IC104(2/4) MC14053BF
Q106 DTC144EU
Q206 DTC144EU
C131 TBC-24 MCB; 33p TBC-24P MCB; 100p


A/D CONVERTER
IC100 CXD1175AM
DELAY
IC103 CXD101-106Q
Y AD CK 2/3
Y AD IN
TP103
R128 100
D100 DA204U
C125 0.022
C126 0.022
C129 330 50V
C127 0.022
C128 0.022
C124 100 16V
L100 22µH
2.5V
5V-2
C136 0.022
Y DATA 9 102-11A → TBC-23(1/5), 101-11B
Y DATA 8 102-11B → TBC-23(1/5), 101-11A
Y DATA 7 102-10A → TBC-23(1/5), 101-10B
Y DATA 6 102-10B → TBC-23(1/5), 101-10A
Y DATA 5 102-9A → TBC-23(1/5), 101-9B
Y DATA 4 102-9B → TBC-23(1/5), 101-9A
Y DATA 3 102-8A → TBC-23(1/5), 101-8B
Y DATA 2 102-8B → TBC-23(1/5), 101-8A
Y DATA 1 102-7A → TBC-23(1/5), 101-7B
Y DATA 0 102-7B → TBC-23(1/5), 101-7A
W DIAG Y 2/3
Y GH 2/3
Y SHW 2/3
Y WCLP 102-13A → TBC-23(1/5), 101-13B
L;Y SDO PLS 102-44B → TBC-23(1/5), 101-17A
L;Y DO PLS 102-43B → DM(1/4), 103-16A
Y PDS CONT 102-15B → TBC-23(1/5), 101-15A
Y WCLP
IC106 :NM ← WHEN LOT NO 305-308, SC14S66F MOUNTED.
R122 220k
R163 :NM
IC101(5/6) SN74HC04ANS
R164 10k
C138 0.01 50V
L;Y NO SIG 2/3
BUFFER
Q110 2SA1611
R154 1k
R155 1k
R161 1k
R162 47k
TBC VD 2 102-44A → VPR(7/7), 115-48B
A/D CONVERTER
IC200 CXD1175AM
DELAY
IC202 CXD101-106Q
C AD CK 3/3
C AD IN
TP203
R227 100
D200 DA204U
C222 100 16V
C225 0.022
C226 0.022
C229 330 50V
C227 0.022
C228 0.022
2.5V-2
5V-3
C231 0.022
C DATA 9 102-41A → TBC-23(1/5), 101-41B
C DATA 8 102-41B → TBC-23(1/5), 101-41A
C DATA 7 102-40A → TBC-23(1/5), 101-40B
C DATA 6 102-40B → TBC-23(1/5), 101-40A
C DATA 5 102-39A → TBC-23(1/5), 101-39B
C DATA 4 102-39B → TBC-23(1/5), 101-39A
C DATA 3 102-38A → TBC-23(1/5), 101-38B
C DATA 2 102-38B → TBC-23(1/5), 101-38A
C DATA 1 102-37A → TBC-23(1/5), 101-37B
C DATA 0 102-37B → TBC-23(1/5), 101-37A
W DIAG C 3/3
C GH 3/3
C SHW 3/3
C WCLP 102-35A → TBC-23(1/5), 101-35B
L;C SDO PLS 102-46B → TBC-23(1/5), 101-28A
C WCLP
IC204 :NM ← WHEN LOT NO. 305-308, SC14S66F MOUNTED.
R221 220k
R264 :NM
IC101(6/6) SN74HC04ANS
R255 10k
C232 0.01 50V
L;C DO PLS 102-45B → DM(2/4), 103-16B
C PDS CONT 102-33B → TBC-23(1/5), 101-33A
AP TBC JP0 102-54A → AP(2/3), 104-9A
AP TBC JP1 102-55A → AP(2/3), 104-9B
L;C NO SIG 3/3
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.
MB-441
15V
8V
5V
3.3V
-8V
-15V
102-57A REG +15V
102-57B REG +15V
102-3A REG +8V
102-3B REG +8V
102-5A REG +5V
102-5B REG +5V
102-6A REG +3.3V
102-6B REG +3.3V
102-21B GND
102-22B GND
102-23B GND
102-24B GND
102-1A GND
102-1B GND
102-2A GND
102-2B GND
102-59A GND
102-59B GND
102-60A GND
102-60B GND
102-4A REG -8V
102-4B REG -8V
102-58A REG -15V
102-58B REG -15V
SB007-03CP PIN LAYOUT
IC11 NJM78L09A
IC12 NJM78L09A
IC10 NJM78L12A
IC15 L78M05T-FA
IC16 L78M05T-FA
IC17 L78M05T-FA
IC13 NJM79L05A
IC14 NJM79L05A
IC20 NJM431U
IC21 NJM431U
IC22 NJM431U
9V
9V-2
12V
5V
2.5V
2.5V-2
4V
-5V
-5V-2
DA204U PIN LAYOUT
IMX1 PIN LAYOUT
FMS2 PIN LAYOUT
TRANSISTER PIN LAYOUT
IC104(4/4) MC14053BF
IC104(3/4) MC14053BF
TBC A/D Converter
TBC-24 BOARD (1/3)
BOARD NO. 1-648-542-12
BOARD' S LOT NO. 305-402
DVW-A500 (J, UC) :TBC-24 MCB
DVW-A500P (EK) :TBC-24P MCB
DVW-A500P (UC) :TBC-24P MCB
DVW-A510 (J, UC) :TBC-24 MCB
DVW-A510P (EK) :TBC-24P MCB
DVW-CA510 (UC) :TBC-24 MCB
DVW-CA510P(EK) :TBC-24P MCB
DVW-TBC24-ALL-A-PB-S/M-05-B



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.


CLAMP
A/D CONV.
D/A CONV.
AMP
IC402(1/2) MC34182M
IC403 SC14S66F
IC402(2/2) MC34182M
IC404 TLC549IPS
IC405 NJU8001M
IC407(1/2) NJM4559M
IC407(2/2) NJM4558M
RV401;IE OFFSET
Y IE
TP406
R442 TBC-24 MCB ; 27k TBC-24P MCB; 27k :RN-C
Y WCLP 1/3
H;SV LOCK 3/3
SERVO V 3/3
IC304(1/4) SN74HC32ANS
IC304(2/4) SN74HC32ANS
Y PB SYNC 102-42A
Y TBC PB SYNC 102-14A
MB-441
AP(2/3), 104-14A
SS(7/12), 123-10A
TBC-23(1/5), 101-14B
NC 102-27B
NC 102-30B
NC 102-48B
NC 102-52A
NC 102-52B
NC 102-53A
NC 102-53B
NC 102-54B
NC 102-55B
NC 102-56A
NC 102-56B
TBC-24 MCB
TBC-24P MCB
W DIAG Y 1/3
Y WZ
TP405
Y WZ 102-12B
Y ADV WZ 102-13B
Y CLP PLS 1/3
Y GATED WCK 102-12A
Y AD CK 1/3
PB V 102-22A
SS(10/12), 123-9A
TBC-23(1/5), 101-12A
TBC-23(1/5), 101-13A
TBC-23(1/5), 101-12B
TBC-23(1/5), 101-22B
IC101(3/6) SN74HC04ANS
Y WCK
TP404
NOR ERROR
TP403
BID ERR-1
TP401
BID ERR-2
TP400
LOT NO. 311-
LOT NO. 305-311
See TABLE B
TABLE B
TBC-24 MCB
TBC-24P MCB
R433
4.7k
NO MOUNTED
R435
220
56 :RN-C
IC304(3/4) SN74HC32ANS
SH DET 1-12
Y BID ERROR 3/3
C SPD 3/3
TBC SPEED 102-20B
DM(3/4), 103-20B
KV1470 PIN LAYOUT
DA204U PIN LAYOUT
IMX1 PIN LAYOUT
TRANSISTER PIN LAYOUT
SC14S66F PIN LAYOUT
301
QFP 100P
REF AMP
ERROR AMP
ERROR AMP
NORMAL VCO
RV400;Y TR GAIN
RV402;Y TR OFFSET
LV401;IE OFFSET
Y Write Clock Generator
TBC-24 BOARD (2/3)
BOARD NO. 1-648-542-12
BOARD' S LOT NO. 305-402
DVW-A500 (J, UC) :TBC-24 MCB
DVW-A500P (EK) :TBC-24P MCB
DVW-A500P (UC) :TBC-24P MCB
DVW-A510 (J, UC) :TBC-24 MCB
DVW-A510P (EK) :TBC-24P MCB
DVW-CA510 (UC) :TBC-24 MCB
DVW-CA510P(EK) :TBC-24P MCB
DVW-TBC24-ALL-A-PB-S/M-05-B


2/3 H;SV LOCK
2/3 SERVO V
1/3 C SHW
MB-441
TBC-23(1/5), 101-33B
102-33A C SHW
1/3 L;C NO SIG
TBC-23(1/5), 1-10 — 8
1-10 L;C NO SIG
TBC-23(1/5), 1-8 — 8
1-8 C GH
TBC-23(4/5), 1-9 — 8
1-9 L;C TEST
1/3 C GH
TBC-23(1/5), 1-7 — 8
1-7 C WBLK
5V-3
R500 100k
R506 100k
5V
L501 47μH
C502 100 16V
C504 0.022
E501
E502
-3
-5V-2
L502 47μH
C503 100 16V
C505 0.022
MB-441
SS(7/12), 123-16B
SS(5/12), 123-15B
DM(3/4), 103-49A
102-30A ADV C SW PLS
102-31A DM TBC SS JP1
VPR(5/7), 113-20A
VPR(5/7), 113-20A
VPR(5/7), 115-48A
VPR(5/7), 115-49A
102-46A TBC VPR JP1
102-47A TBC VPR JP2
102-43A TBC VPR JP5
102-45A TBC VPR JP7
TBC-23(1/5), 101-32B
TBC-23(1/5), 101-29B
TBC-23(1/5), 101-34A
102-32A C SDO
102-29A C WRITE V
102-34B L;C GUARD BAND
R516 100
1/3 X INS
R585 2.2k
DC CONV.
1/3 C SYNC SEP VIDEO
5V-2
IC303(2/2) LM2903PS
R501 3.9k
R502 1k
R503 2.2k
R504 10k
R505 10k
R597 10k
R514 :NM
C501 10 50V
303
-2
1/3 L;F-BID
2/3 C SPD
2/3 SCH TRACKING
R507 13k :RN-C
R510 18k :RN-C
TBC-23(3/5), 101-28B
102-28A Y/C DL CONT
2/3 Y BID ERROR
DM(4/4), 103-15A
102-50B L;METAL/H;OXIDE
R509 100k
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.
C WRITE CLOCK GENERATOR
IC501
CXD2221Q
VIN 4
VIN 1
VIN 2
REF 1
REF 2
DO
REF 3
VIN 3
H BLKG
FBID
SH OUT
WRITE V
SWP
TEST0
TEST1
PLL RESET
CH
SH2
COUNT H
GB I
BOP X
BOP O
ER 1
ER 2
CLR
Y/C
AOP X
AOP O
AOP I
CCP I
PB SYNC
VOT 3
ACP X
ACP I
ACP O
PB SY
AI 2
AI 1
PB/EE
NOSIG
FR30
R20
DDF
SHW
GH
BPF
DELAY
Q500 IMX1
Q501 2SC4177
C PB SYNC
TP500
R525 47
R550 1k :RN-C
L504 100μH
C528 330p 50V
R553 100
L505 220μH
R551 2.2k
R555 220
R554 2.2k
C551 0.022
L506 15μH
L507 33μH
C537 0.022
C533 0.022
R540 470
R561 10k
R560 10k
C536 0.022
C581 0.022
R563 33k
R569 33k
R558 0
See TABLE C
R532 3k/2.7k :RN-C
R542 2.7k/2.4k :RN-C
R545 470
Q502 2SA1611
Q503 2SA1611
Q504 2SA1611
BUFFER
SYNC LPF
TABLE C
TBC-24 MCB
TBC-24P MCB
R532 3k :RN-C 2.7k :RN-C
R533 56 :RN-C 82 :RN-C
R542 2.7k :RN-C 2.4k :RN-C
WHEN LOT NO. 305-310, R557 IS 1.5k-OHM.
REPAIR PART FOR R557(1.5k) IS 2.7k-OHM.
DS01 DA204U
12V
5V-3
RV503 2.2k :RS-H
R557 2.7k :RN-C
C530 100p 50V
TH502 :NM
R556 330 :RN-C
R559 3.3k :RN-C
C535 100p 50V
C546 0.022
C547 0.022
C543 0.01 50V
C542 470p 50V
R580 220
Q506 2SC3735
Q507 2SA1611
R579 100
R578 680 :RN-C
RV502 1k :RS-H
C541 47p 50V
R573 3.3k
R574 10k
R577 2.7k :RN-C
C526 0.022
C524 100 16V
C534 0.022
R562 220
C529 100 16V
C522 0.022
R552 220
C521 0.022
R549 10k :RN-C
9V-2
R575 2.2k :RN-C
R541 47k :RN-C
R535 10k :RN-C
R513 10k :RN-C
C554 10 50V
R523 10k :RN-C
R526 10k :RN-C
R527 2.4k :RN-C
R522 10k :RN-C
C503 0.022
R547 33k :RN-C
TH501 :NM
R568 0
RV500 4.7k :RS-H
R546 2.7k :RN-C
4V
R582 12k :RN-C
R572 10k :RN-C
R571 10k :RN-C
C514 1 50V
R519 10k :RN-C
R515 10k :RN-C
5V
R512 1k :RN-C
RV501 1k :RS-H
R511 470 :RN-C
2.5V-2
R517 2.2k
R518 470
L503 39μH
C507 10p 50V
C500 47p 50V
C506 220p 50V
C508 470 50V
C509 0.1
Q502
Q503
Q504
R521 470
R520 470
R581 3.3M
R524 220
C510 0.01 50V
C511 0.001 50V
R529 680k
R528 100
R530 100
C512 50V
C513 0.1
R534 1k :RN-C
C523 50V
R543 1k :RN-C
C517 0.1
C516 0.1
R548 220
R544 1M
C519 0.1
R596 4.7k
C520 100p 50V
R517 2.2k
C532 100 16V
R536 22k :RN-C
R538 10k :RN-C
C515 0.022
R537 8.2k :RN-C
R539 27k :RN-C
C518 0.022
R525 47
C555 15p 50V
C556 220 50V
C525 120p 50V
C527 10p 50V
R564 3k :RN-C
R565 12k :RN-C
C539 120p 50V
C549 0.022
C552 100p 50V
C550 100p 50V
C562 0.022
R567 220
C564 100p 50V
R570 2.2k :RN-C
IC600(3/4) MC74HC4066F
IC600(1/4) MC74HC4066F
IC609(2/4) MC34184M
IC609(4/4) MC34184M
IC502(2/4) MC34184M
IC609(1/4) MC34184M
IC600(4/4) MC74HC4066F
IC502(1/4) MC34184M
IC502(3/4) MC34184M
IC502(4/4) MC34184M
Q506 2SC3735
Q507 2SA1611
IC508 MB4002PF
IC507(2/3) SN74LS221NS
IC507(1/3) SN74LS221NS
IC507(3/3) SN74LS221NS
PHASE SHIFTER
VOLTAGE COMP.
RV500;Y/C DELAY
RV501;OX Y/C DLY
RV502;C SLOPE
RV503;C FREQ

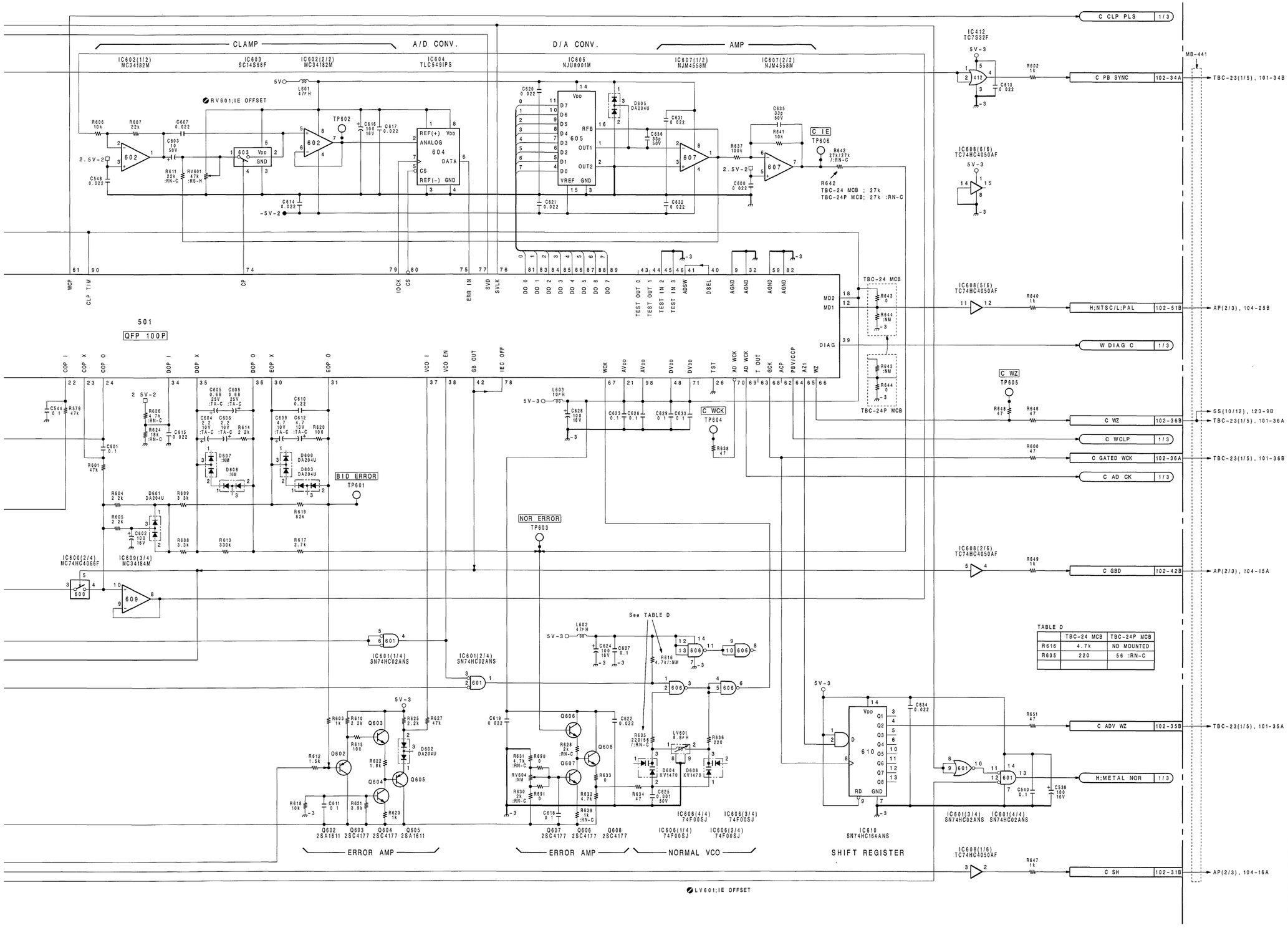


TABLE D		
	TBC-24 MCB	TBC-24P MCB
R616	4.7k	NO MOUNTED
R635	220	56 :RN-C

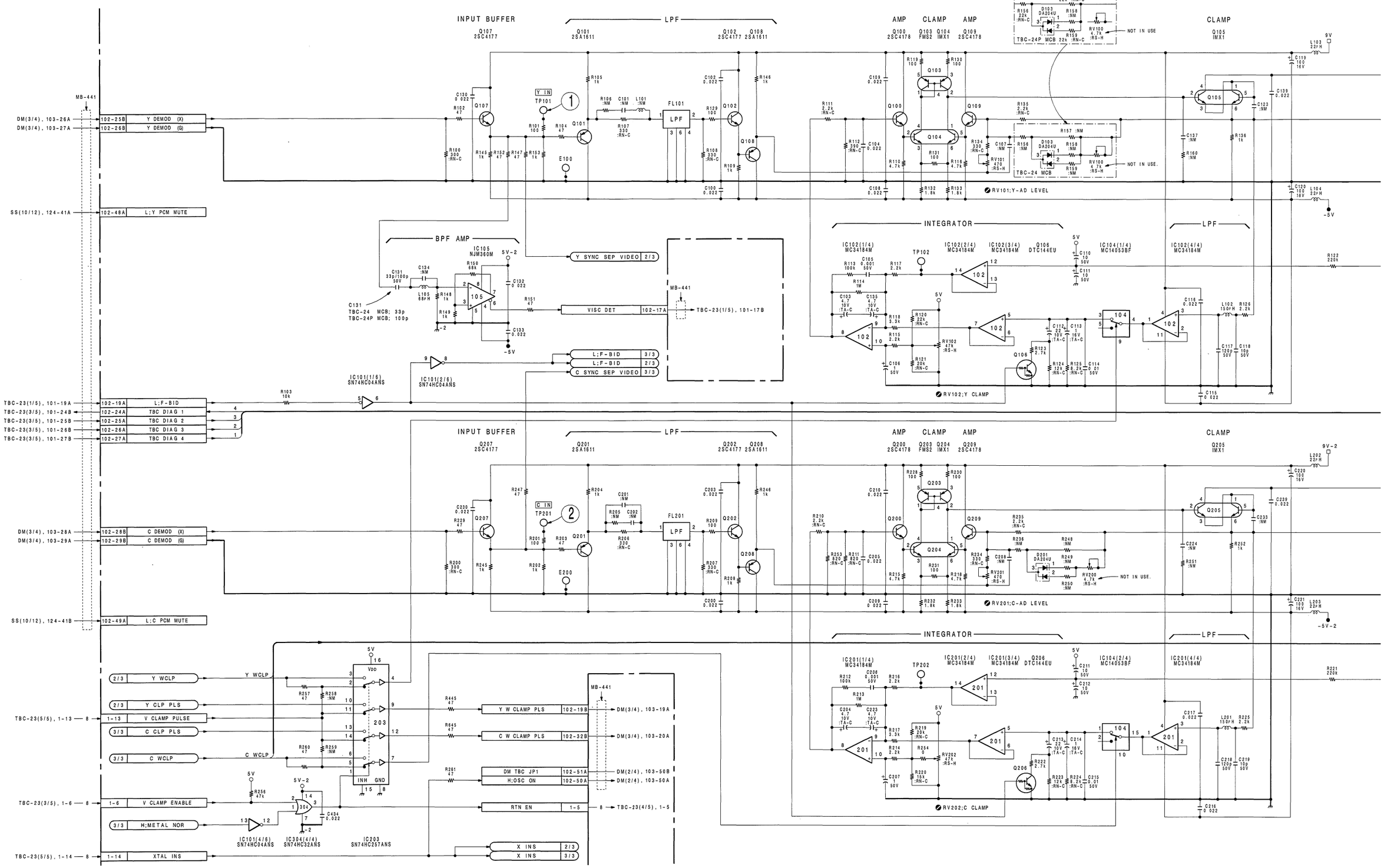
C Write Clock Generator

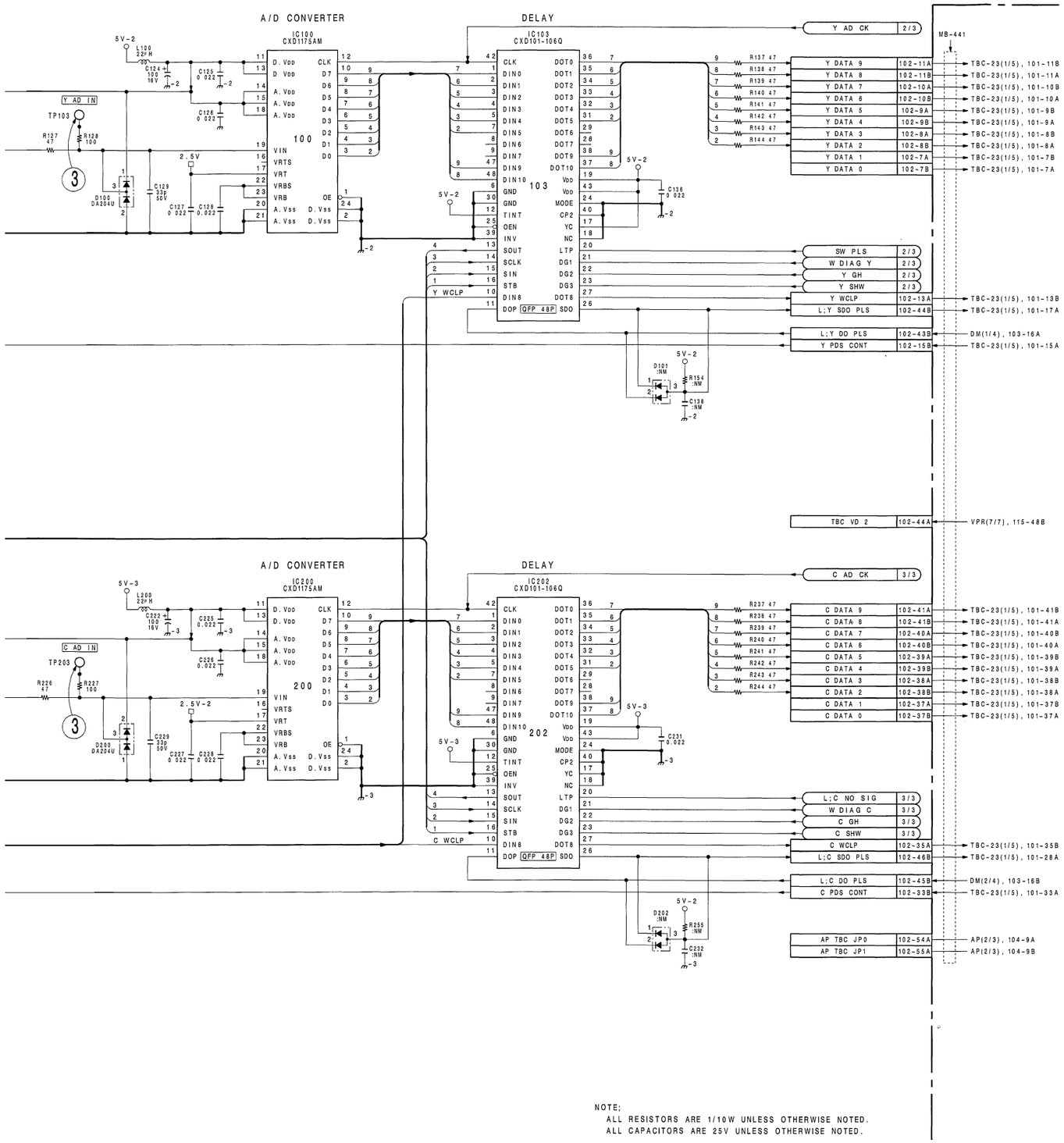
TBC-24 BOARD (3/3)

BOARD NO. 1-648-542-12
BOARD' S LOT NO. 305-402

DVW-A500	(J, UC)	:TBC-24 MCB
DVW-A500P	(EK)	:TBC-24P MCB
DVW-A500P	(UC)	:TBC-24P MCB
DVW-A510	(J, UC)	:TBC-24 MCB
DVW-A510P	(EK)	:TBC-24P MCB
DVW-CA510	(UC)	:TBC-24 MCB
DVW-CA510P	(EK)	:TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-B


INPUT BUFFER
LPF
AMP
CLAMP
AMP
CLAMP
INTEGRATOR
LPF
BPF AMP
MB-441
DM(3/4), 103-26A
DM(3/4), 103-27A
SS(10/12), 124-41A
TBC-23(1/5), 101-19A
TBC-23(3/5), 101-24B
TBC-23(3/5), 101-25B
TBC-23(3/5), 101-26B
TBC-23(3/5), 101-27B
DM(3/4), 103-28A
DM(3/4), 103-29A
SS(10/12), 124-41B
TBC-23(5/5), 1-13
TBC-23(3/5), 1-6
TBC-23(5/5), 1-14
102-25B Y DEMOD (X)
102-26B Y DEMOD (G)
102-48A L;Y PCM MUTE
102-19A L;F-BID
102-24A TBC DIAG 1
102-25A TBC DIAG 2
102-26A TBC DIAG 3
102-27A TBC DIAG 4
102-28B C DEMOD (X)
102-29B C DEMOD (G)
102-49A L;C PCM MUTE
Y SYNC SEP VIDEO 2/3
VISC DET 102-17A
L;F-BID 3/3
L;F-BID 2/3
C SYNC SEP VIDEO 3/3
TBC-23(1/5), 101-17B
C131 TBC-24 MCB; 33p TBC-24P MCB; 100p
IC105 NJM360M
IC101(1/6) SN74HC04ANS
IC101(2/6) SN74HC04ANS
Y WCLP
Y CLP PLS
V CLAMP PULSE
C CLP PLS
C WCLP
V CLAMP ENABLE
H;METAL NOR
XTAL INS
IC101(1/6) SN74HC04ANS
IC304(4/4) SN74HC32ANS
IC203 SN74HC257ANS
Y W CLAMP PLS 102-19B
C W CLAMP PLS 102-32B
DM TBC JP1 102-51A
H;OSC ON 102-50A
RTN EN 1-5
X INS 2/3
X INS 3/3
DM(3/4), 103-19A
DM(3/4), 103-20A
DM(2/4), 103-50B
DM(2/4), 103-50A
8 TBC-23(4/5), 1-5
TBC-24P MCB 22k
TBC-24 MCB
NOT IN USE
RV101;Y-AD LEVEL
RV102;Y CLAMP
RV201;C-AD LEVEL
RV202;C CLAMP
IC102(1/4) MC34184M
IC102(2/4) MC34184M
IC102(3/4) MC34184M
Q106 DTC144EU
IC104(1/4) MC14053BF
IC102(4/4) MC34184M
IC201(1/4) MC34184M
IC201(2/4) MC34184M
IC201(3/4) MC34184M
Q206 DTC144EU
IC104(2/4) MC14053BF
IC201(4/4) MC34184M
9V
9V-2
-5V
-5V-2
5V
5V-2



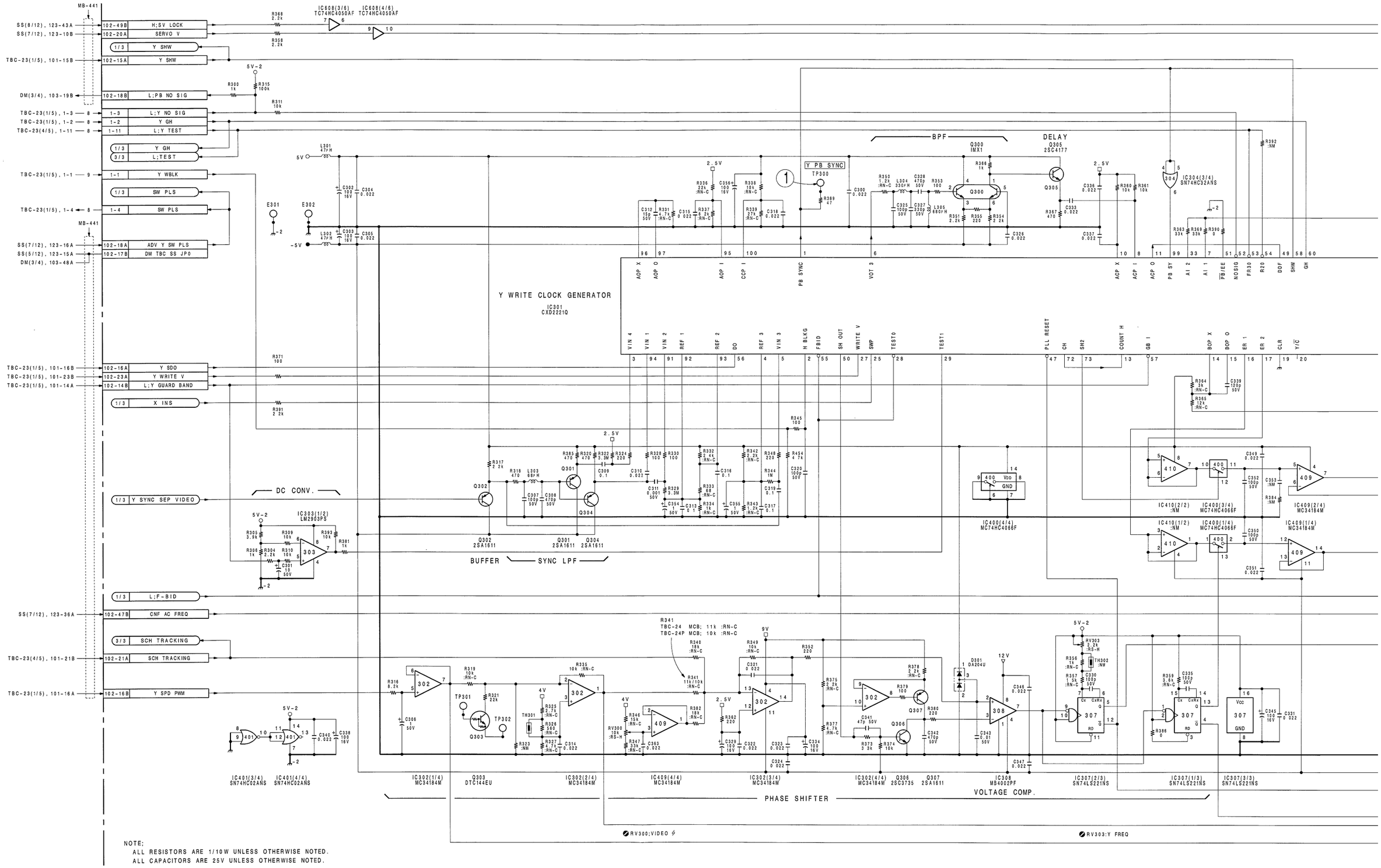
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

TBC A/D Converter

TBC-24 BOARD (1/3)

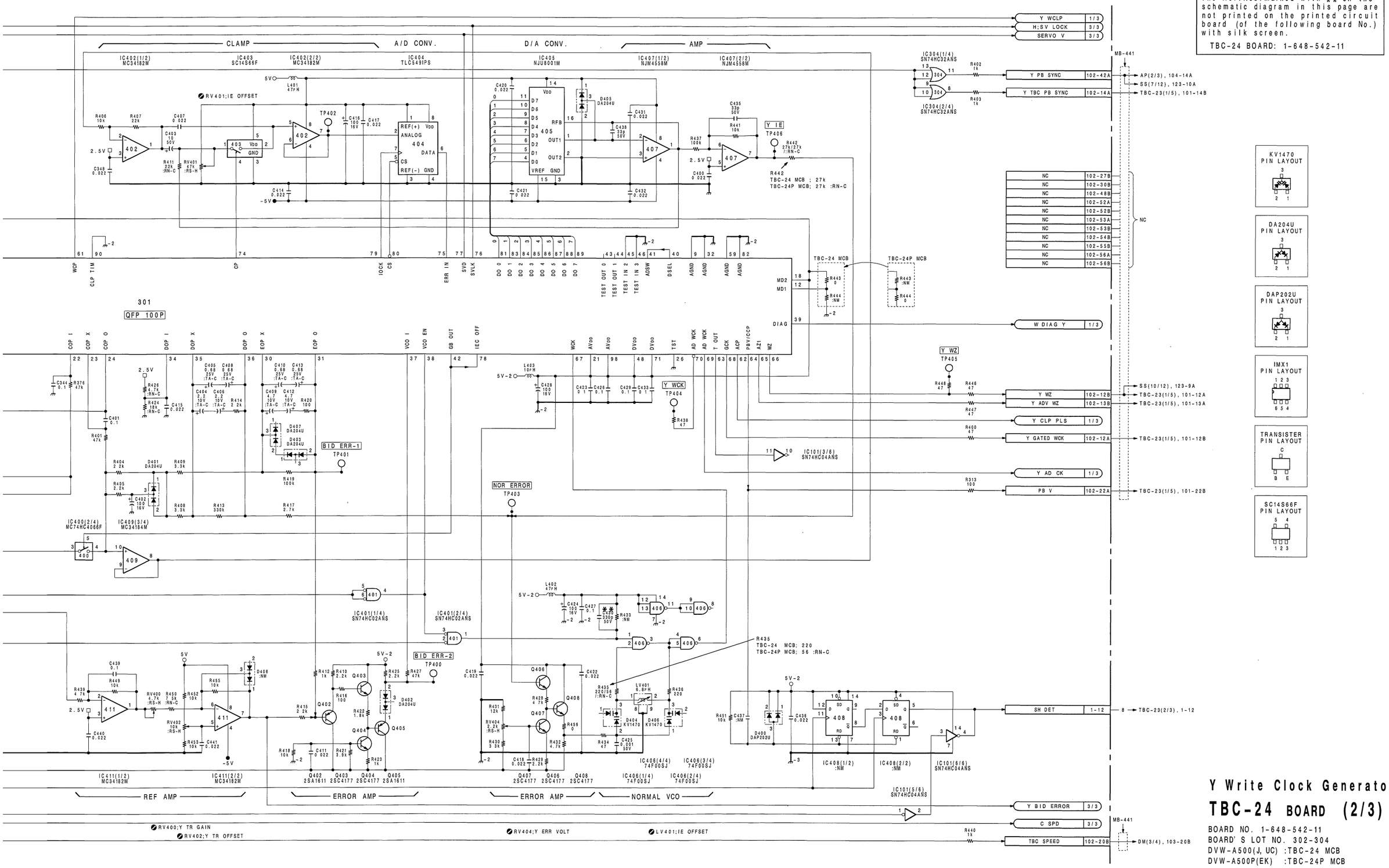
BOARD NO. 1-648-542-11
BOARD' S LOT NO. 302-304
DVW-A500(J, UC) :TBC-24 MCB
DVW-A500P(EK) :TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-A


Y WRITE CLOCK GENERATOR
IC301
CXD2221Q
Y PB SYNC
TP300
BPF
DELAY
Q300 IMX1
Q305 2SC4177
IC304(3/4) SN74HC32ANS
IC400(4/4) MC74HC4066F
IC410(2/2) :NM
IC400(3/4) MC74HC4066F
IC409(2/4) MC34184M
IC410(1/2) :NM
IC400(1/4) MC74HC4066F
IC409(1/4) MC34184M
DC CONV.
IC303(1/2) LM2903PS
BUFFER
SYNC LPF
Q302 2SA1611
Q301 2SA1611
Q304 2SA1611
PHASE SHIFTER
IC302(1/4) MC34184M
Q303 DTC144EU
IC302(2/4) MC34184M
IC409(4/4) MC34184M
IC302(3/4) MC34184M
IC302(4/4) MC34184M
Q306 2SC3735
Q307 2SA1611
VOLTAGE COMP.
IC308 MB4002PF
IC307(2/3) SN74LS221NS
IC307(1/3) SN74LS221NS
IC307(3/3) SN74LS221NS
IC401(3/4) SN74HC02ANS
IC401(4/4) SN74HC02ANS
MB-441
MB-441
TBC-23(1/5), 101-15B
DM(3/4), 103-19B
TBC-23(1/5), 1-3
TBC-23(1/5), 1-2
TBC-23(4/5), 1-11
TBC-23(1/5), 1-1
TBC-23(1/5), 1-4
SS(7/12), 123-16A
SS(5/12), 123-15A
DM(3/4), 103-48A
TBC-23(1/5), 101-16B
TBC-23(1/5), 101-23B
TBC-23(1/5), 101-14A
SS(8/12), 123-43A
SS(7/12), 123-10B
TBC-23(4/5), 101-21B
TBC-23(1/5), 101-16A
SS(7/12), 123-36A
102-49B H;SV LOCK
102-20A SERVO V
1/3 Y SHW
102-15A Y SHW
102-18B L;PB NO SIG
1-3 L;Y NO SIG
1-2 Y GH
1-11 L;Y TEST
1/3 Y GH
3/3 L;TEST
1-1 Y WBLK
1/3 SW PLS
1-4 SW PLS
102-18A ADV Y SW PLS
102-17B DM TBC SS JP0
102-16A Y SDO
102-23A Y WRITE V
102-14B L;Y GUARD BAND
1/3 X INS
1/3 Y SYNC SEP VIDEO
1/3 L;F-BID
102-47B CNF AC FREQ
3/3 SCH TRACKING
102-21A SCH TRACKING
102-16B Y SPD PWM
R341 TBC-24 MCB; 11k :RN-C TBC-24P MCB; 10k :RN-C
RV300;VIDEO ϕ
RV303;Y FREQ
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

TBC-24 BOARD: 1-648-542-11

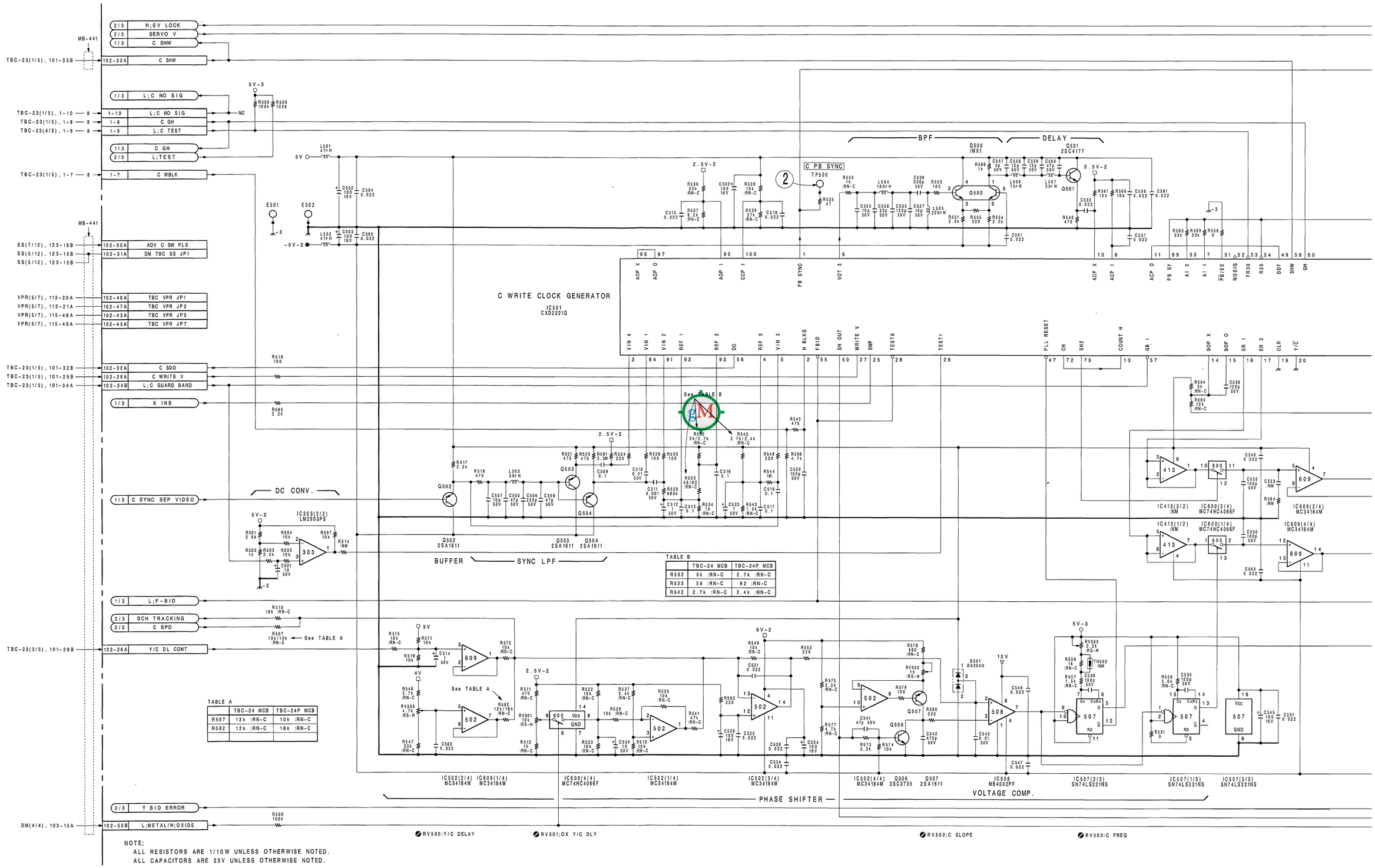


Y Write Clock Generator

TBC-24 BOARD (2/3)

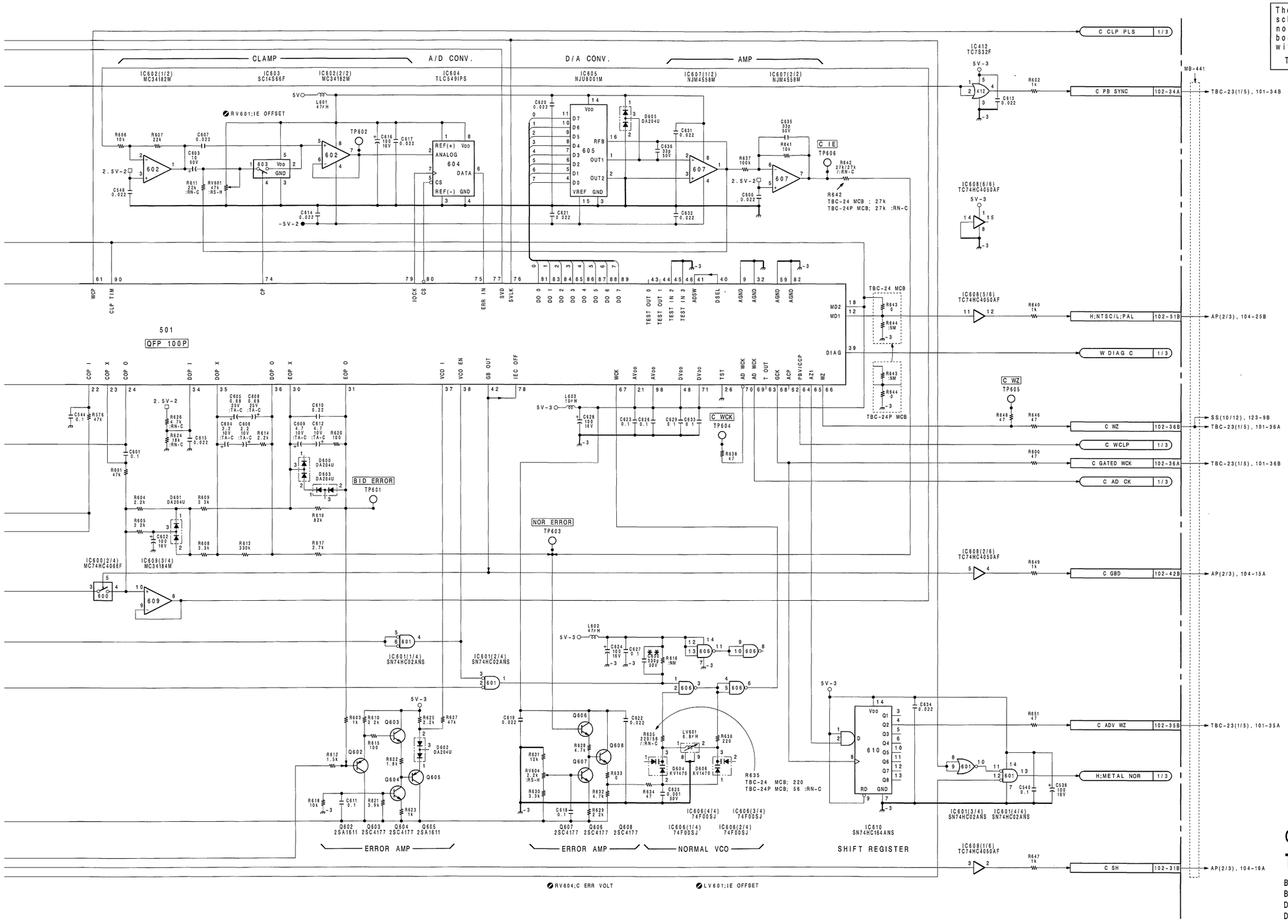
BOARD NO. 1-648-542-11
BOARD' S LOT NO. 302-304
DVW-A500(J, UC) :TBC-24 MCB
DVW-A500P(EK) :TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-A


C WRITE CLOCK GENERATOR
IC501
CXD2221Q
C PB SYNC
BPF
DELAY
DC CONV.
BUFFER
SYNC LPF
PHASE SHIFTER
VOLTAGE COMP.
TABLE A
TABLE B
See TABLE A
See TABLE B
RV500;Y/C DELAY
RV501;OX Y/C DLY
RV502;C SLOPE
RV503:C FREQ
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

TBC-24 BOARD: 1-648-542-11



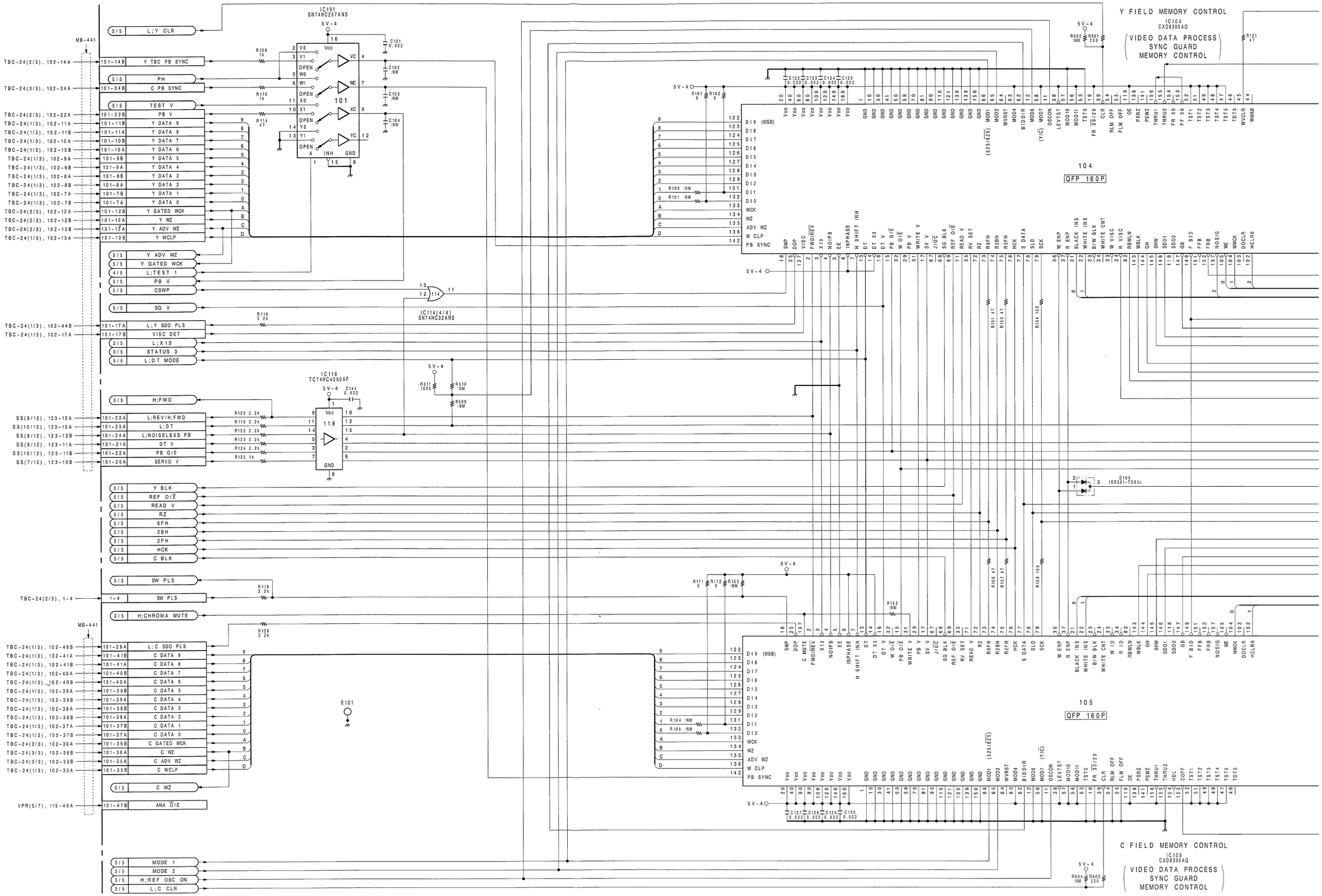
C Write Clock Generator

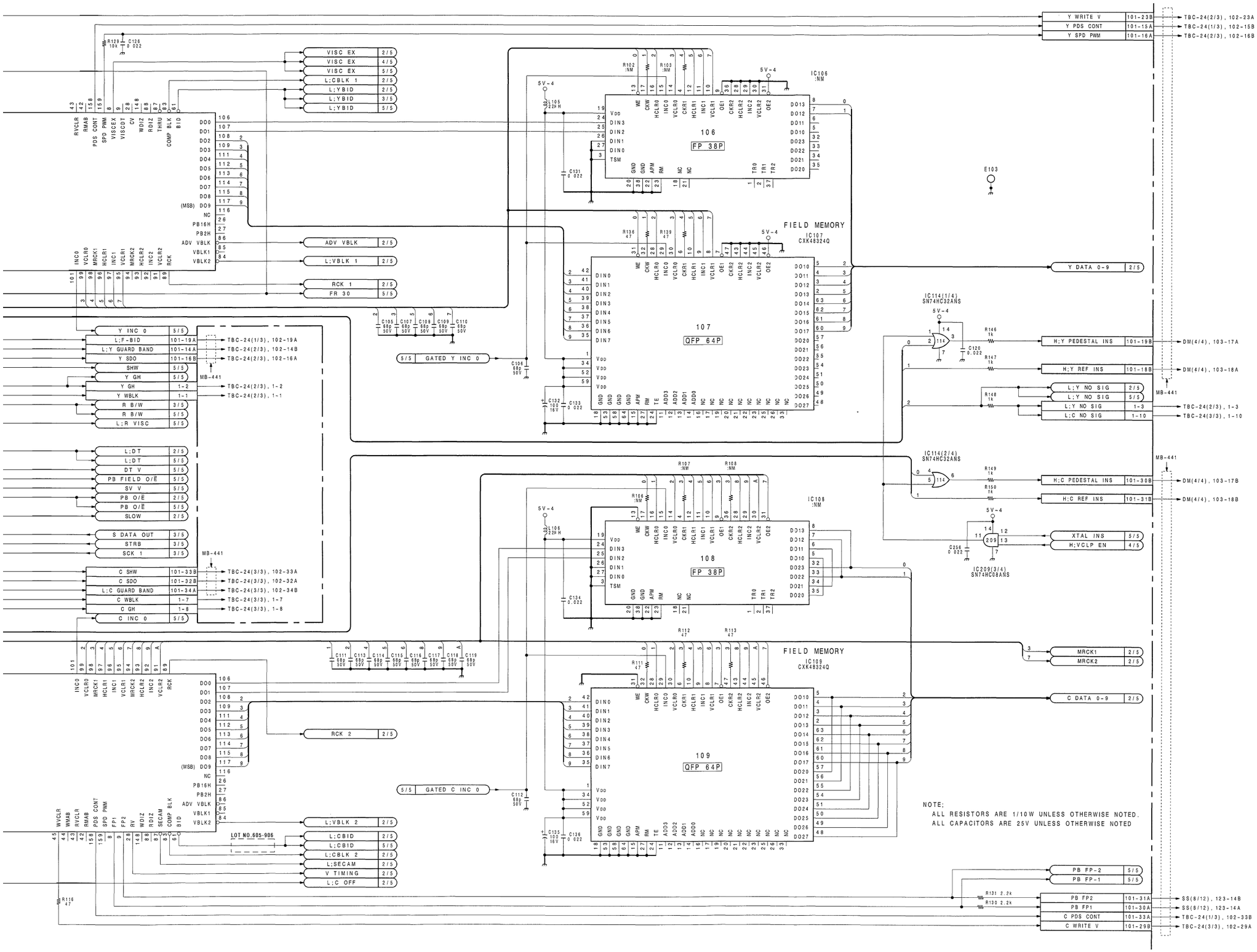
TBC-24 BOARD (3/3)

BOARD NO. 1-648-542-11
BOARD' S LOT NO. 302-304
DVW-A500(J, UC) :TBC-24 MCB
DVW-A500P(EK) :TBC-24P MCB

DVW-TBC24-ALL-A-PB-S/M-05-A

TBC-23 (1/5)


Y FIELD MEMORY CONTROL
IC104
CXD8395AQ
VIDEO DATA PROCESS
SYNC GUARD
MEMORY CONTROL
C FIELD MEMORY CONTROL
IC105
CXD8395AQ
VIDEO DATA PROCESS
SYNC GUARD
MEMORY CONTROL
IC101
SN74HC257ANS
IC114(4/4)
SN74HC32ANS
IC118
TC74HC4050AF
QFP 160P
104
105
D106
1SS301-TE85L
E101
MB-441
L;Y CLR
Y TBC PB SYNC
PH
C PB SYNC
TEST V
PB V
Y DATA 9
Y DATA 8
Y DATA 7
Y DATA 6
Y DATA 5
Y DATA 4
Y DATA 3
Y DATA 2
Y DATA 1
Y DATA 0
Y GATED WCK
Y WZ
Y ADV WZ
Y WCLP
Y ADV WZ
Y GATED WCK
L;TEST 1
PB V
CSWP
SQ V
L;Y SDO PLS
VISC DET
L;X13
STATUS 3
L;DT MODE
H;FWD
L;REV/H;FWD
L;DT
L;NOISELESS PB
DT V
PB O/E
SERVO V
Y BLK
REF O/E
READ V
RZ
6FH
2BH
2FH
HCK
C BLK
SW PLS
SW PLS
H;CHROMA MUTE
L;C SDO PLS
C DATA 9
C DATA 8
C DATA 7
C DATA 6
C DATA 5
C DATA 4
C DATA 3
C DATA 2
C DATA 1
C DATA 0
C GATED WCK
C WZ
C ADV WZ
C WCLP
C WZ
ANA O/E
MODE 1
MODE 2
H;REF OSC ON
L;C CLR
TBC-24(2/3), 102-14A
TBC-24(3/3), 102-34A
TBC-24(2/3), 102-22A
TBC-24(1/3), 102-11A
TBC-24(1/3), 102-11B
TBC-24(1/3), 102-10A
TBC-24(1/3), 102-10B
TBC-24(1/3), 102-9A
TBC-24(1/3), 102-9B
TBC-24(1/3), 102-8A
TBC-24(1/3), 102-8B
TBC-24(1/3), 102-7A
TBC-24(1/3), 102-7B
TBC-24(2/3), 102-12A
TBC-24(2/3), 102-12B
TBC-24(2/3), 102-13B
TBC-24(1/3), 102-13A
TBC-24(1/3), 102-44B
TBC-24(1/3), 102-17A
SS(8/12), 123-12A
SS(10/12), 123-13A
SS(8/12), 123-12B
SS(9/12), 123-11A
SS(10/12), 123-11B
SS(7/12), 123-10B
TBC-24(2/3), 1-4
TBC-24(1/3), 102-46B
TBC-24(1/3), 102-41A
TBC-24(1/3), 102-41B
TBC-24(1/3), 102-40A
TBC-24(1/3), 102-40B
TBC-24(1/3), 102-39A
TBC-24(1/3), 102-39B
TBC-24(1/3), 102-38A
TBC-24(1/3), 102-38B
TBC-24(1/3), 102-37A
TBC-24(1/3), 102-37B
TBC-24(3/3), 102-36A
TBC-24(3/3), 102-36B
TBC-24(3/3), 102-35B
TBC-24(1/3), 102-35A
VPR(5/7), 115-49A
R109 1k
R110 1k
R114 47
R119 2.2k
R120 2.2k
R115 2.2k
R122 2.2k
R123 2.2k
R124 2.2k
R125 1k
R118 2.2k
R126 2.2k
R161 0
R162 0
R100 :NM
R101 :NM
R104 :NM
R105 :NM
R171 0
R172 0
R153 :NM
R152 :NM
R511 100k
R510 :NM
R509 :NM
R601 220
R602 :NM
R603 220
R604 :NM
R121 47
R151 47
R153 47
R154 100
R156 47
R157 47
R158 100
C101 0.022
C102 :NM
C103 :NM
C104 :NM
C107 0.022
C108 0.022
C109 0.022
C110 0.022
C122 0.022
C123 0.022
C124 0.022
C125 0.022
C144 0.022
5V-4
DI9 (MSB)
DI8
DI7
DI6
DI5
DI4
DI3
DI2
DI1
DI0
WCK
WZ
ADV WZ
W CLP
PB SYNC
SWP
DOP
VISC
FWD/REV
X13
NOIPB
EE
INPHASE
H SHIFT INH
DT
DT X3
DT V
W O/E
PB V
WRITE V
SV V
J/UC
SG BLK
REF O/E
RV SET
READ V
RZ
R6FH
R2BH
R2FH
HCK
S DATA
SLD
SCK
W ENP
R ENP
BLACK INS
WHITE INS
B/W BLK
WHITE CNT
W VISC
R VISC
RBWLN
WBLK
GH
SHW
SDO1
SDO2
GB
F BID
FFB
FRB
NOSIG
WE
WWCK
DOCLR
HCLR0
MOD1
MOD2
WVRST
MOD4
BIDDIR
MOD6
MOD7
OSCON
LEVTST
MOD10
MOD11
TST0
FR 30/20
CLR
RLM OFF
FLM OFF
OE
PSRZ
PSWZ
THRU1
THRU2
FF 30
TST1
TST2
TST3
TST4
TST5
TDT0
WVCLR
WWAB
(525/625)
(Y/C)



1SS300-TE85L PIN LAYOUT

1SS301-TE85L PIN LAYOUT

LOT NO.	BOARD NO.
605-802	1-648-543-15
803-	1-648-543-16

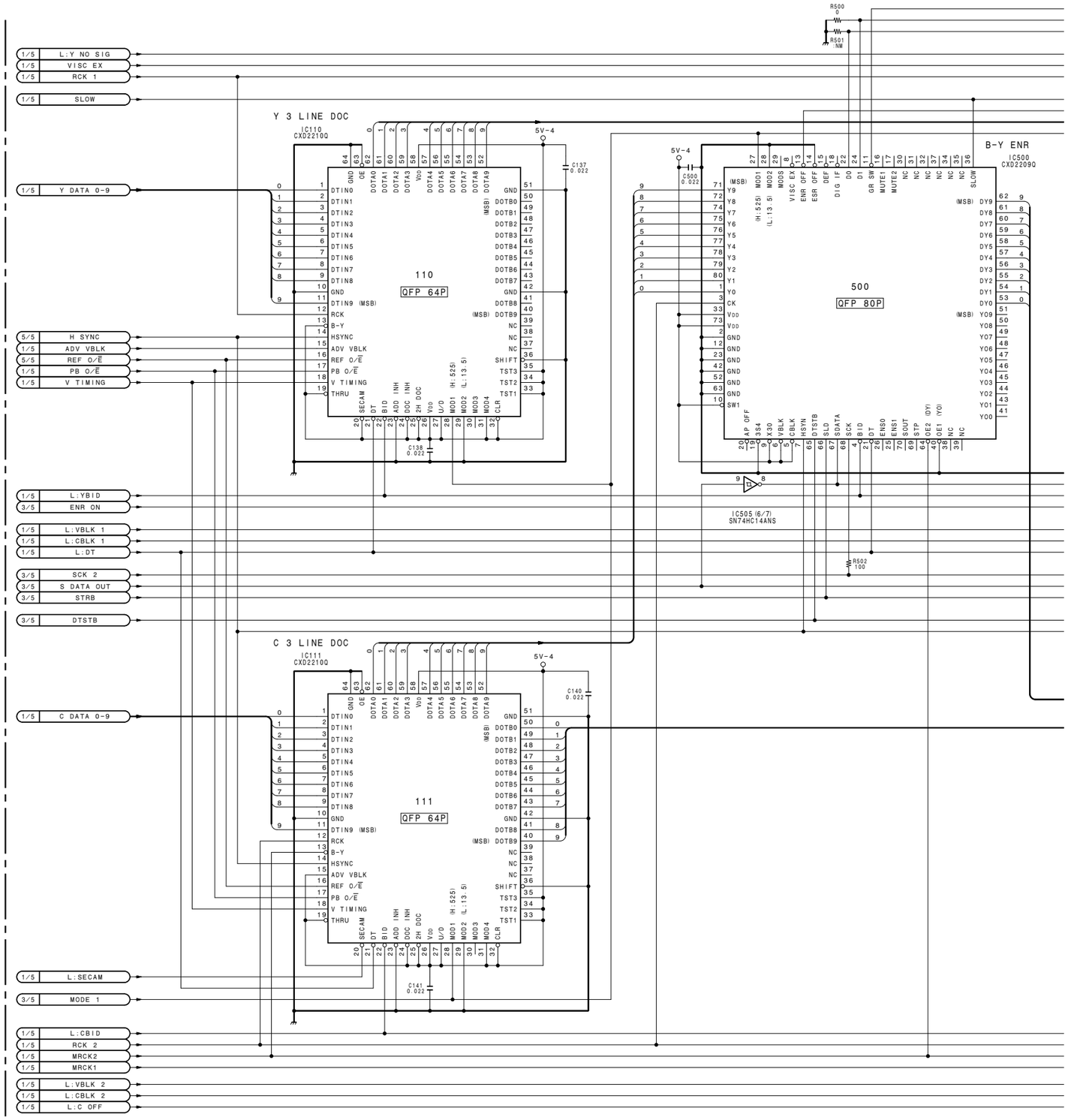
Y/C Data Memory Control, Field Memory

TBC-23 BOARD (1/5)

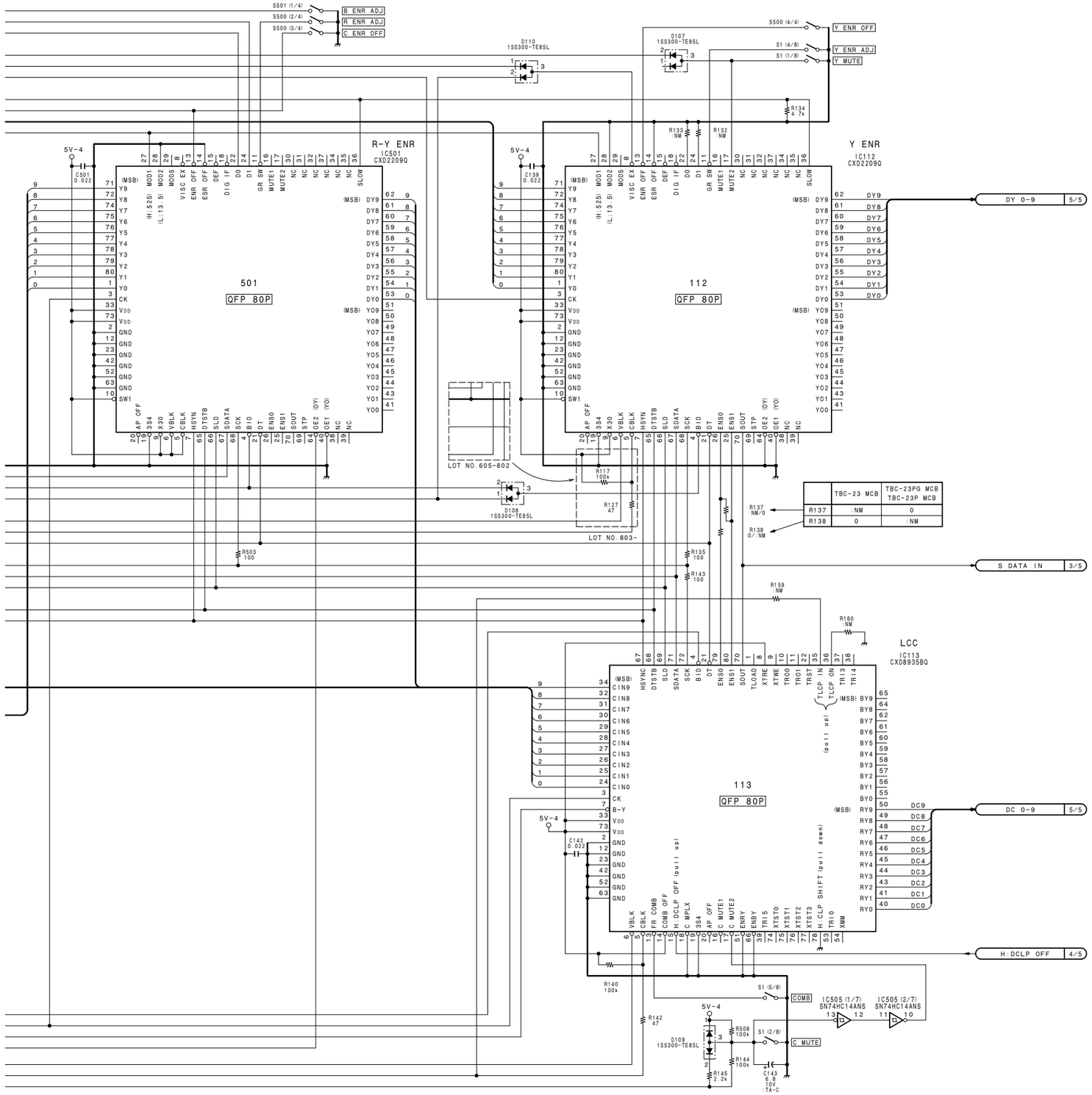
BOARD NO. 1-648-543-15,16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510(J, UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-C

TBC-23 (2/5)



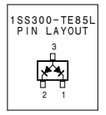
1-100 (c) 1-100 (c)



	TBC-23 MCB	TBC-23PG MCB TBC-23P MCB
R137	:NM	0
R138	0	:NM

NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

1SS300-TE85L PIN LAYOUT



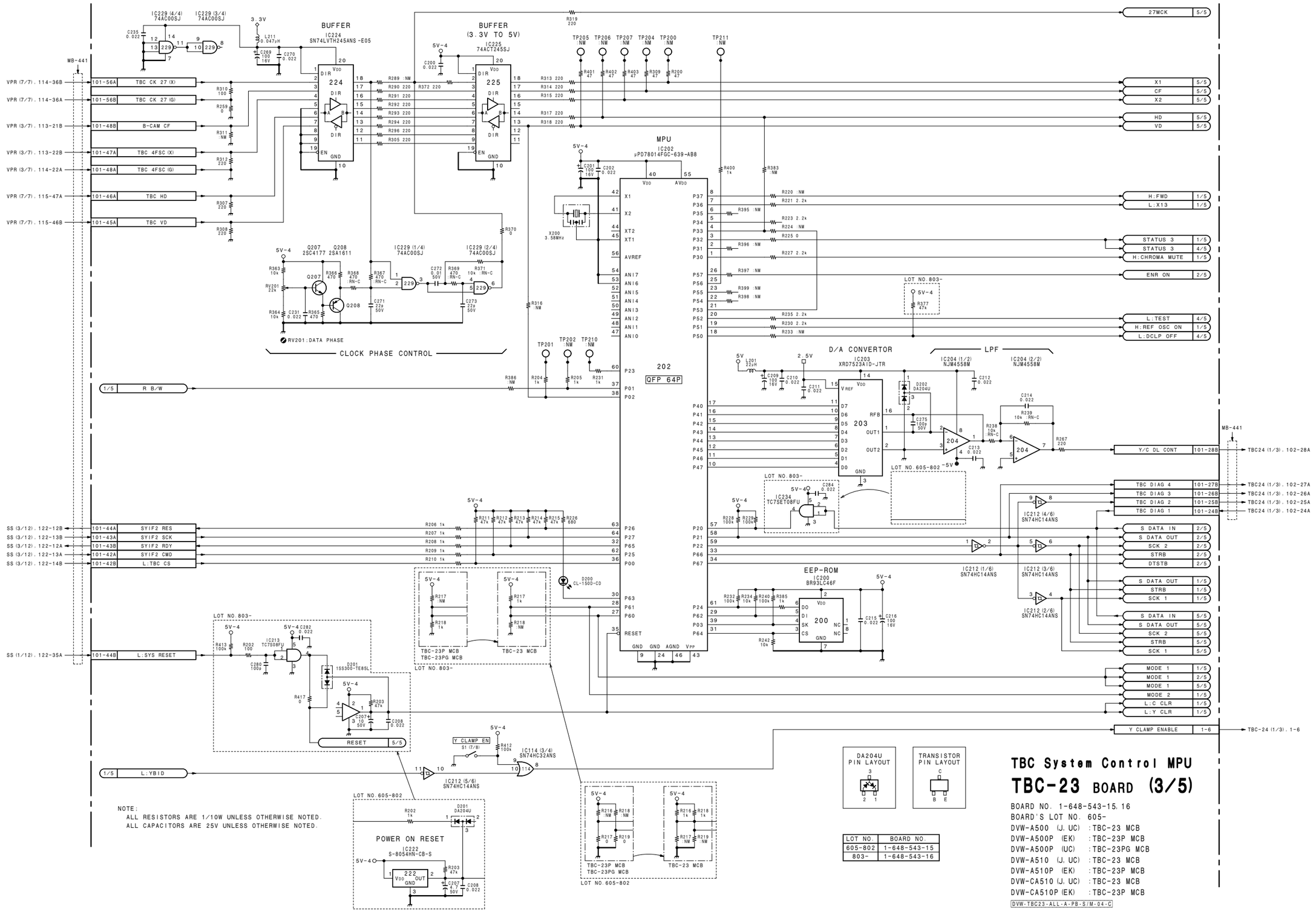
LOT NO.	BOARD NO.
605-802	1-648-543-15
803-	1-648-543-16

TBC Sequence

TBC-23 BOARD (2/5)

BOARD NO. 1-648-543-15, 16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : TBC-23 MCB
DVW-A500P (EK) : TBC-23P MCB
DVW-A500P (UC) : TBC-23PG MCB
DVW-A510 (J, UC) : TBC-23 MCB
DVW-A510P (EK) : TBC-23P MCB
DVW-CA510 (J, UC) : TBC-23 MCB
DVW-CA510P (EK) : TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-C



DA204U PIN LAYOUT

TRANSISTOR PIN LAYOUT

LOT NO.	BOARD NO.
605-802	1-648-543-15
803-	1-648-543-16

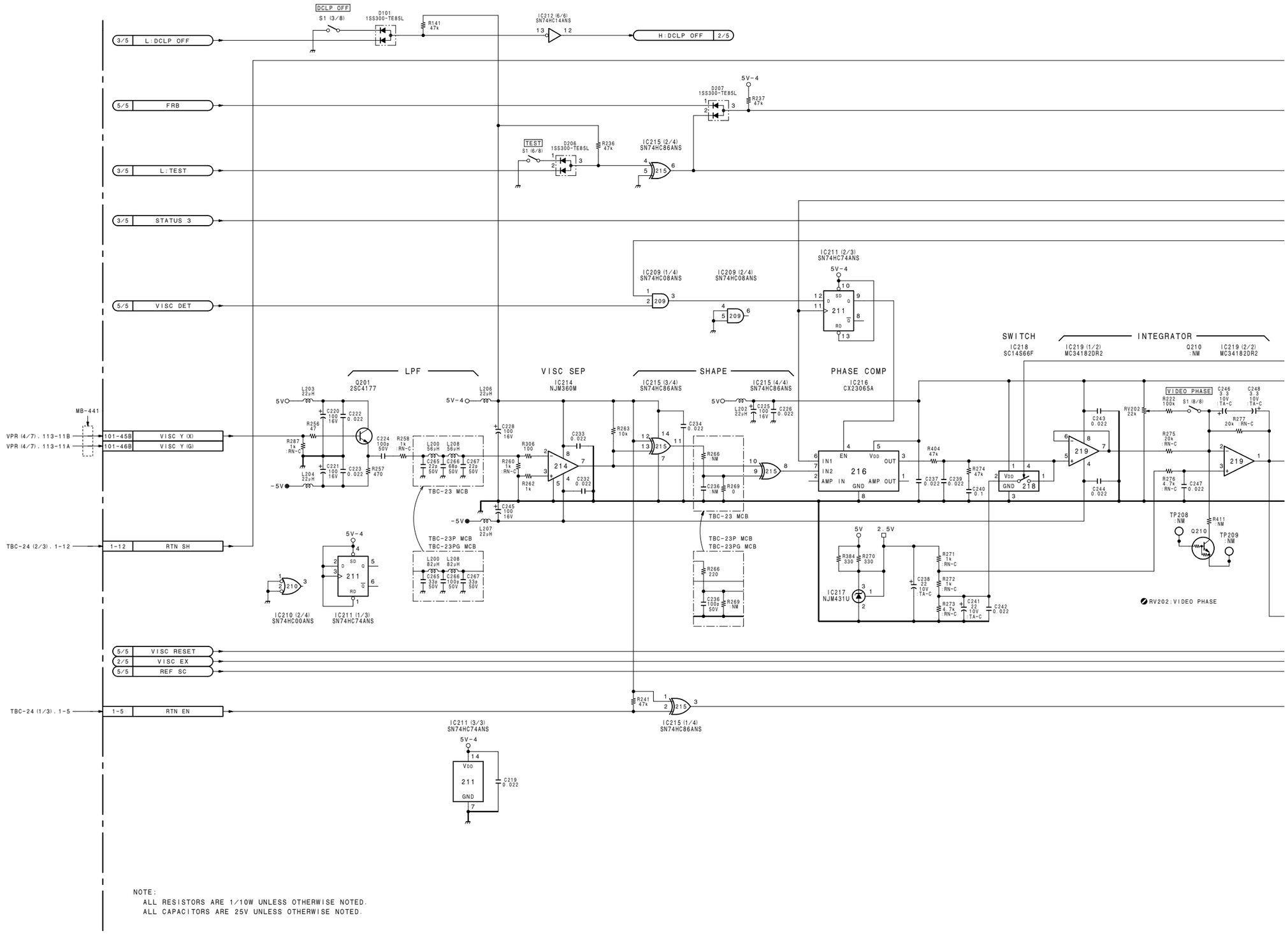
TBC System Control MPU

TBC-23 BOARD (3/5)

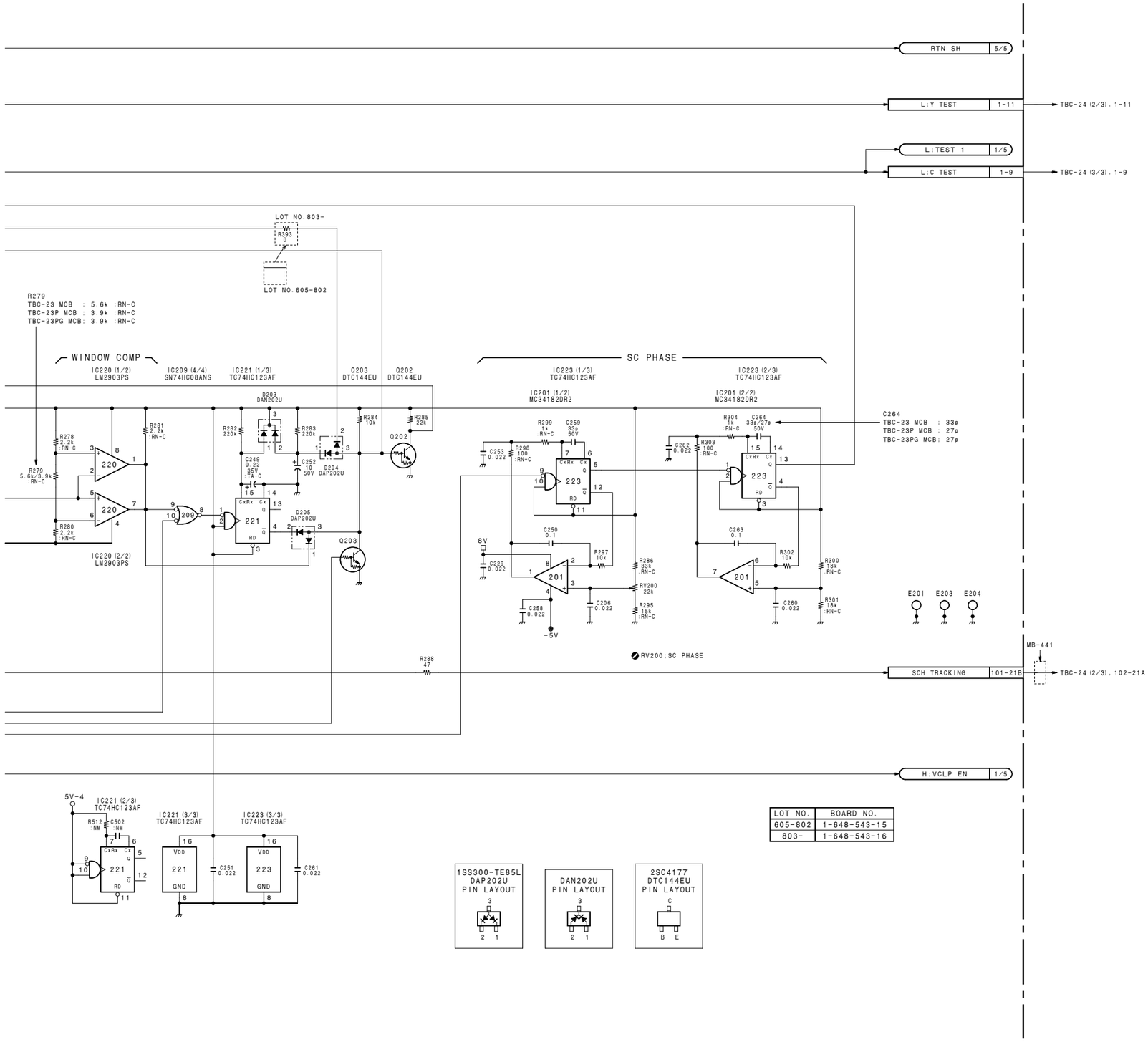
BOARD NO. 1-648-543-15, 16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510 (J, UC) :TBC-23 MCB
DVW-CA510P (EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-C

TBC-23 (4/5)



NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



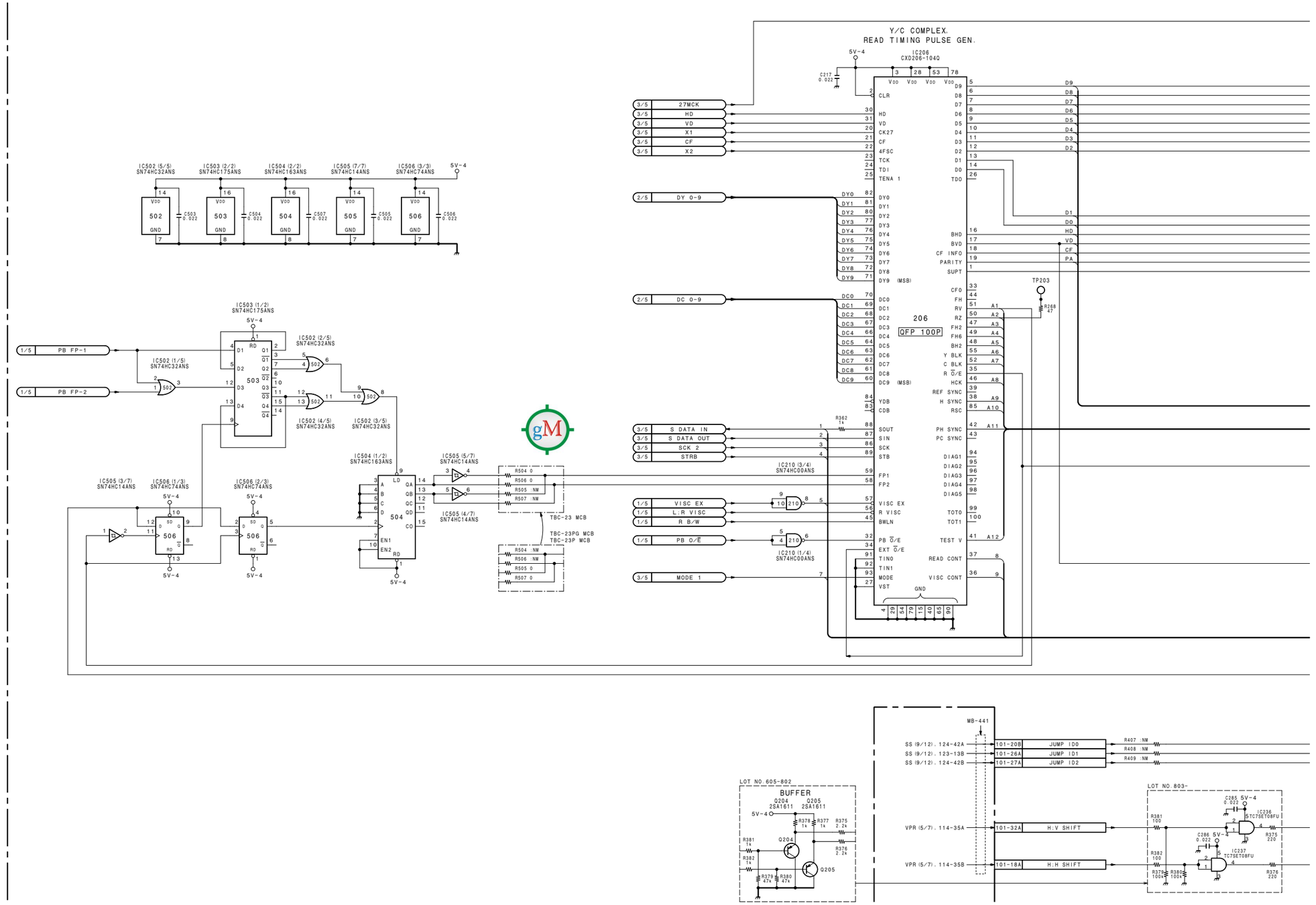
LOT NO.	BOARD NO.
605-802	1-648-543-15
803-	1-648-543-16

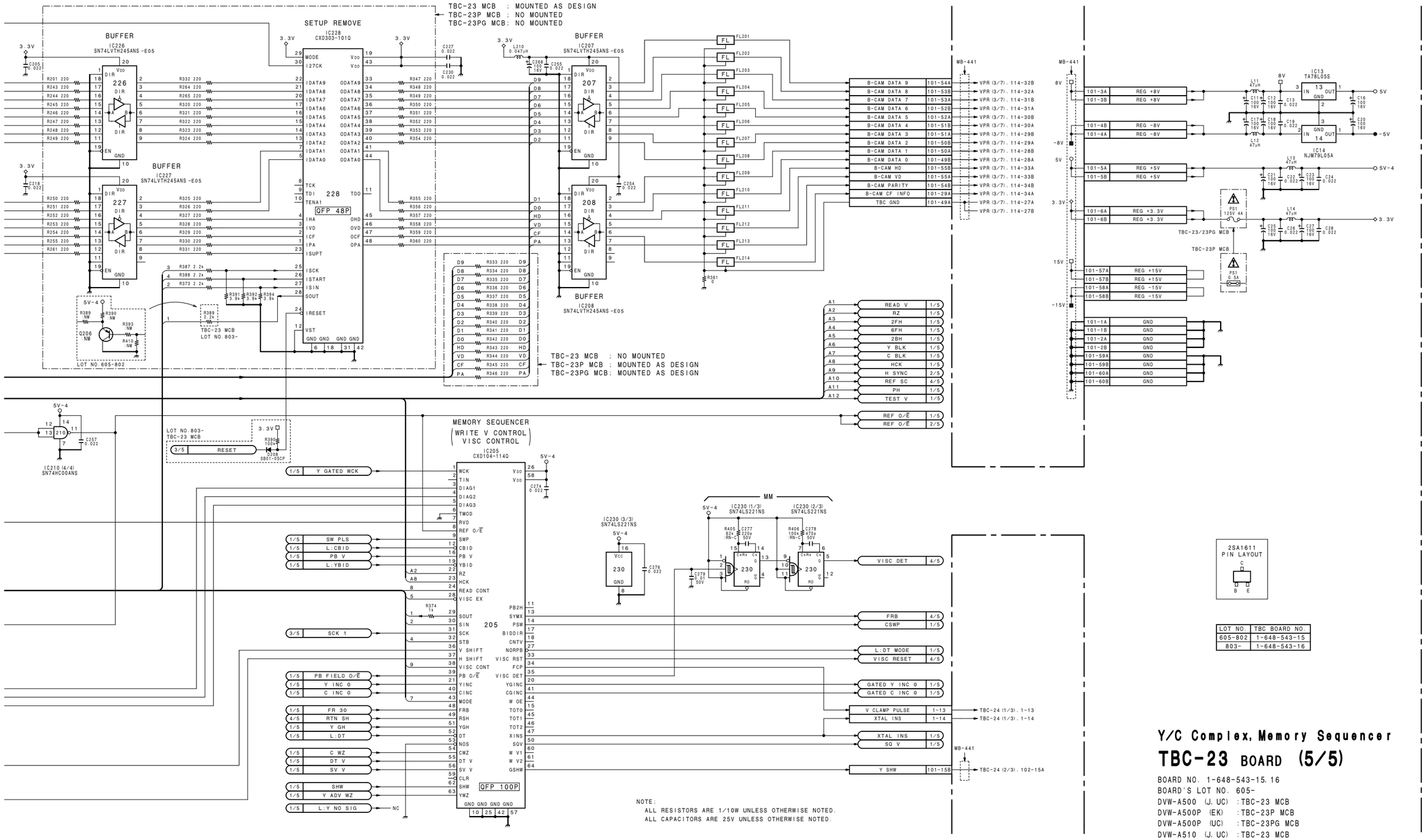
VISC Phase Detector

TBC-23 BOARD (4/5)

BOARD NO. 1-648-543-15, 16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : TBC-23 MCB
DVW-A500P (EK) : TBC-23P MCB
DVW-A500P (UC) : TBC-23PG MCB
DVW-A510 (J, UC) : TBC-23 MCB
DVW-A510P (EK) : TBC-23P MCB
DVW-CA510 (J, UC) : TBC-23 MCB
DVW-CA510P (EK) : TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-C


Y/C COMPLEX.
READ TIMING PULSE GEN.
IC206
CXD206-104Q
206
QFP 100P
5V-4
C217 0.022
3/5 27MCK
3/5 HD
3/5 VD
3/5 X1
3/5 CF
3/5 X2
2/5 DY 0-9
2/5 DC 0-9
3/5 S DATA IN
3/5 S DATA OUT
3/5 SCK 2
3/5 STRB
1/5 VISC EX
1/5 L/R VISC
1/5 R B/W
1/5 PB O/E
3/5 MODE 1
R362 1k
IC210 (3/4) SN74HC00ANS
IC210 (1/4) SN74HC00ANS
TP203
R268 47
GND
IC502 (5/5) SN74HC32ANS
IC503 (2/2) SN74HC175ANS
IC504 (2/2) SN74HC163ANS
IC505 (7/7) SN74HC14ANS
IC506 (3/3) SN74HC74ANS
C503 0.022
C504 0.022
C507 0.022
C505 0.022
C506 0.022
IC503 (1/2) SN74HC175ANS
IC502 (1/5) SN74HC32ANS
IC502 (2/5) SN74HC32ANS
IC502 (4/5) SN74HC32ANS
IC502 (3/5) SN74HC32ANS
IC504 (1/2) SN74HC163ANS
IC505 (5/7) SN74HC14ANS
IC505 (4/7) SN74HC14ANS
IC505 (3/7) SN74HC14ANS
IC506 (1/3) SN74HC74ANS
IC506 (2/3) SN74HC74ANS
1/5 PB FP-1
1/5 PB FP-2
R504 0
R506 0
R505 :NM
R507 :NM
R504 :NM
R506 :NM
R505 0
R507 0
TBC-23 MCB
TBC-23PG MCB
TBC-23P MCB
MB-441
SS (9/12), 124-42A
SS (9/12), 123-13B
SS (9/12), 124-42B
101-20B JUMP ID0
101-26A JUMP ID1
101-27A JUMP ID2
R407 :NM
R408 :NM
R409 :NM
VPR (5/7), 114-35A
VPR (5/7), 114-35B
101-32A H:V SHIFT
101-18A H:H SHIFT
LOT NO.605-802
BUFFER
Q204 2SA1611
Q205 2SA1611
LOT NO.803-
IC236 TC75ET08FU
IC237 TC75ET08FU
C285 5V-4 0.022
C286 5V-4 0.022



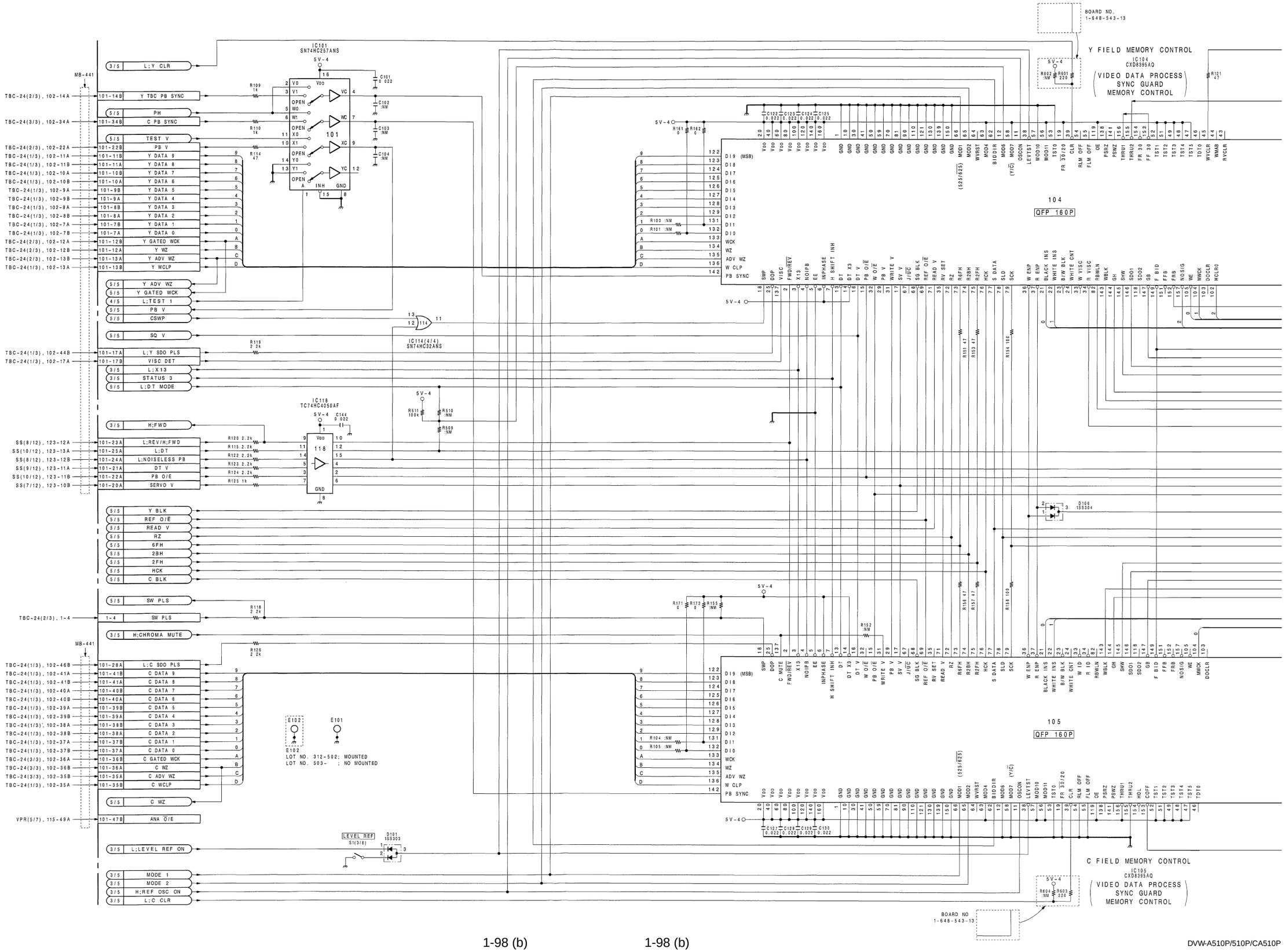
LOT NO.	TBC BOARD NO.
605-802	1-648-543-15
803-	1-648-543-16

Y/C Complex, Memory Sequencer

TBC-23 BOARD (5/5)

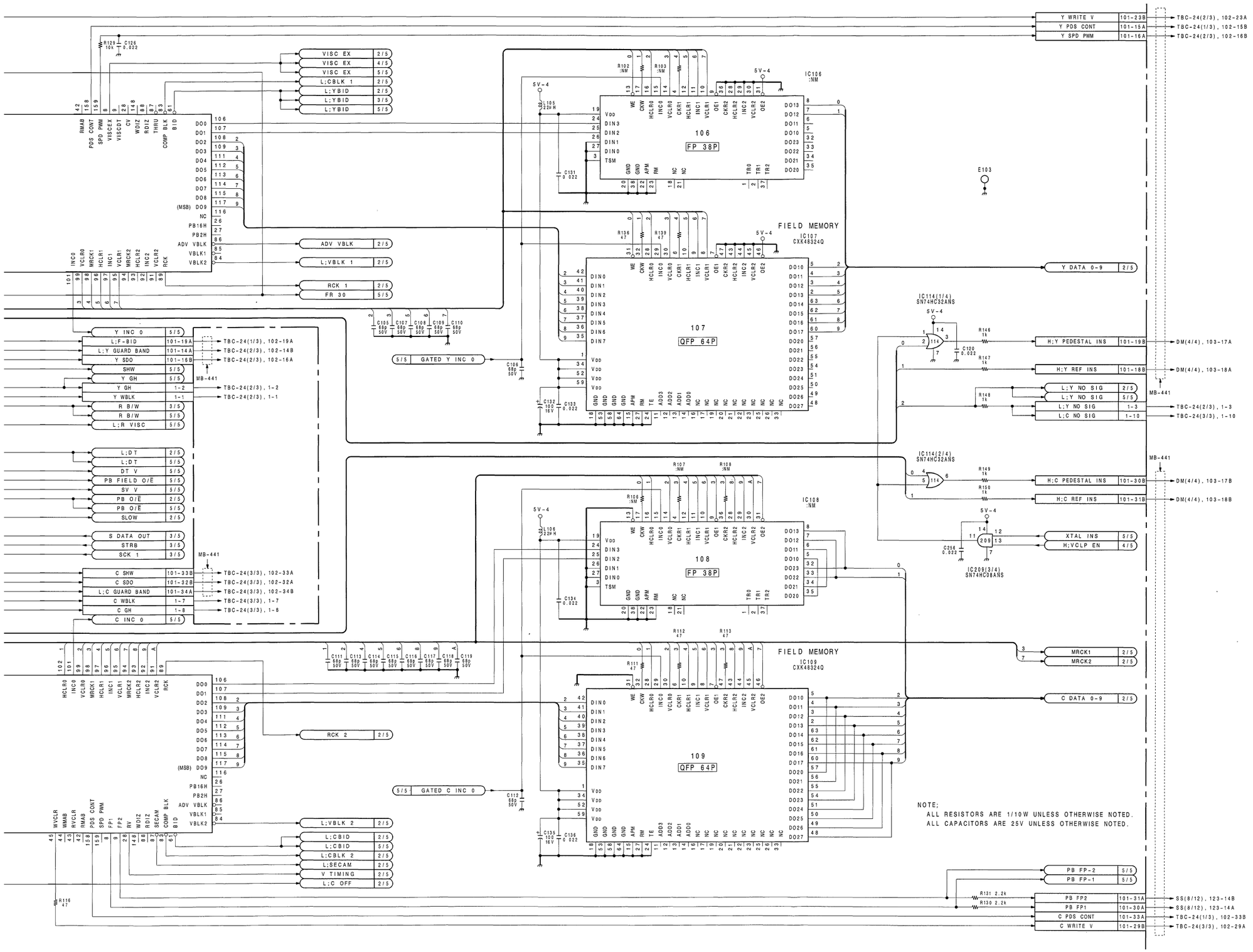
BOARD NO. 1-648-543-15, 16
BOARD'S LOT NO. 605-
DVW-A500 (J, UC) : TBC-23 MCB
DVW-A500P (EK) : TBC-23P MCB
DVW-A500P (UC) : TBC-23PG MCB
DVW-A510 (J, UC) : TBC-23 MCB
DVW-A510P (EK) : TBC-23P MCB
DVW-CA510 (J, UC) : TBC-23 MCB
DVW-CA510P (EK) : TBC-23P MCB

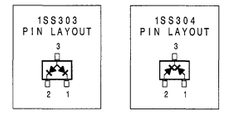
DVW-TBC23-ALL-A-PB-S/M-04-C



1-98 (b)　　1-98 (b)

DVW-A510P/510P/CA510P





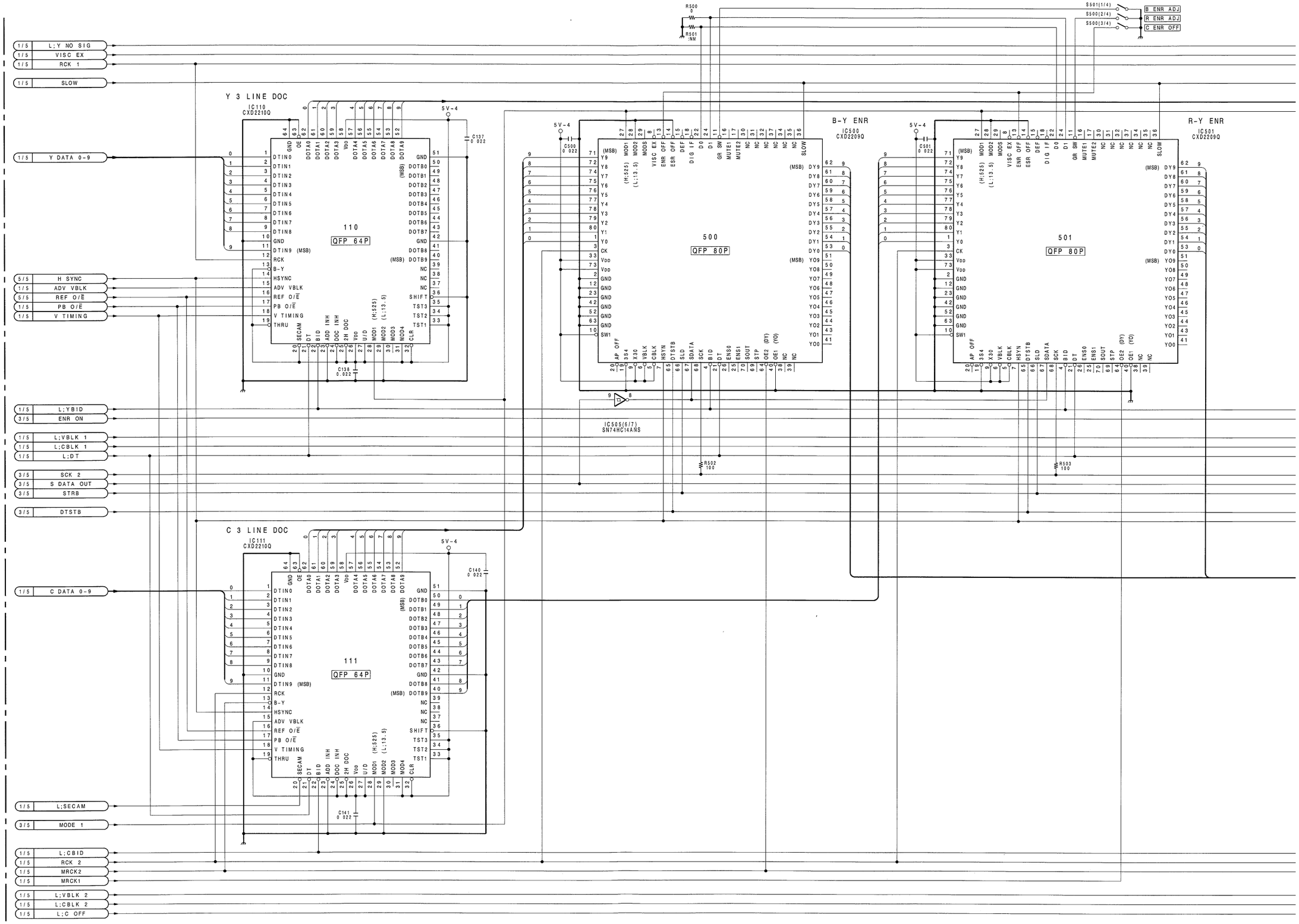
LOT NO.	BOARD NO.
312-412	1-648-543-13
501-603	1-648-543-14

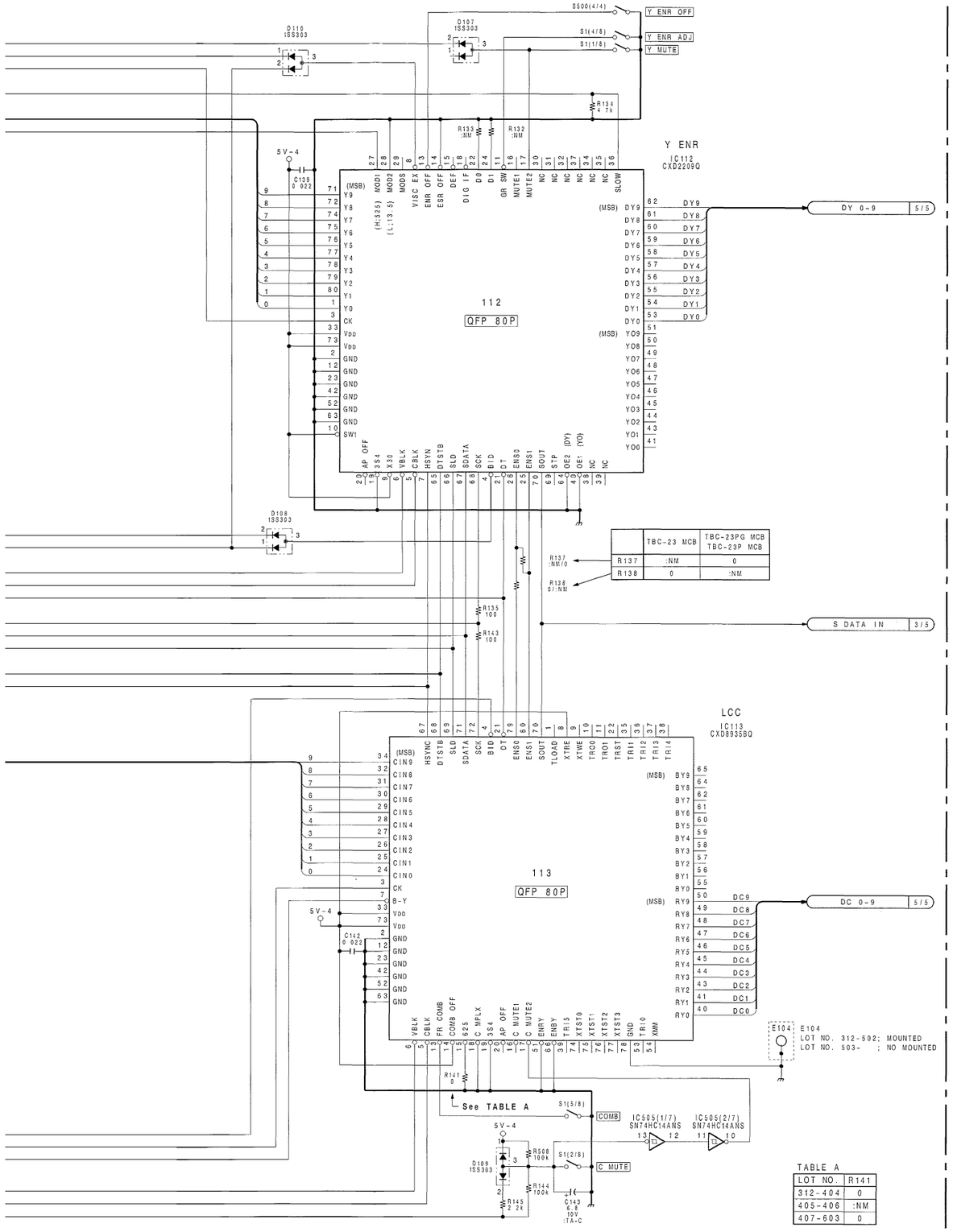
Y/C Data Memory Control, Field Memory

TBC-23 BOARD (1/5)

BOARD NO. 1-648-543-13, 14
BOARD' S LOT NO. 312-603
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500PG (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510(J, UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-B


Y 3 LINE DOC
IC110
CXD2210Q
110
QFP 64P
C 3 LINE DOC
IC111
CXD2210Q
111
QFP 64P
B-Y ENR
IC500
CXD2209Q
500
QFP 80P
R-Y ENR
IC501
CXD2209Q
501
QFP 80P
IC505(6/7)
SN74HC14ANS
R500
R501 :NM
R502 100
R503 100
C137 0.022
C138 0.022
C140 0.022
C141 0.022
C500 0.022
C501 0.022
5V-4
S501(1/4)
S500(2/4)
S500(3/4)
B ENR ADJ
R ENR ADJ
C ENR OFF
1/5 L;Y NO SIG
1/5 VISC EX
1/5 RCK 1
1/5 SLOW
1/5 Y DATA 0-9
5/5 H SYNC
1/5 ADV VBLK
5/5 REF O/E
1/5 PB O/E
1/5 V TIMING
1/5 L;YBID
3/5 ENR ON
1/5 L;VBLK 1
1/5 L;CBLK 1
1/5 L;DT
3/5 SCK 2
3/5 S DATA OUT
3/5 STRB
3/5 DTSTB
1/5 C DATA 0-9
1/5 L;SECAM
3/5 MODE 1
1/5 L;CBID
1/5 RCK 2
1/5 MRCK2
1/5 MRCK1
1/5 L;VBLK 2
1/5 L;CBLK 2
1/5 L;C OFF

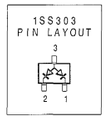


	TBC-23 MCB	TBC-23PG MCB TBC-23P MCB
R137	:NM	0
R138	0	:NM

TABLE A

LOT NO.	R141
312-404	0
405-406	:NM
407-603	0

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED



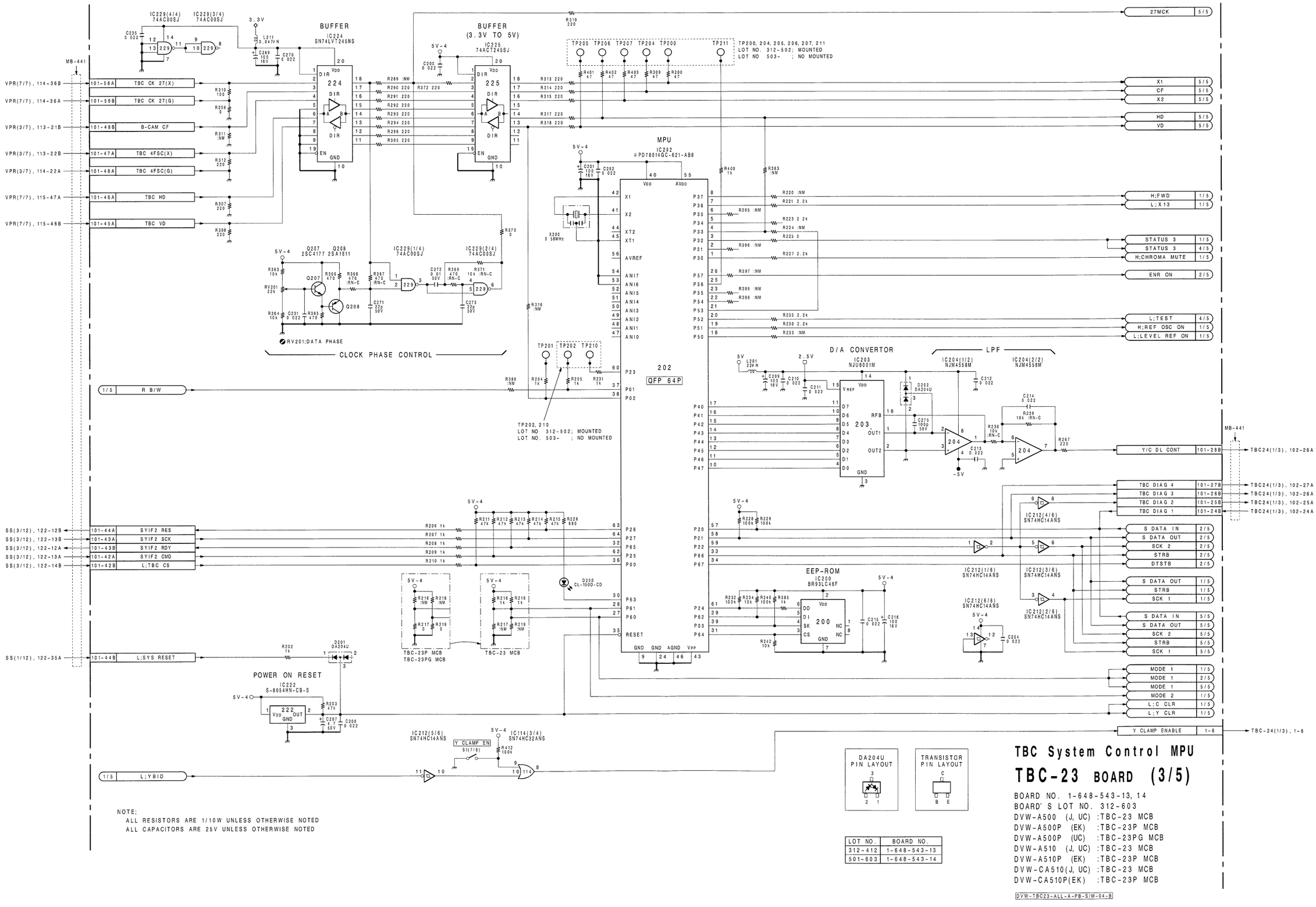
LOT NO.	BOARD NO.
312-412	1-648-543-13
501-603	1-648-543-14

TBC Sequence

TBC-23 BOARD (2/5)

BOARD NO. 1-648-543-13, 14
BOARD' S LOT NO. 312-603
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510(J, UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-B



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED

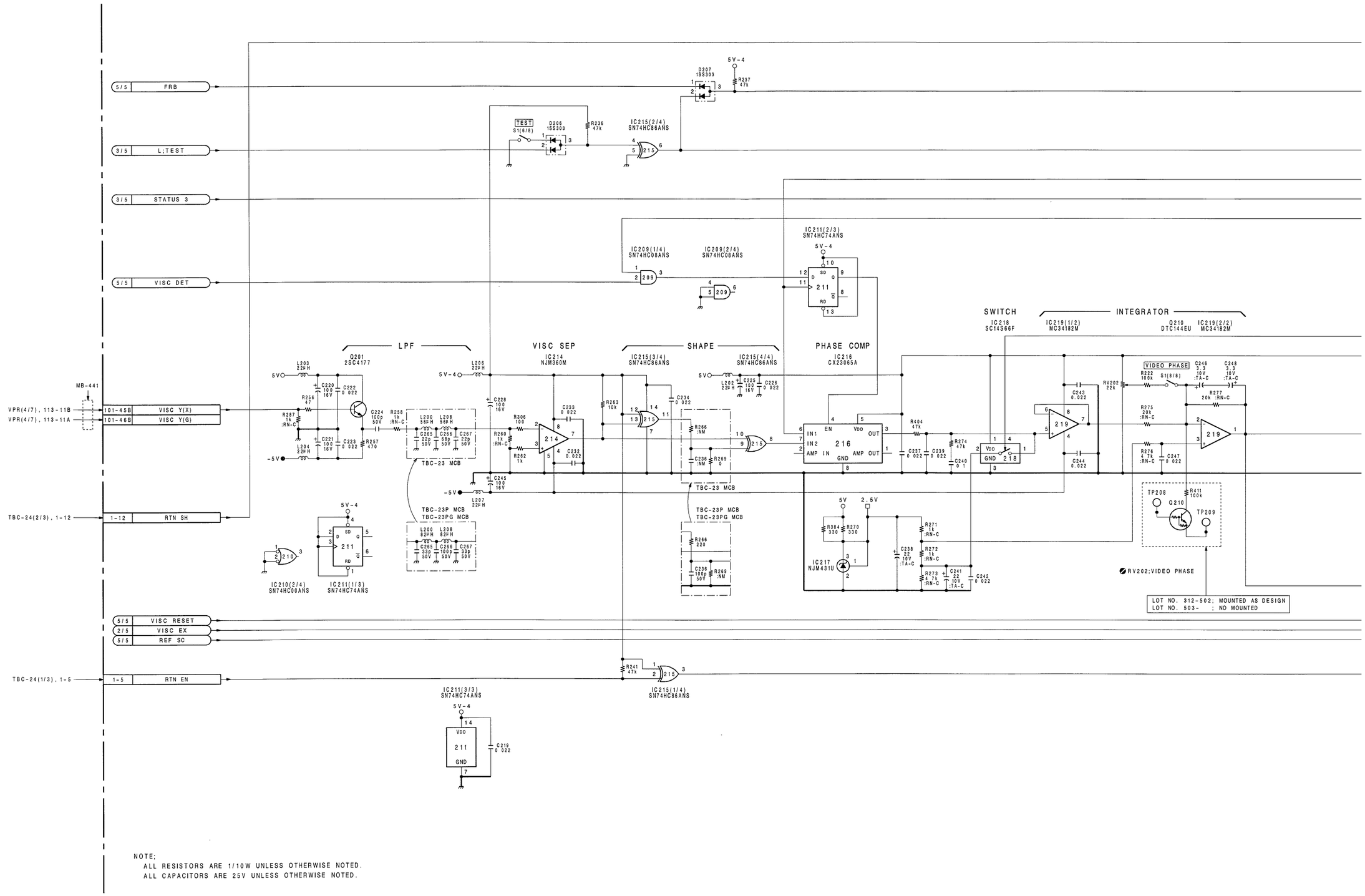
LOT NO.	BOARD NO.
312-412	1-648-543-13
501-603	1-648-543-14

TBC System Control MPU

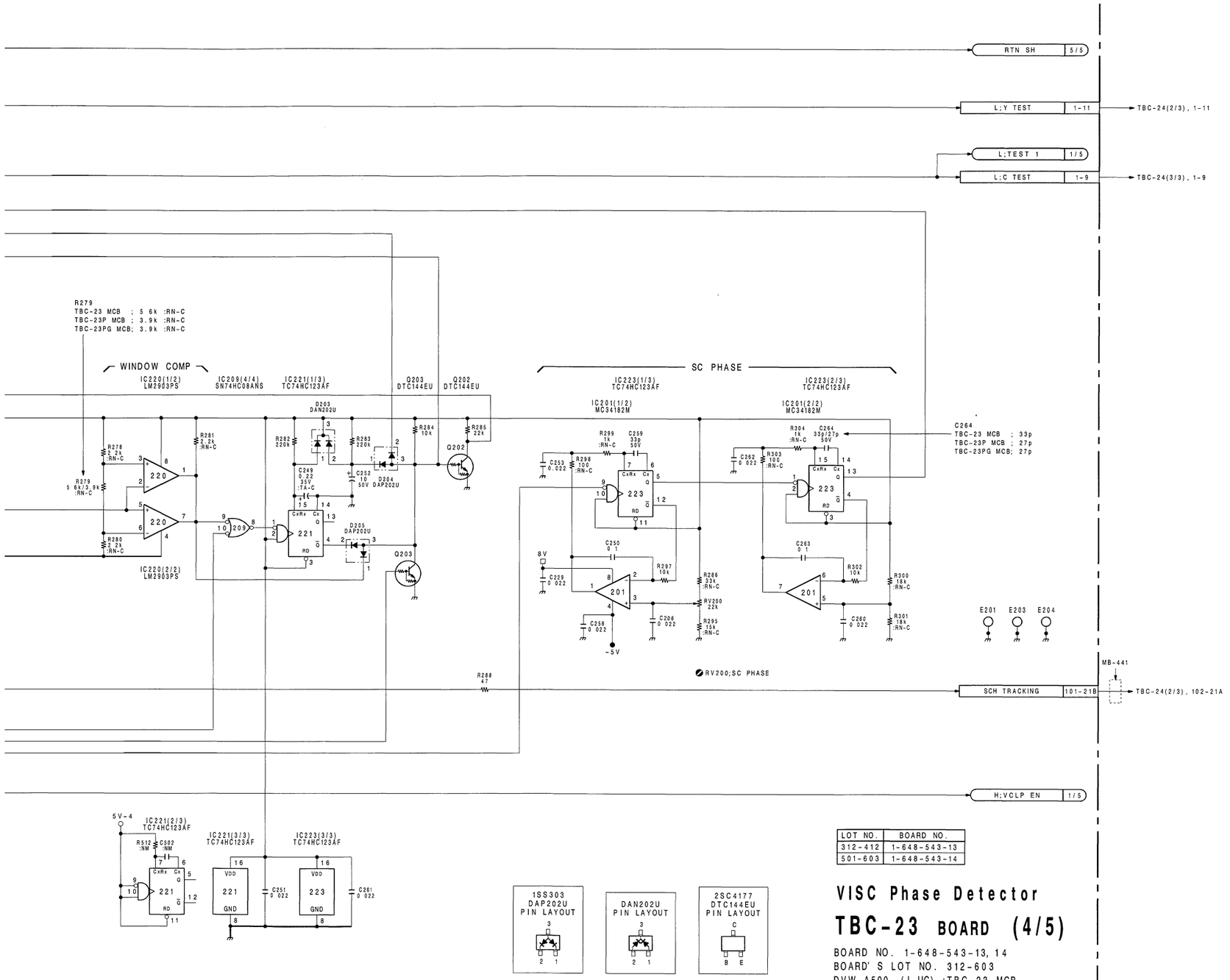
TBC-23 BOARD (3/5)

BOARD NO. 1-648-543-13, 14
BOARD' S LOT NO. 312-603
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510(J, UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-B



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



LOT NO.	BOARD NO.
312-412	1-648-543-13
501-603	1-648-543-14

1SS303 DAP202U PIN LAYOUT

DAN202U PIN LAYOUT

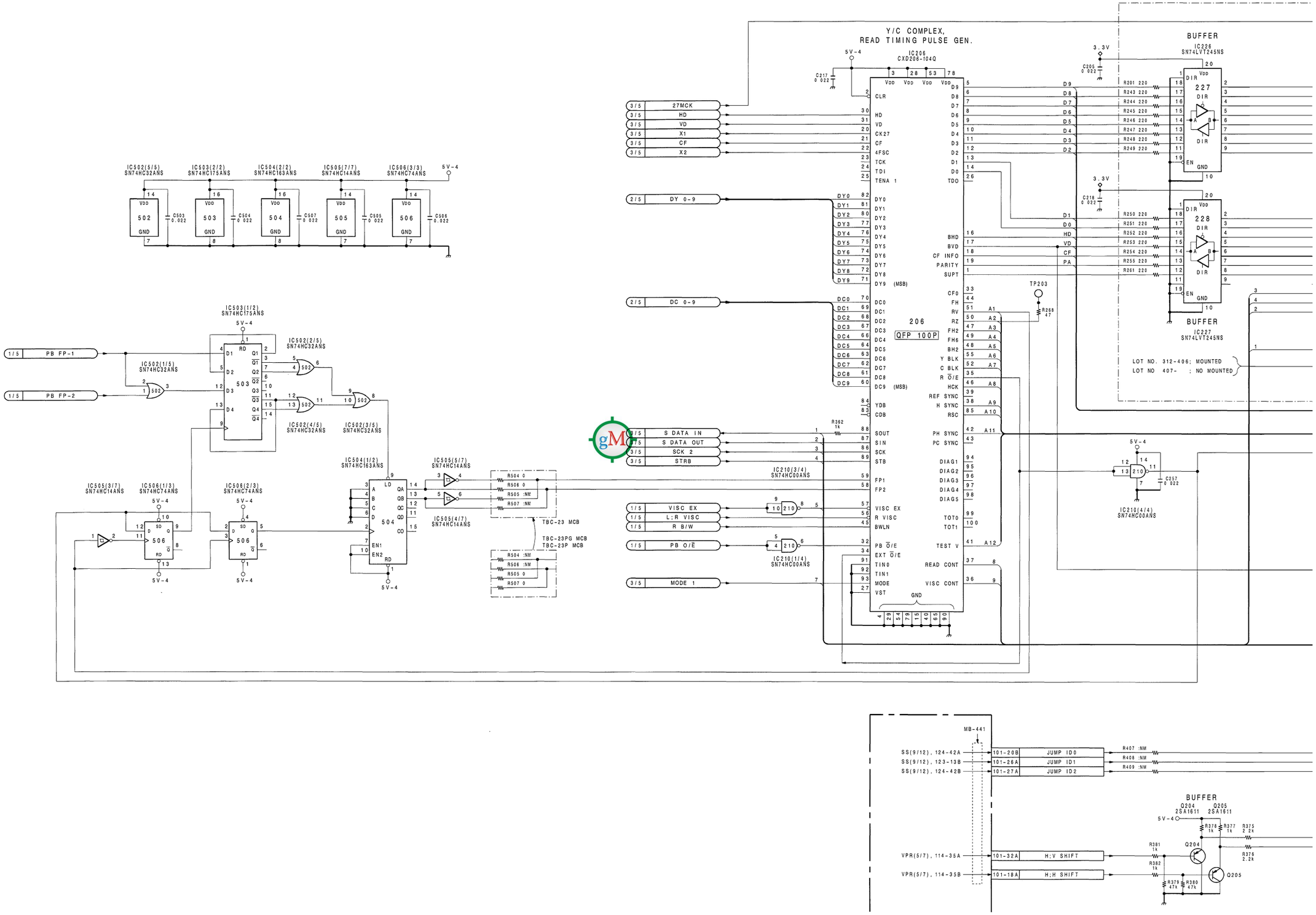
2SC4177 DTC144EU PIN LAYOUT

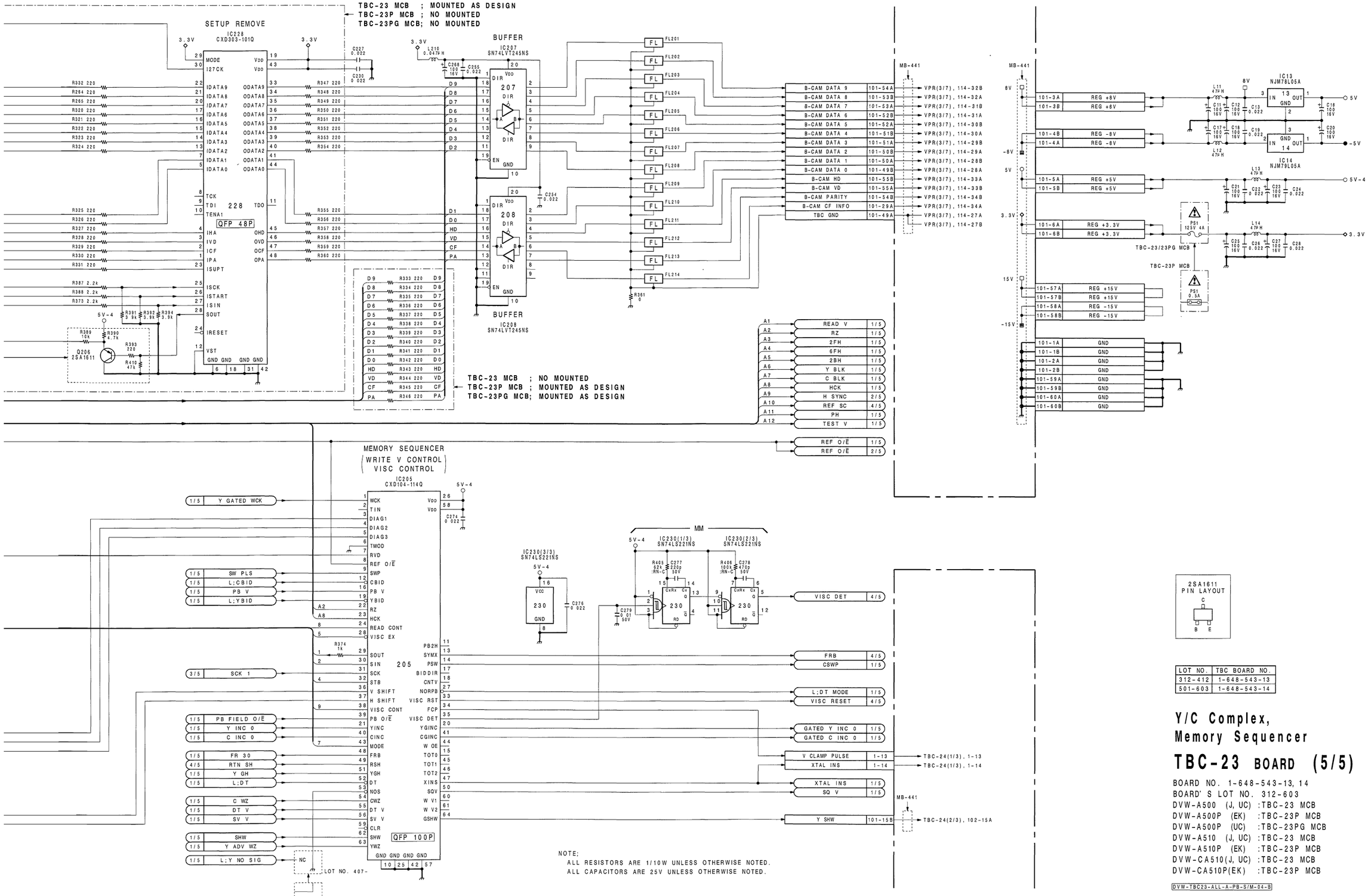
VISC Phase Detector

TBC-23 BOARD (4/5)

BOARD NO. 1-648-543-13, 14
BOARD' S LOT NO. 312-603
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510(J, UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-B


Y/C COMPLEX,
READ TIMING PULSE GEN.
IC206
CXD206-104Q
206
QFP 100P
BUFFER
IC226
SN74LVT245NS
227
228
BUFFER
IC227
SN74LVT245NS
LOT NO. 312-406; MOUNTED
LOT NO 407- ; NO MOUNTED
IC502(5/5) SN74HC32ANS
IC503(2/2) SN74HC175ANS
IC504(2/2) SN74HC163ANS
IC505(7/7) SN74HC14ANS
IC506(3/3) SN74HC74ANS
IC503(1/2) SN74HC175ANS
IC502(1/5) SN74HC32ANS
IC502(2/5) SN74HC32ANS
IC502(4/5) SN74HC32ANS
IC502(3/5) SN74HC32ANS
IC504(1/2) SN74HC163ANS
IC505(5/7) SN74HC14ANS
IC505(4/7) SN74HC14ANS
IC505(3/7) SN74HC14ANS
IC506(1/3) SN74HC74ANS
IC506(2/3) SN74HC74ANS
IC210(3/4) SN74HC00ANS
IC210(1/4) SN74HC00ANS
IC210(4/4) SN74HC00ANS
TBC-23 MCB
TBC-23PG MCB
TBC-23P MCB
TP203
27MCK
HD
VD
X1
CF
X2
DY 0-9
DC 0-9
S DATA IN
S DATA OUT
SCK 2
STRB
MODE 1
VISC EX
L;R VISC
R B/W
PB O/E
PB FP-1
PB FP-2
MB-441
JUMP ID0
JUMP ID1
JUMP ID2
H;V SHIFT
H;H SHIFT
GND



2SA1611 PIN LAYOUT

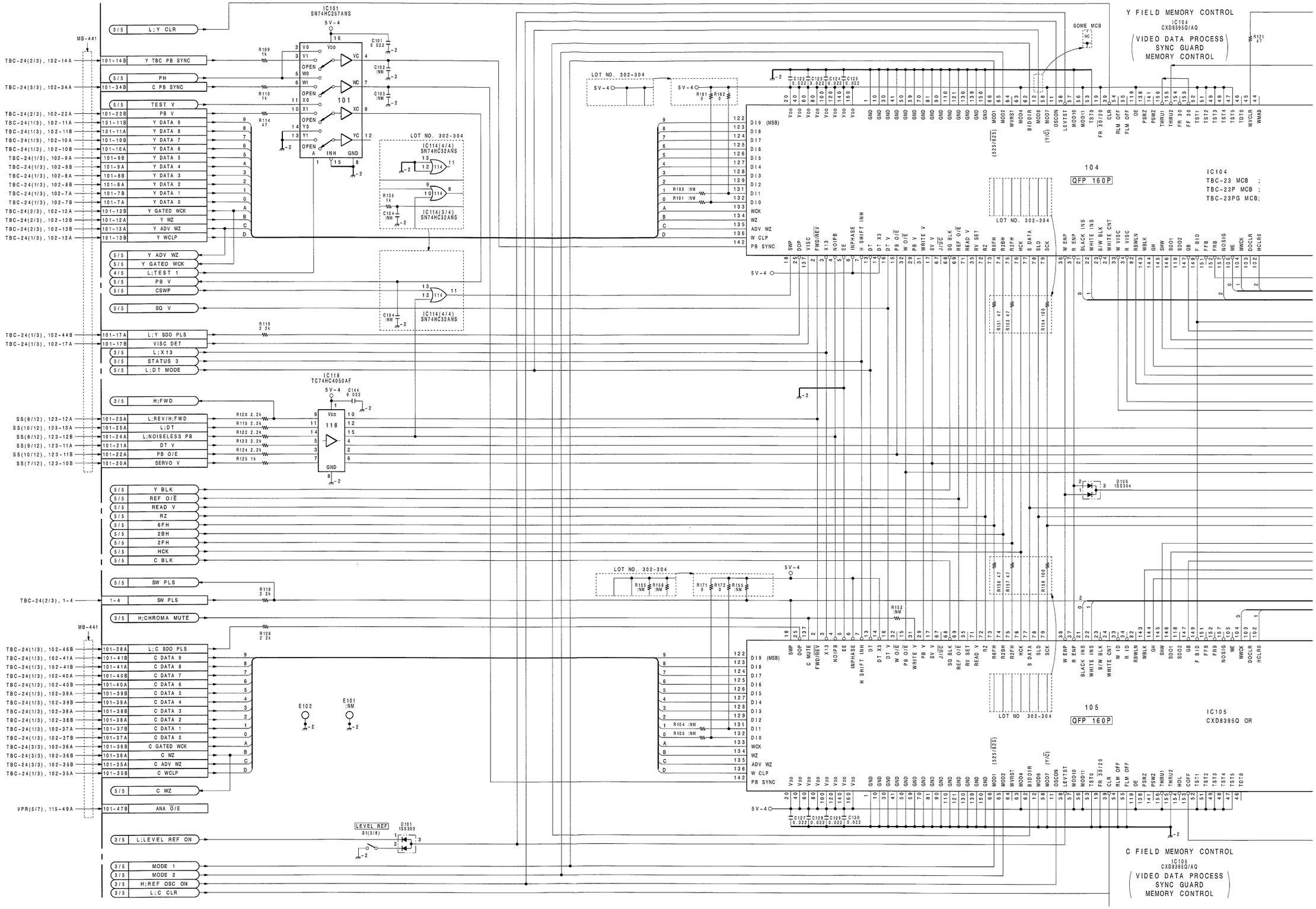
LOT NO.	TBC BOARD NO.
312-412	1-648-543-13
501-603	1-648-543-14

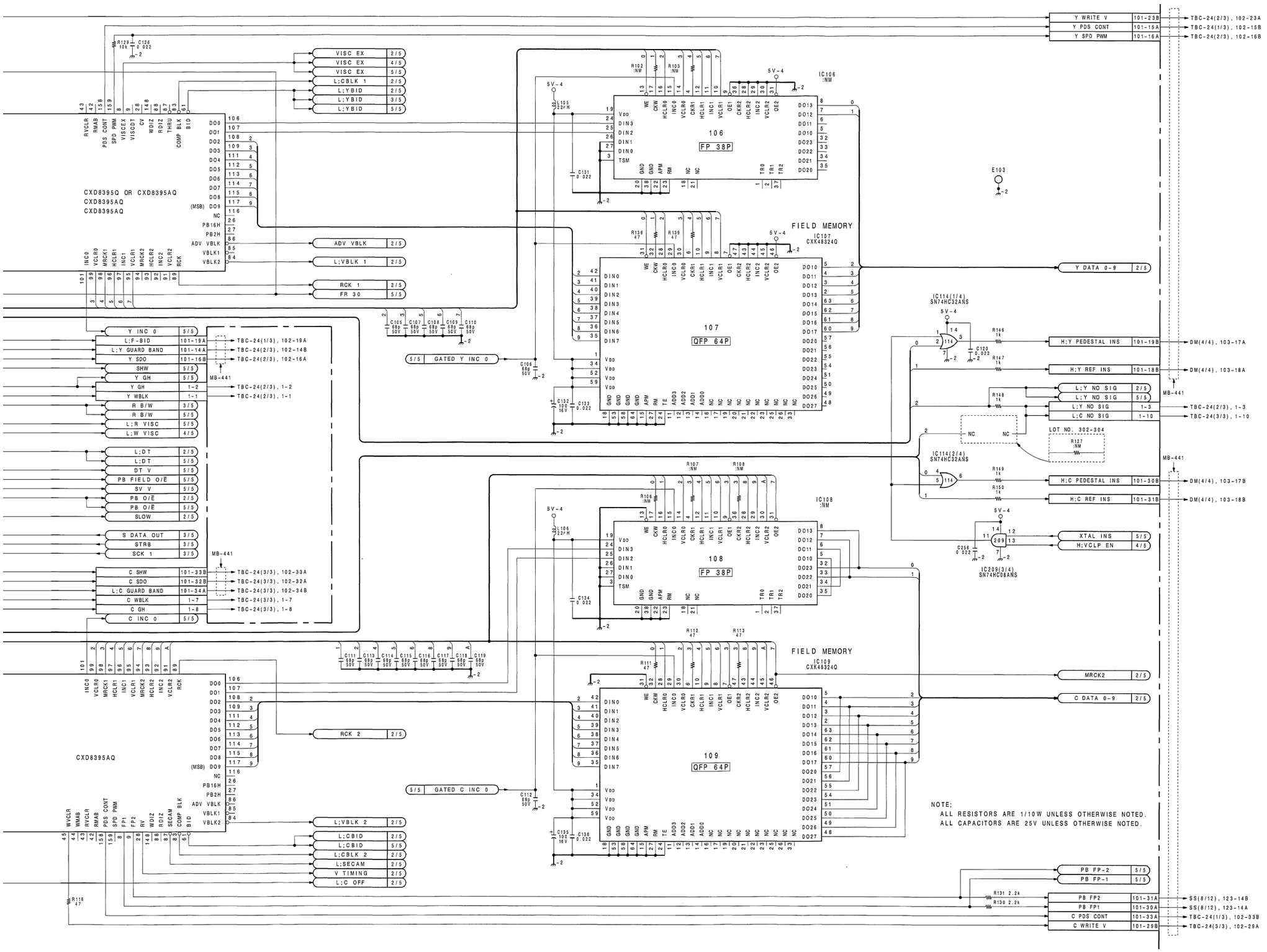
Y/C Complex, Memory Sequencer

TBC-23 BOARD (5/5)

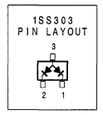
BOARD NO. 1-648-543-13, 14
BOARD' S LOT NO. 312-603
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510(J, UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-B

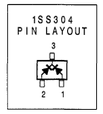

Y FIELD MEMORY CONTROL
IC104
CXD8395Q/AQ
VIDEO DATA PROCESS
SYNC GUARD
MEMORY CONTROL
IC104
TBC-23 MCB ;
TBC-23P MCB ;
TBC-23PG MCB;
104
QFP 160P
C FIELD MEMORY CONTROL
IC105
CXD8395Q/AQ
VIDEO DATA PROCESS
SYNC GUARD
MEMORY CONTROL
IC105
CXD8395Q OR
105
QFP 160P
IC101
SN74HC257ANS
IC114/4/4)
SN74HC32ANS
IC114/3/4)
SN74HC32ANS
IC118
TC74HC4050AF
LOT NO. 302-304
SOME MCB
MB-441
LEVEL REF
51(3/8)
D101
1SS303
D106
1SS304
E101
:NM
E102
L;Y CLR
Y TBC PB SYNC
PH
C PB SYNC
TEST V
PB V
Y DATA 9
Y DATA 8
Y DATA 7
Y DATA 6
Y DATA 5
Y DATA 4
Y DATA 3
Y DATA 2
Y DATA 1
Y DATA 0
Y GATED WCK
Y WZ
Y ADV WZ
Y WCLP
Y ADV WZ
Y GATED WCK
L;TEST 1
PB V
CSWP
SQ V
L;Y SDO PLS
VISC DET
L;X13
STATUS 3
L;DT MODE
H;FWD
L;REV/H;FWD
L;DT
L;NOISELESS PB
DT V
PB O/E
SERVO V
Y BLK
REF O/E
READ V
RZ
6FH
2BH
2FH
HCK
C BLK
SW PLS
SW PLS
H;CHROMA MUTE
L;C SDO PLS
C DATA 9
C DATA 8
C DATA 7
C DATA 6
C DATA 5
C DATA 4
C DATA 3
C DATA 2
C DATA 1
C DATA 0
C GATED WCK
C WZ
C ADV WZ
C WCLP
C WZ
ANA O/E
L;LEVEL REF ON
MODE 1
MODE 2
H;REF OSC ON
L;C CLR
TBC-24(2/3), 102-14A
TBC-24(3/3), 102-34A
TBC-24(2/3), 102-22A
TBC-24(1/3), 102-11A
TBC-24(1/3), 102-11B
TBC-24(1/3), 102-10A
TBC-24(1/3), 102-10B
TBC-24(1/3), 102-9A
TBC-24(1/3), 102-9B
TBC-24(1/3), 102-8A
TBC-24(1/3), 102-8B
TBC-24(1/3), 102-7A
TBC-24(1/3), 102-7B
TBC-24(2/3), 102-12A
TBC-24(2/3), 102-12B
TBC-24(2/3), 102-13B
TBC-24(1/3), 102-13A
TBC-24(1/3), 102-44B
TBC-24(1/3), 102-17A
SS(8/12), 123-12A
SS(10/12), 123-13A
SS(8/12), 123-12B
SS(9/12), 123-11A
SS(10/12), 123-11B
SS(7/12), 123-10B
TBC-24(2/3), 1-4
TBC-24(1/3), 102-46B
TBC-24(1/3), 102-41A
TBC-24(1/3), 102-41B
TBC-24(1/3), 102-40A
TBC-24(1/3), 102-40B
TBC-24(1/3), 102-39A
TBC-24(1/3), 102-39B
TBC-24(1/3), 102-38A
TBC-24(1/3), 102-38B
TBC-24(1/3), 102-37A
TBC-24(1/3), 102-37B
TBC-24(3/3), 102-36A
TBC-24(3/3), 102-36B
TBC-24(3/3), 102-35B
TBC-24(1/3), 102-35A
VPR(5/7), 115-49A



1SS303 PIN LAYOUT



1SS304 PIN LAYOUT



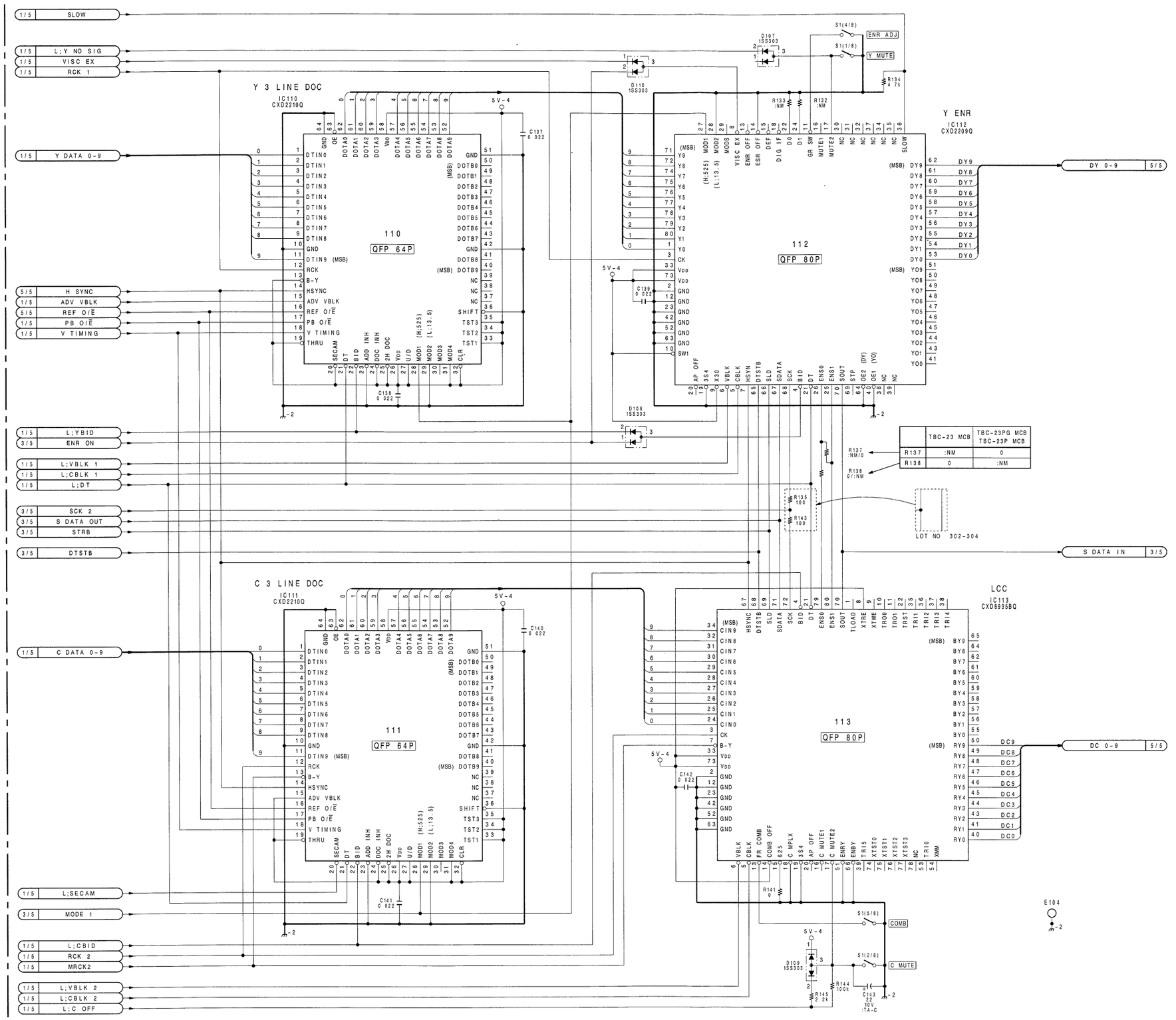
LOT NO.	BOARD NO.
302-304	1-648-543-11
305-311	1-648-543-12

Y/C Data Memory Control, Field Memory

TBC-23 BOARD (1/5)

BOARD NO. 1-648-543-11, 12
BOARD' S LOT NO. 302-311
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510 (UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

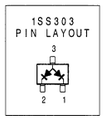
DVW-TBC23-ALL-A-PB-S/M-04-A



	TBC-23 MCB	TBC-23PG MCB TBC-23P MCB
R137	:NM	0
R138	0	:NM

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

1SS303 PIN LAYOUT



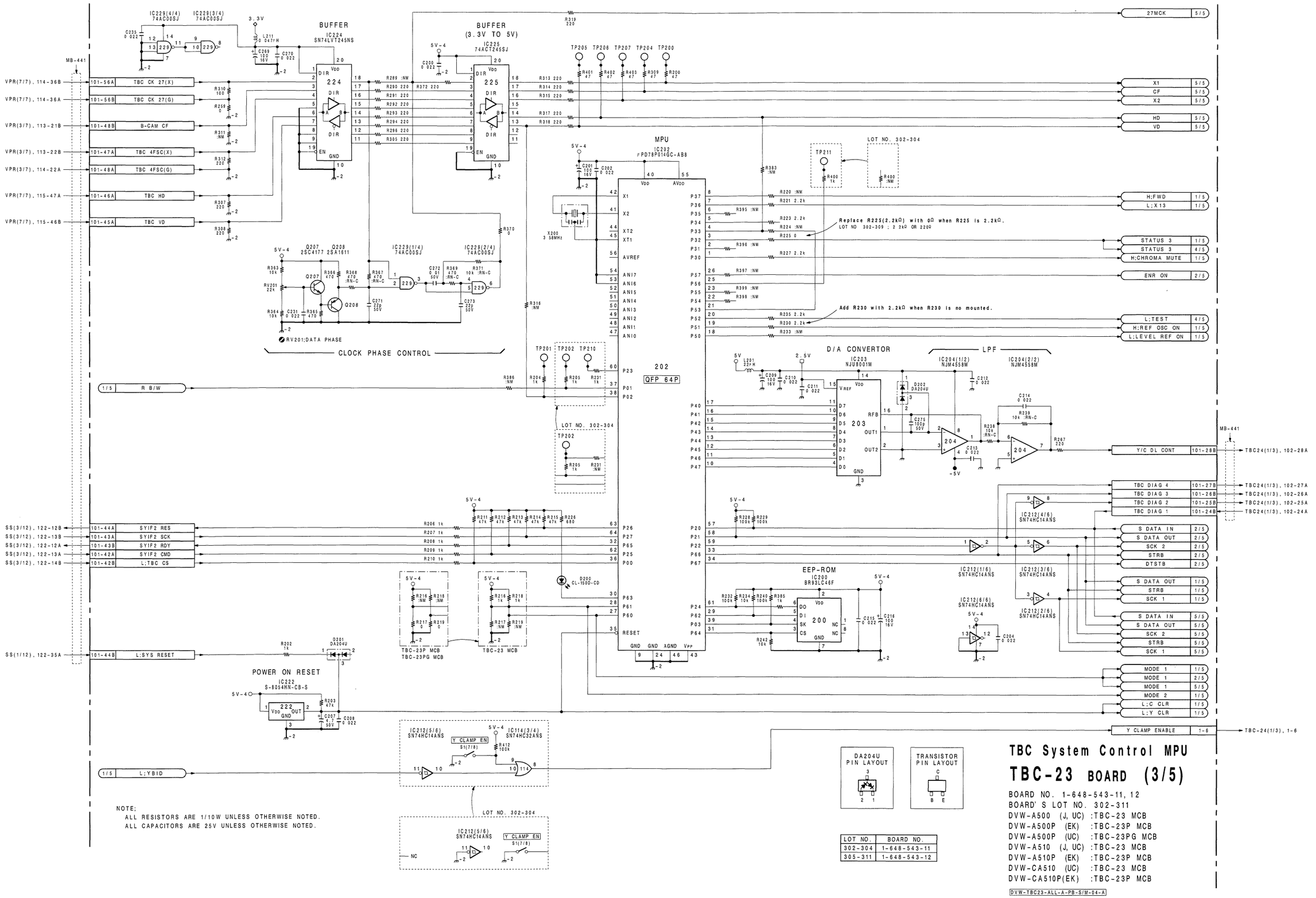
LOT NO.	BOARD NO.
302-304	1-648-543-11
305-311	1-648-543-12

TBC Sequence

TBC-23 BOARD (2/5)

BOARD NO. 1-648-543-11, 12
BOARD' S LOT NO. 302-311
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510 (UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-A



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

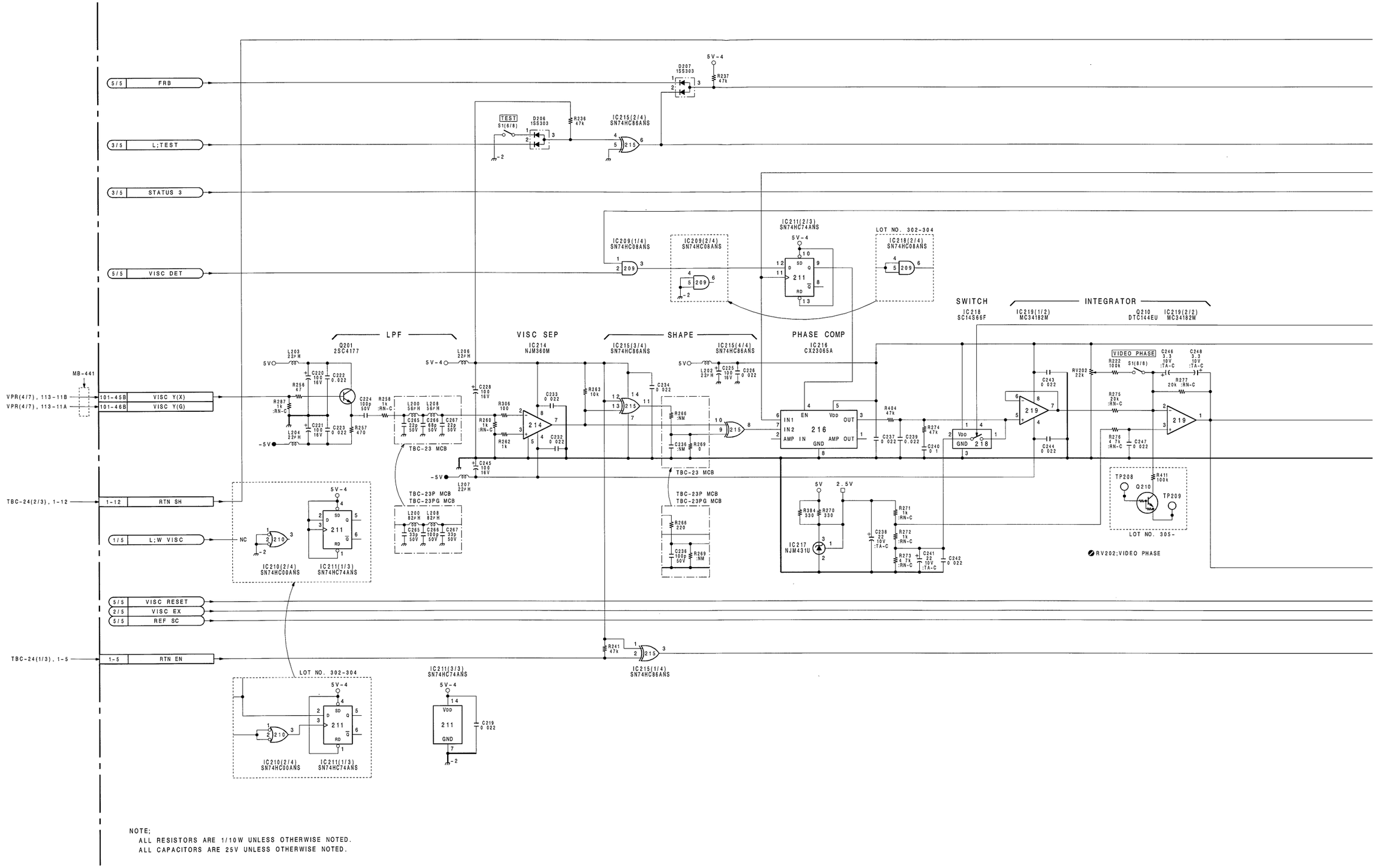
TBC System Control MPU

TBC-23 BOARD (3/5)

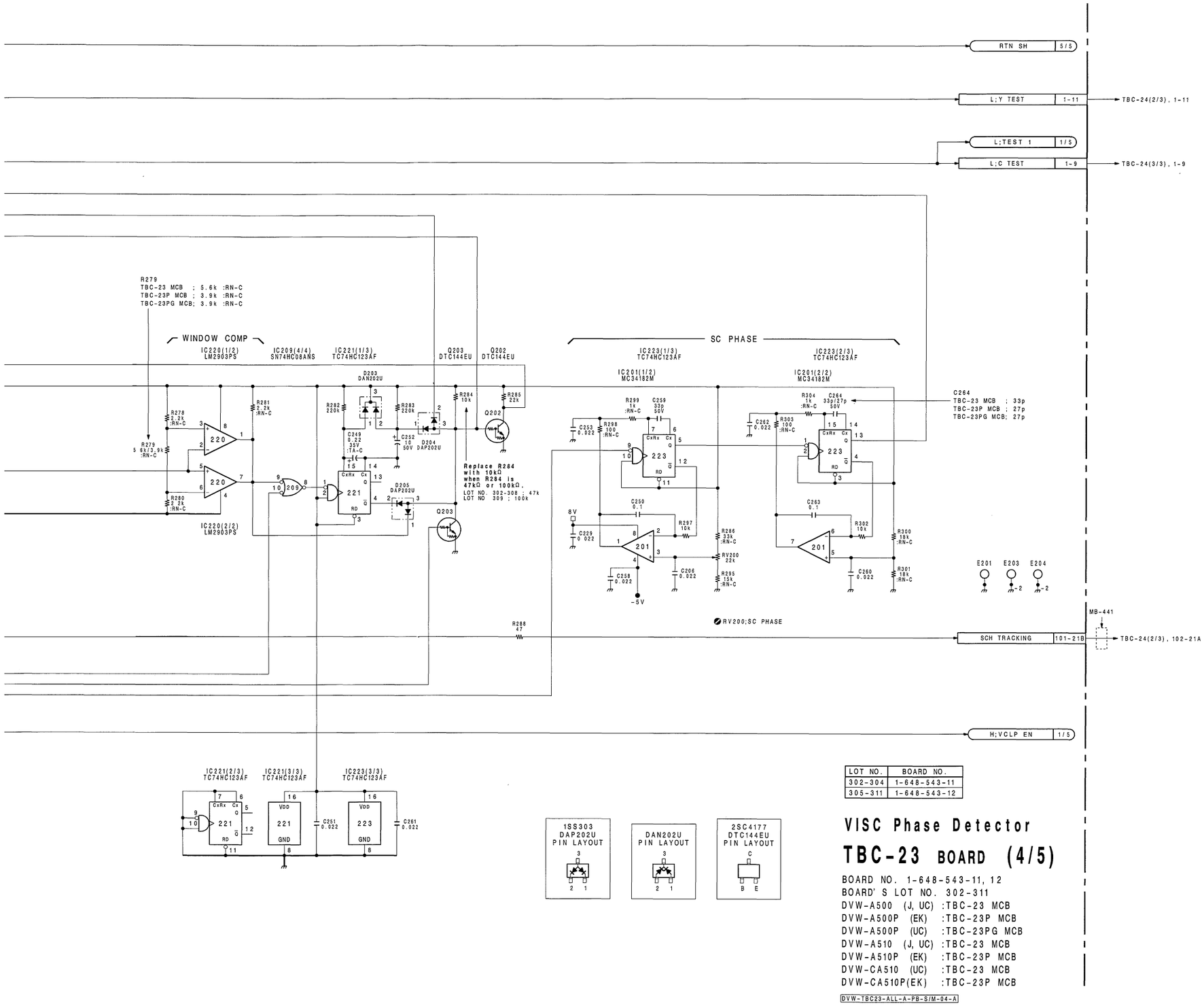
BOARD NO. 1-648-543-11, 12
BOARD' S LOT NO. 302-311
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510 (UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-A

LOT NO.	BOARD NO.
302-304	1-648-543-11
305-311	1-648-543-12



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



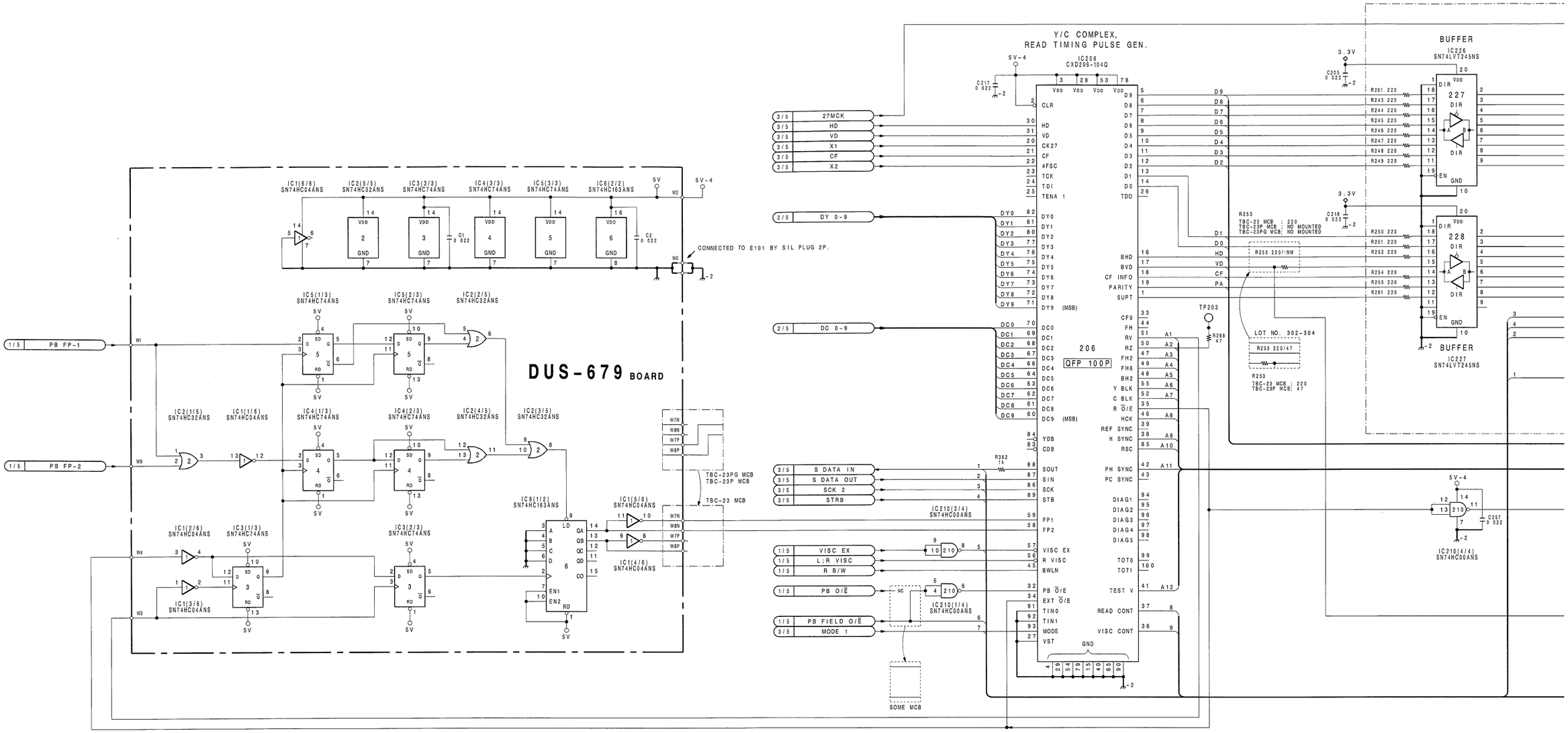
LOT NO.	BOARD NO.
302-304	1-648-543-11
305-311	1-648-543-12

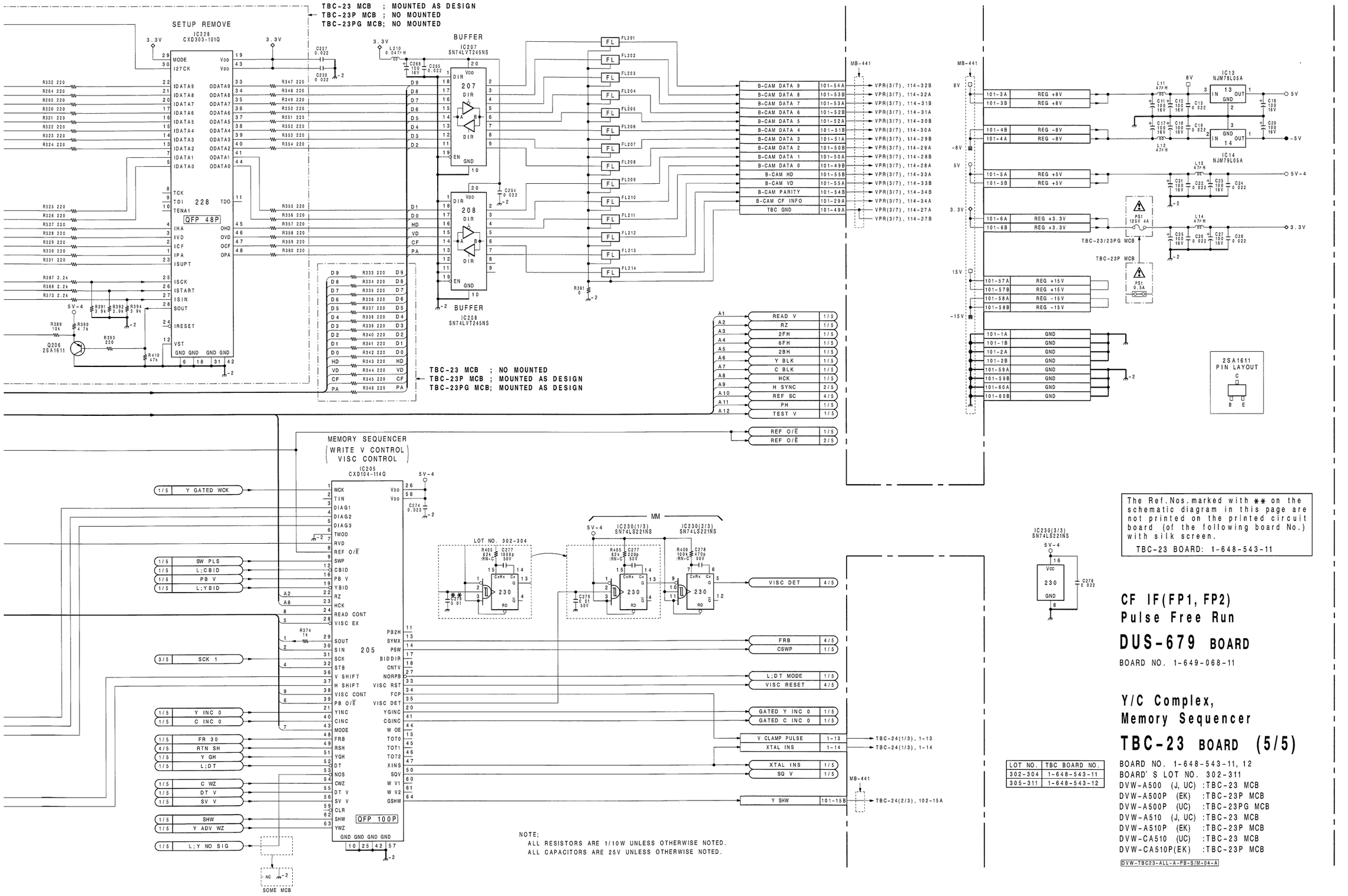
VISC Phase Detector

TBC-23 BOARD (4/5)

BOARD NO. 1-648-543-11, 12
BOARD' S LOT NO. 302-311
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510 (UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

DVW-TBC23-ALL-A-PB-S/M-04-A


DUS-679 BOARD
Y/C COMPLEX, READ TIMING PULSE GEN.
IC206 CXD2095-104Q
QFP 100P
BUFFER
IC226 SN74LVT245NS
IC227 SN74LVT245NS
IC1(6/6) SN74HC04ANS
IC2(5/5) SN74HC32ANS
IC3(3/3) SN74HC74ANS
IC4(3/3) SN74HC74ANS
IC5(3/3) SN74HC74ANS
IC6(2/2) SN74HC163ANS
IC5(1/3) SN74HC74ANS
IC5(2/3) SN74HC74ANS
IC2(2/5) SN74HC32ANS
IC2(1/5) SN74HC32ANS
IC1(1/6) SN74HC04ANS
IC4(1/3) SN74HC74ANS
IC4(2/3) SN74HC74ANS
IC2(4/5) SN74HC32ANS
IC2(3/5) SN74HC32ANS
IC1(2/6) SN74HC04ANS
IC3(1/3) SN74HC74ANS
IC3(2/3) SN74HC74ANS
IC1(3/6) SN74HC04ANS
IC6(1/2) SN74HC163ANS
IC1(5/6) SN74HC04ANS
IC1(4/6) SN74HC04ANS
IC210(3/4) SN74HC00ANS
IC210(1/4) SN74HC00ANS
IC210(4/4) SN74HC00ANS
CONNECTED TO E101 BY SIL PLUG 2P.
TBC-23PG MCB
TBC-23P MCB
TBC-23 MCB
SOME MCB
PB FP-1
PB FP-2
27MCK
HD
VD
X1
CF
X2
DY 0-9
DC 0-9
S DATA IN
S DATA OUT
SCK 2
STRB
VISC EX
L;R VISC
R B/W
PB O/E
PB FIELD O/E
MODE 1
R253 TBC-23 MCB : 220 TBC-23P MCB: NO MOUNTED TBC-23PG MCB: NO MOUNTED
R253 220/:NM
LOT NO. 302-304
R253 220/47
R253 TBC-23 MCB : 220 TBC-23P MCB: 47
TP203
R268 47
MB-441
SS(9/12), 124-42A
SS(9/12), 123-13B
SS(9/12), 124-42B
101-20B JUMP ID0
101-26A JUMP ID1
101-27A JUMP ID2
R407 :NM
R408 :NM
R409 :NM
BUFFER
Q204 2SA1611
Q205 2SA1611
VPR(5/7), 114-35A
VPR(5/7), 114-35B
101-32A H;V SHIFT
101-18A H;H SHIFT



The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

TBC-23 BOARD: 1-648-543-11

CF IF(FP1, FP2) Pulse Free Run

DUS-679 BOARD

BOARD NO. 1-649-068-11

Y/C Complex, Memory Sequencer

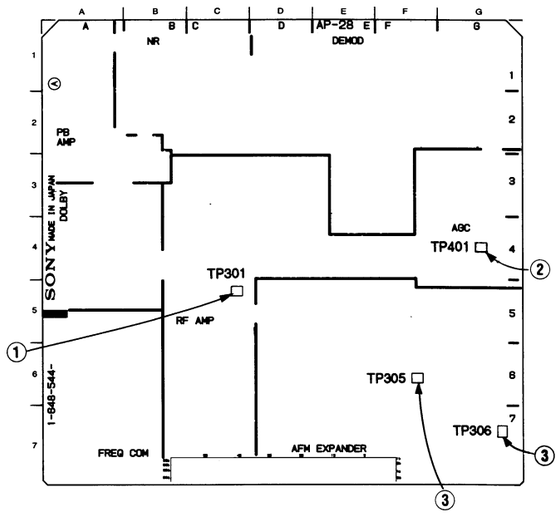
TBC-23 BOARD (5/5)

BOARD NO. 1-648-543-11, 12
BOARD' S LOT NO. 302-311
DVW-A500 (J, UC) :TBC-23 MCB
DVW-A500P (EK) :TBC-23P MCB
DVW-A500P (UC) :TBC-23PG MCB
DVW-A510 (J, UC) :TBC-23 MCB
DVW-A510P (EK) :TBC-23P MCB
DVW-CA510 (UC) :TBC-23 MCB
DVW-CA510P(EK) :TBC-23P MCB

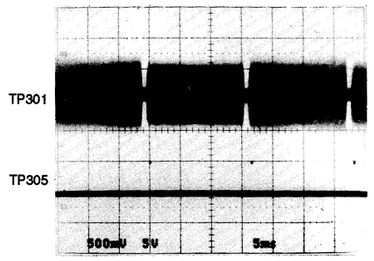
DVW-TBC23-ALL-A-PB-S/M-04-A

LOT NO.	TBC BOARD NO.
302-304	1-648-543-11
305-311	1-648-543-12

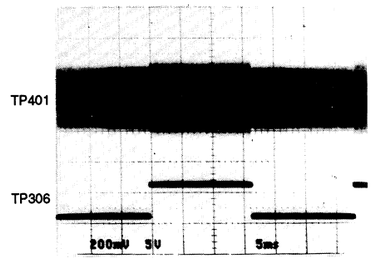
AP-28 Board -A Side-



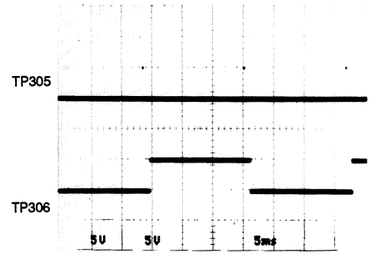
① TP301(C-5) PB mode
TP305(G-7) PB mode(TRIG)



② TP401(G-4) PB mode
TP306(G-7)(TRIG)



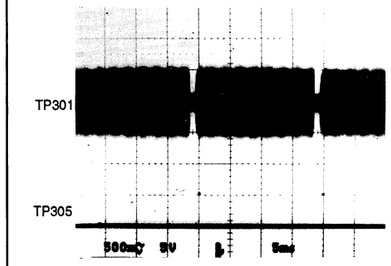
③ TP305(F-6) PB mode
TP306(G-7)(TRIG)



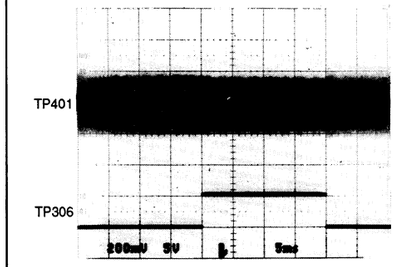
Measurement Condition
MODE : PB mode
TAPE : CR5-1B

For DVW-A500/A510/CA510

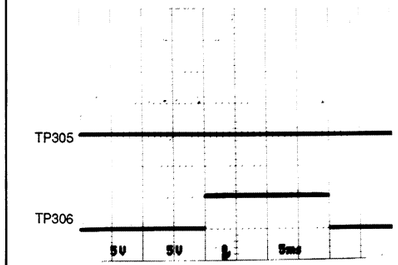
① TP301(C-5) PB mode
TP305(G-7) PB mode(TRIG)



② TP401(G-4) PB mode
TP306(G-7)(TRIG)

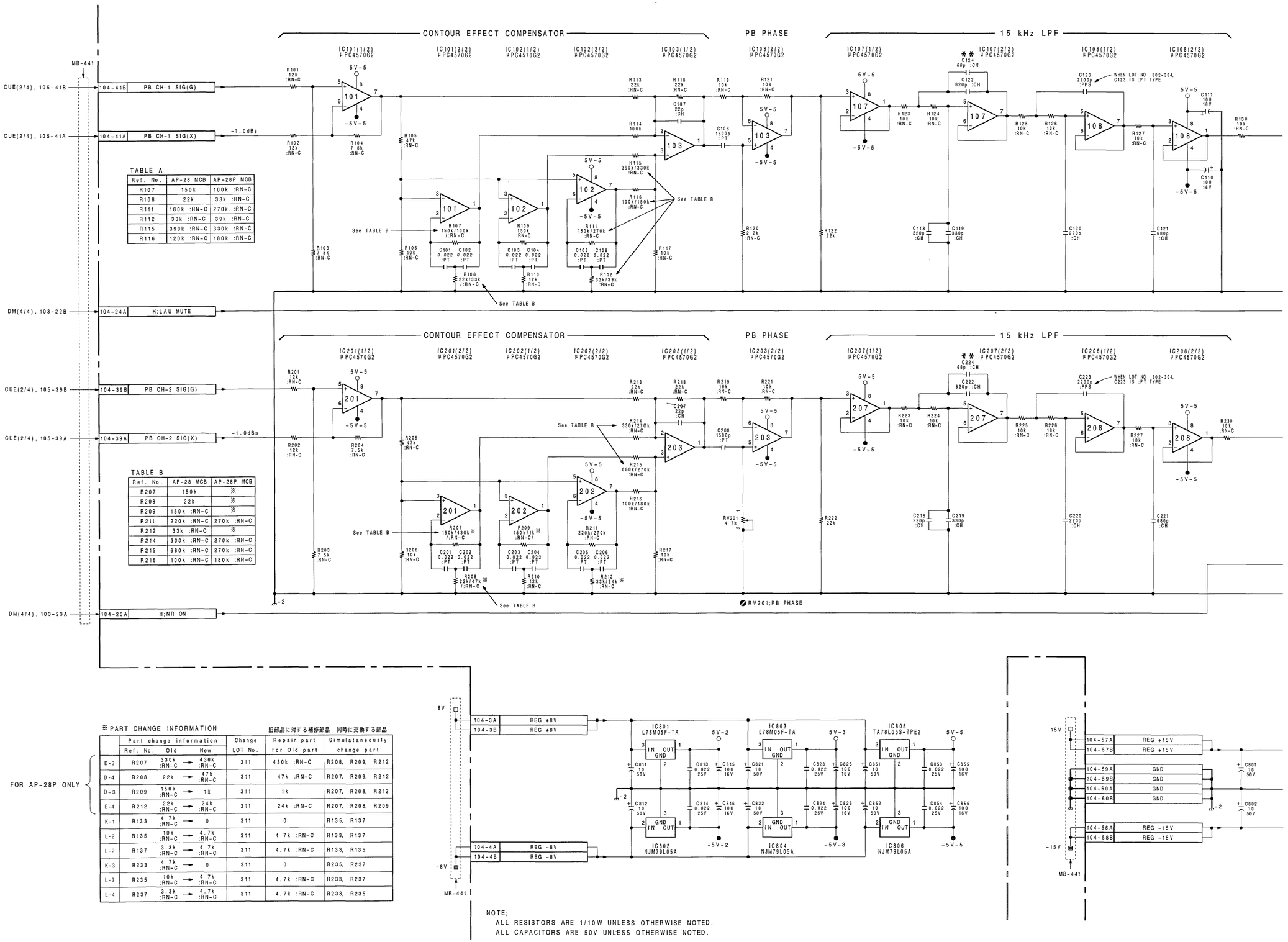


③ TP305(F-6) PB mode
TP306(G-7)(TRIG)



Measurement Condition
MODE : PB mode
TAPE : CR5-1BPS

For DVW-A500P/A510P/CA510P



※ PART CHANGE INFORMATION

旧部品に対する補修部品 同時に交換する部品

	Part change information Ref. No.	Old	New	Change LOT No.	Repair part for Old part	Simulataneously change part
FOR AP-28P ONLY	D-3 R207	330k :RN-C	430k :RN-C	311	430k :RN-C	R208, R209, R212
	D-4 R208	22k	47k :RN-C	311	47k :RN-C	R207, R209, R212
	D-3 R209	150k :RN-C	1k	311	1k	R207, R208, R212
	E-4 R212	22k :RN-C	24k :RN-C	311	24k :RN-C	R207, R208, R209
	K-1 R133	4.7k :RN-C	0	311	0	R135, R137
	L-2 R135	10k :RN-C	4.7k :RN-C	311	4.7k :RN-C	R133, R137
	L-2 R137	3.3k :RN-C	4.7k :RN-C	311	4.7k :RN-C	R133, R135
	K-3 R233	4.7k :RN-C	0	311	0	R235, R237
	L-3 R235	10k :RN-C	4.7k :RN-C	311	4.7k :RN-C	R233, R237
	L-4 R237	3.3k :RN-C	4.7k :RN-C	311	4.7k :RN-C	R233, R235

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

AP-28 BOARD: 1-648-544-11

TRANSISTOR PIN LAYOUT

C
B E

BUFFER
IC106(1/2)
TL082CPS

Q101 :NM
Q102 :NM
Q103 :NM

AMP
IC110(1/2)
μPC4570G2

PB ••• -24.9dBs
RV102 4.7k
C112 47 35V
-4.7dBs
※R133 0
C114 10 50V
C115 10 50V
7V
TP102
R132 10k
1 DOLBY
106
-7V
E101
Q102
Q101
R134 :NM
Q103
12V
RV103 10k
110
-12V
C117 10 50V
1 PB
TP103
-1.0dBs
※R135 4.7k :RN-C
C116 47p :CH
※R137 4.7k :RN-C
※R136 2.2k :RN-C
R138 22k
B PB CH-1(X) 104-47A
B PB CH-1(G) 104-47B
MB-441
APR(1/9), 119-17A
APR(1/9), 119-17B
APR(1/9), 119-18A
APR(1/9), 119-18B
RV102:CH-1 DOLBY LEVEL
RV103:CH-1 PB LEVEL

DOLBY C
NOISE REDUCTION

Q201
DTC144EU

IC105
SBX1645-01

7V
Vcc
REC/PB-2
REC/PB-1
REC OUT-2
REC OUT-1
SIG IN-2
SIG IN-1
LINE OUT-2
LINE OUT-1
TCL-2
TCL-1
D.POINT-2
D.POINT-1
ON/OFF
NC
GND GND VEE GND GND
105

BUFFER
IC106(2/2)
TL082CPS

Q203 :NM

AMP
IC110(2/2)
μPC4570G2

PB ••• -24.9dBs
RV202 4.7k
C212 47 35V
※R233 0
-4.7dBs
C214 10 50V
C215 10 50V
C113 0.068 :PT
C213 0.068 :PT
R232 10k
TP202
2 DOLBY
106
2 PB
TP203
RV203 10k
110
C217 10 50V
-1.0dBs
※R235 4.7k :RN-C
C216 47p :CH
※R237 4.7k :RN-C
※R236 2.2k :RN-C
R238 22k
B PB CH-2(X) 104-49A
B PB CH-2(G) 104-49B
APR(1/9), 119-19A
APR(1/9), 119-19B
APR(1/9), 119-20A
APR(1/9), 119-20B
NR ON
TP204
R231 10k
Q201
-7V
E201
Q203
RV202:CH-2 DOLBY LEVEL
RV203:CH-2 PB LEVEL

IC811
TA78L12S-TPE2
IN OUT GND
12V
C803 0.022 25V
C805 100 16V
C804 0.022 25V
C806 100 16V
IC812
NJM79L12A
-12V

IC813
TA78L05S-TPE2
IN OUT GND
7V
R873 1k
R871 240 :RN-C
R872 240 :RN-C
C871 0.022 25V
C872 0.022 25V
C873 100 16V
C874 100 16V
R874 1k
IC814
NJM79L05A
-7V

5V
3.3V
104-5A REG +5V
104-5B REG +5V
104-1A GND
104-1B GND
104-2A GND
104-2B GND
104-6A REG +3.3V
104-6B REG +3.3V
104-38A GND
104-38B GND
104-40A GND
104-40B GND
104-42A GND
104-42B GND
104-46A GND
104-46B GND
104-48A GND
104-48B GND
MB-441
L801 47μH
C831 10 50V
C832 100 16V
C833 0.022 25V
PS1 :NM
3.3V
C810 :NM
LOT NO 302-304 ONLY

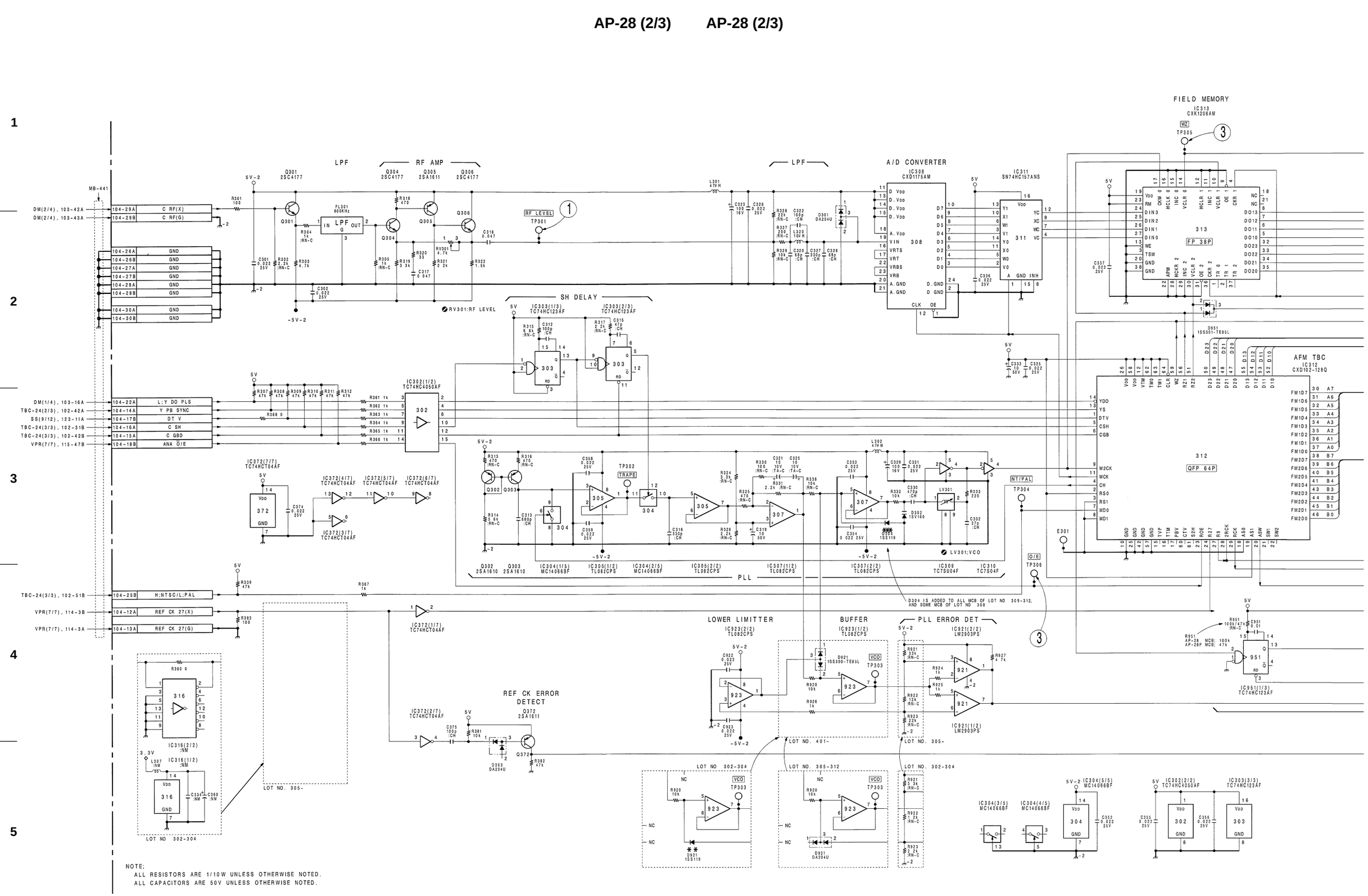
LOT NO.	BOARD NO.
302-304	1-648-544-11
305-312	1-648-544-12
401-	1-648-544-13

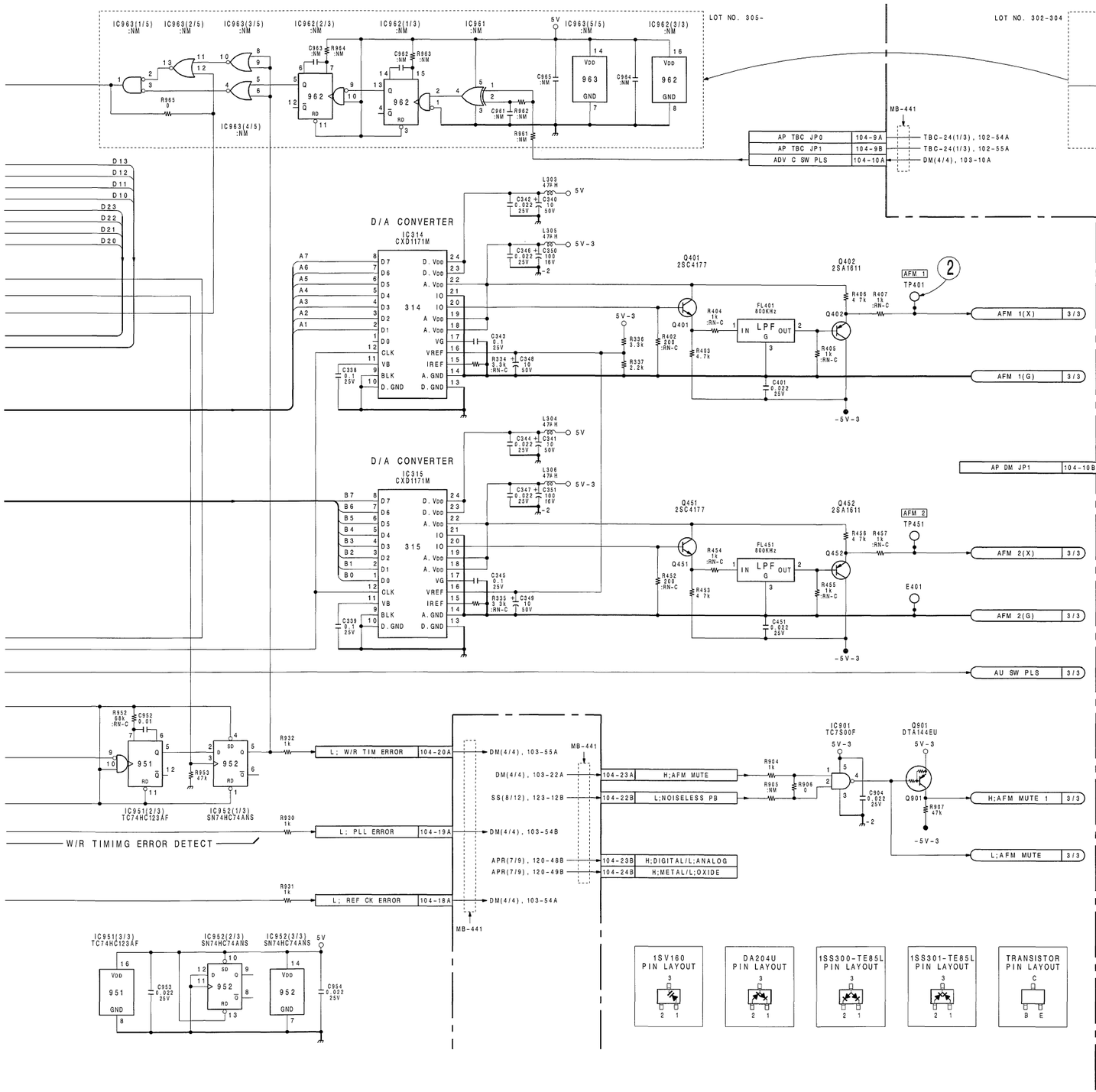
Betacam PB LAU Process

AP-28 BOARD (1/3)

BOARD NO. 1-648-544-11, 12, 13
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :AP-28 MCB
DVW-A500P (EK) :AP-28P MCB
DVW-A500P (UC) :AP-28P MCB
DVW-A510 (J, UC) :AP-28 MCB
DVW-A510P (EK) :AP-28P MCB
DVW-CA510(J, UC) :AP-28 MCB
DVW-CA510P(EK) :AP-28P MCB

DVW-AP28-ALL-A-PB-S/M-04


LPF
RF AMP
LPF
A/D CONVERTER
IC308 CXD1175AM
IC311 SN74HC157ANS
FIELD MEMORY
IC313 CXK1206AM
TP305
SH DELAY
IC303(1/3) TC74HC123AF
IC303(2/3) TC74HC123AF
IC302(1/2) TC74HC4050AF
IC372(7/7) TC74HC04AF
IC372(4/7) TC74HC04AF
IC372(5/7) TC74HC04AF
IC372(6/7) TC74HC04AF
IC372(3/7) TC74HC04AF
IC372(1/7) TC74HC04AF
IC372(2/7) TC74HC04AF
REF CK ERROR DETECT
IC316(2/2) :NM
IC316(1/2) :NM
LOT NO. 305-
LOT NO 302-304
LOT NO. 302-304
LOT NO. 305-312
LOT NO. 401-
LOT NO. 305-
LOT NO. 302-304
RV301:RF LEVEL
LV301:VCO
D304 IS ADDED TO ALL MCB OF LOT NO 309-312, AND SOME MCB OF LOT NO 308
PLL
LOWER LIMITTER
BUFFER
PLL ERROR DET
AFM TBC
IC312 CXD102-128Q
312
QFP 64P
313
FP 38P
311
308
NT/PAL
O/E
TP304
TP306
E301
MB-441
DM(2/4), 103-42A
DM(2/4), 103-43A
DM(1/4), 103-16A
TBC-24(2/3), 102-42A
SS(9/12), 123-11A
TBC-24(3/3), 102-31B
TBC-24(3/3), 102-42B
VPR(7/7), 115-47B
TBC-24(3/3), 102-51B
VPR(7/7), 114-3B
VPR(7/7), 114-3A
104-29A C RF(X)
104-29B C RF(G)
104-26A GND
104-26B GND
104-27A GND
104-27B GND
104-28A GND
104-28B GND
104-30A GND
104-30B GND
104-22A L;Y DO PLS
104-14A Y PB SYNC
104-17B DT V
104-16A C SH
104-15A C GBD
104-18B ANA Ō/E
104-25B H;NTSC/L;PAL
104-12A REF CK 27(X)
104-13A REF CK 27(G)
RF LEVEL
TP301
TRAPE
TP302
TP303
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.



The Ref.Nos. marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

AP-28 BOARD: 1-648-544-11

The Ref.Nos. marked with *** are not printed on the printed circuit board (of the following board No.) with silk screen.

AP-28 BOARD: 1-648-544-11/12

LOT NO.	BOARD NO.
302-304	1-648-544-11
305-312	1-648-544-12
401-	1-648-544-13

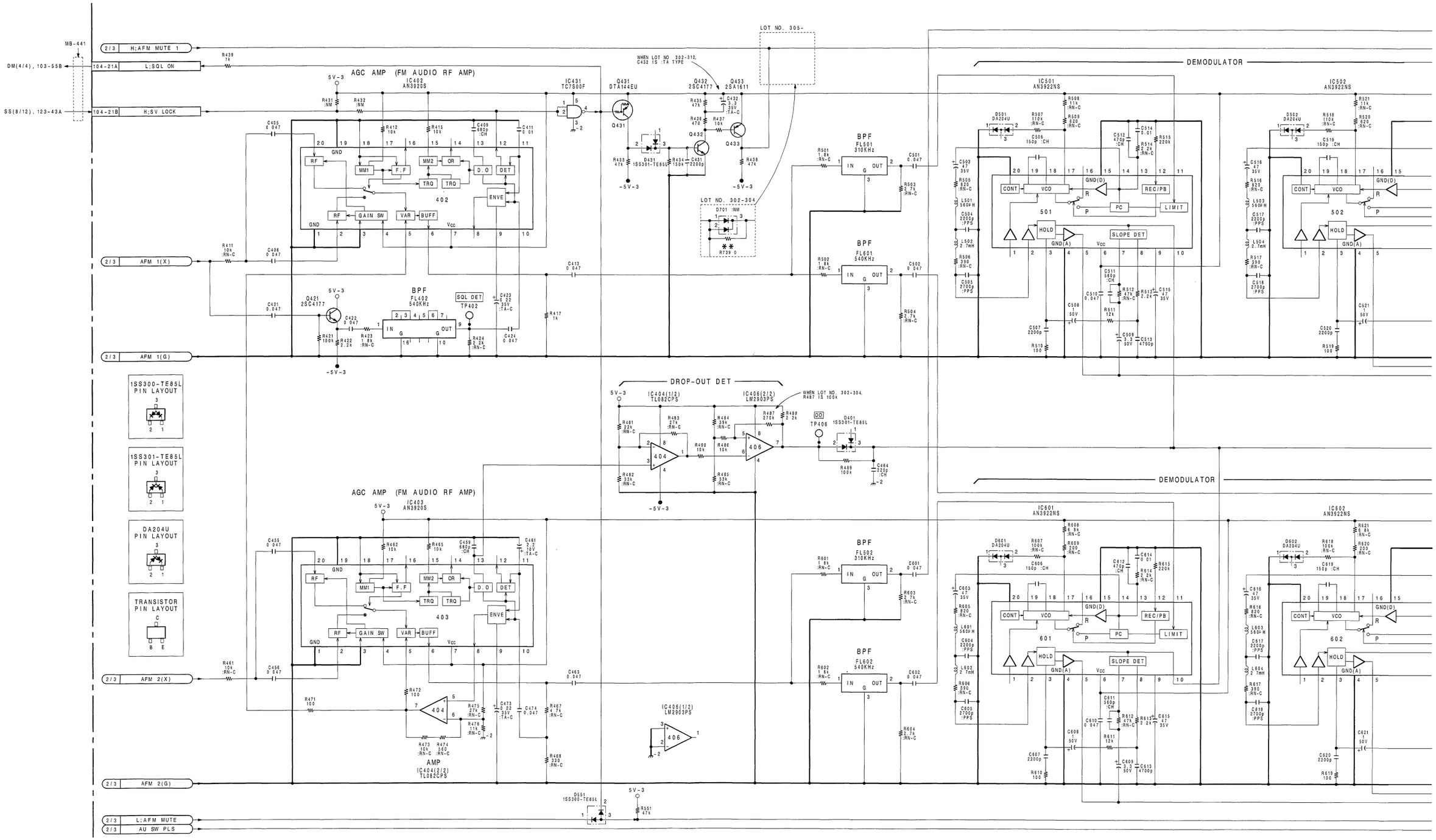
Betacam PB AFM RF

AP-28 BOARD (2/3)

BOARD NO. 1-648-544-11, 12, 13
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :AP-28 MCB
DVW-A500P (EK) :AP-28P MCB
DVW-A500P (UC) :AP-28P MCB
DVW-A510 (J, UC) :AP-28 MCB
DVW-A510P (EK) :AP-28P MCB
DVW-CA510(J, UC) :AP-28 MCB
DVW-CA510P(EK) :AP-28P MCB

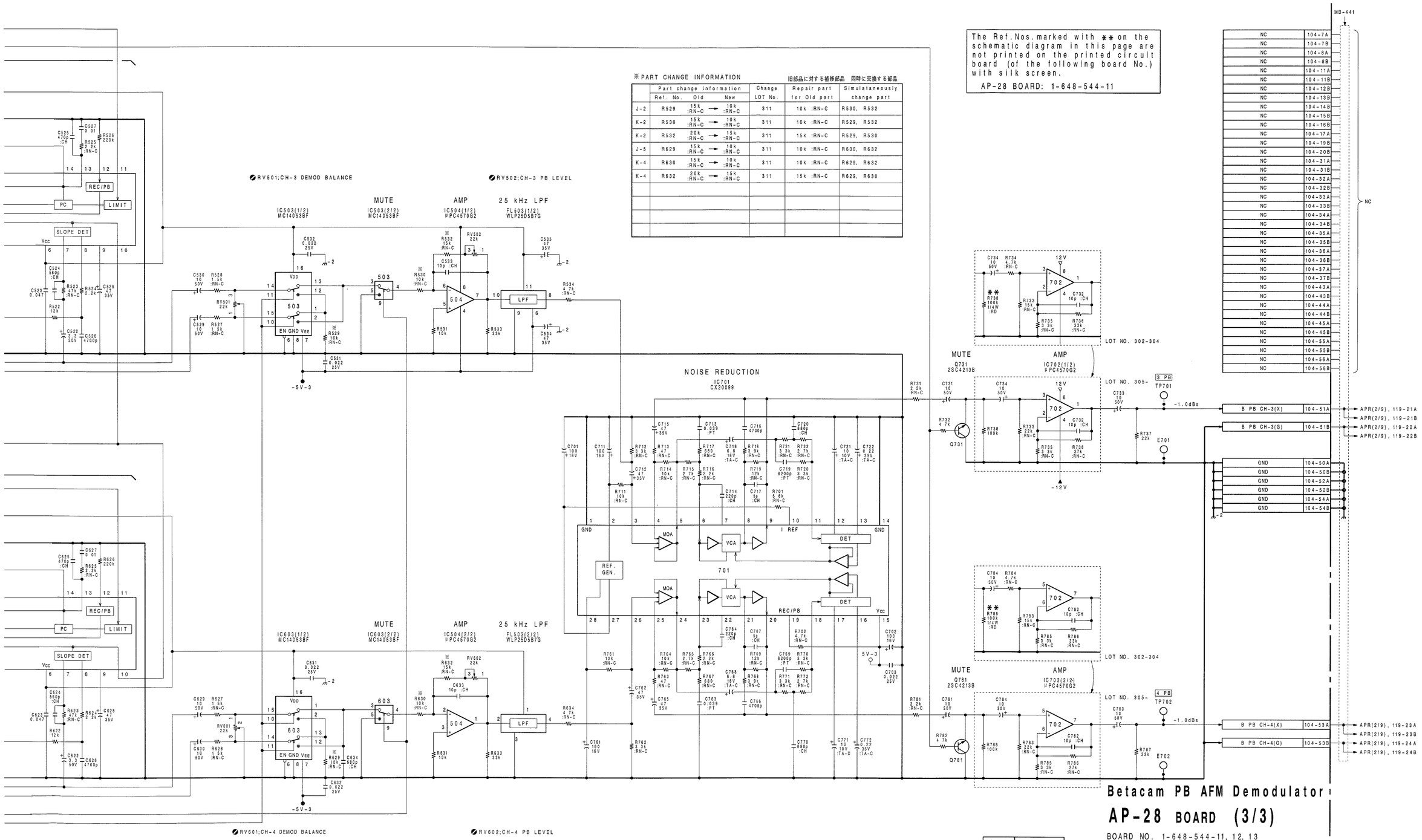
DVW-AP28-ALL-A-PB-S/M-04

AP-28 (3/3)



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

AP-28 (3/3)



※PART CHANGE INFORMATION

旧部品に対する補修部品　同時に交換する部品

	Part change information Ref. No.	Old	New	Change LOT No.	Repair part for Old part	Simulataneously change part
J-2	R529	15k :RN-C	→ 10k :RN-C	311	10k :RN-C	R530, R532
K-2	R530	15k :RN-C	→ 10k :RN-C	311	10k :RN-C	R529, R532
K-2	R532	20k :RN-C	→ 15k :RN-C	311	15k :RN-C	R529, R530
J-5	R629	15k :RN-C	→ 10k :RN-C	311	10k :RN-C	R630, R632
K-4	R630	15k :RN-C	→ 10k :RN-C	311	10k :RN-C	R629, R632
K-4	R632	20k :RN-C	→ 15k :RN-C	311	15k :RN-C	R629, R630

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

AP-28 BOARD: 1-648-544-11

LOT NO.	BOARD NO.
302-304	1-648-544-11
305-312	1-648-544-12
401-	1-648-544-13

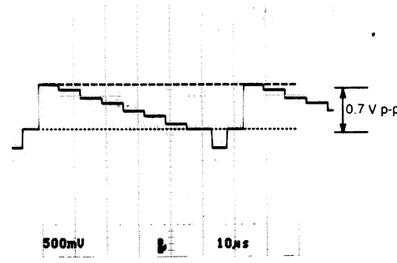
Betacam PB AFM Demodulator

AP-28 BOARD (3/3)

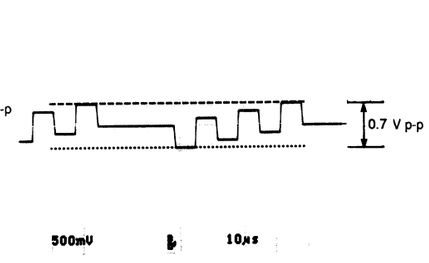
BOARD NO. 1-648-544-11, 12, 13
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :AP-28 MCB
DVW-A500P (EK) :AP-28P MCB
DVW-A500P (UC) :AP-28P MCB
DVW-A510 (J, UC) :AP-28 MCB
DVW-A510P (EK) :AP-28P MCB
DVW-CA510(J, UC) :AP-28 MCB
DVW-CA510P(EK) :AP-28P MCB

DVW-AP28-ALL-A-PB-S/M-04

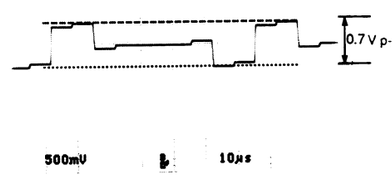
①COMPONENT Y OUT, PB mode



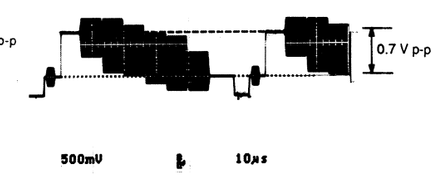
③COMPONENT B-Y OUT, PB mode

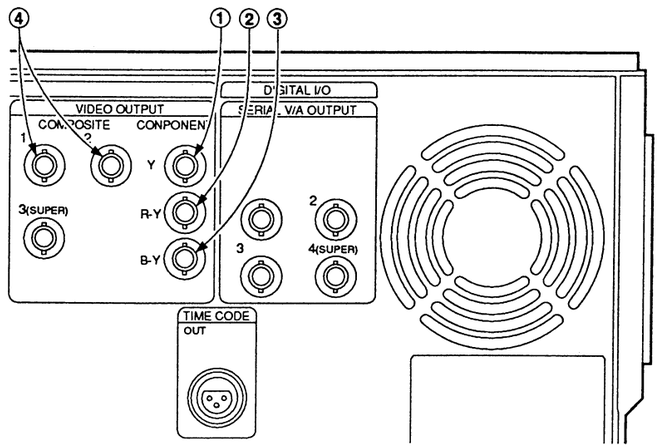


②COMPONENT R-Y OUT, PB mode



④COMPOSITE OUT, PB mode



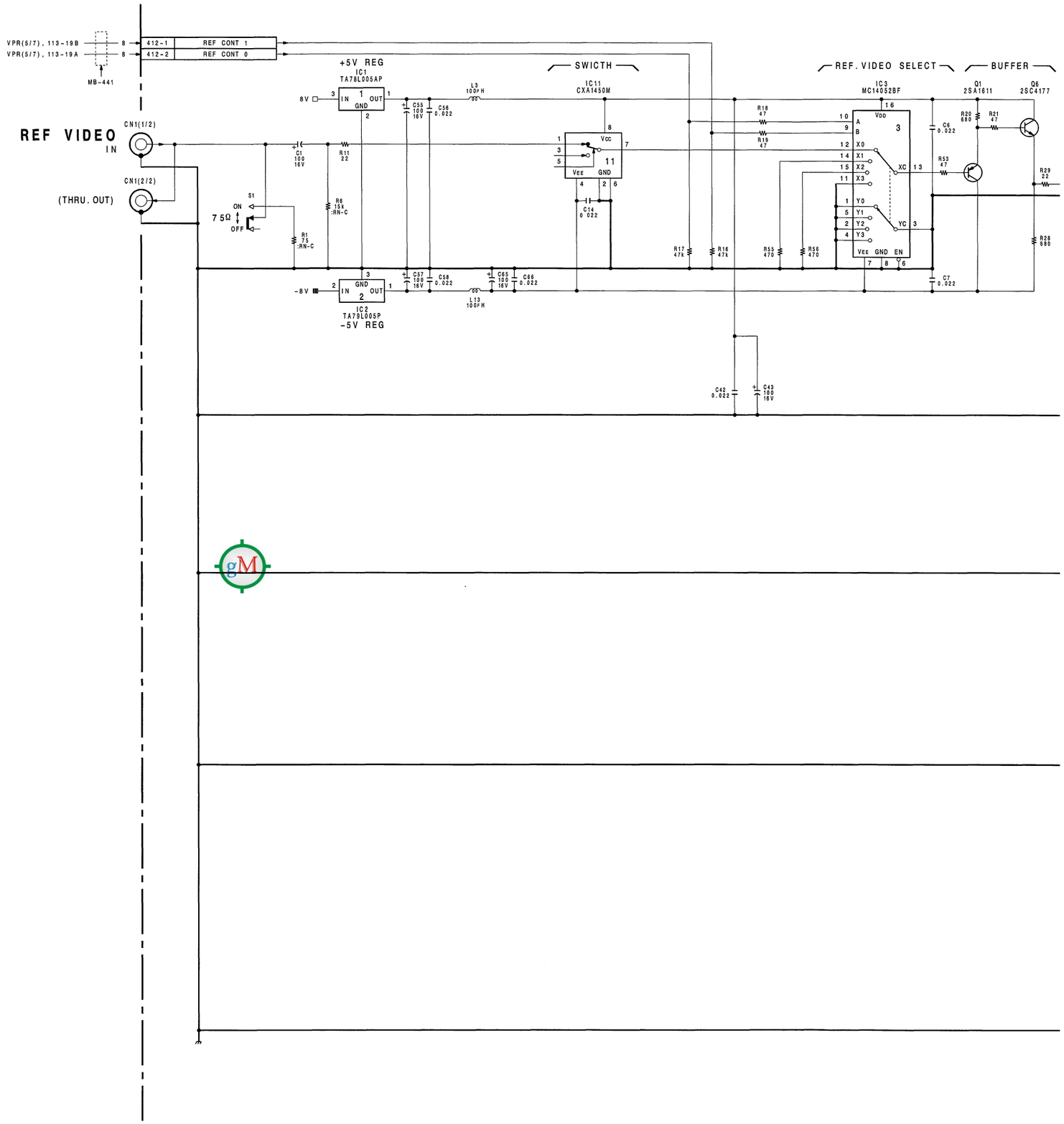


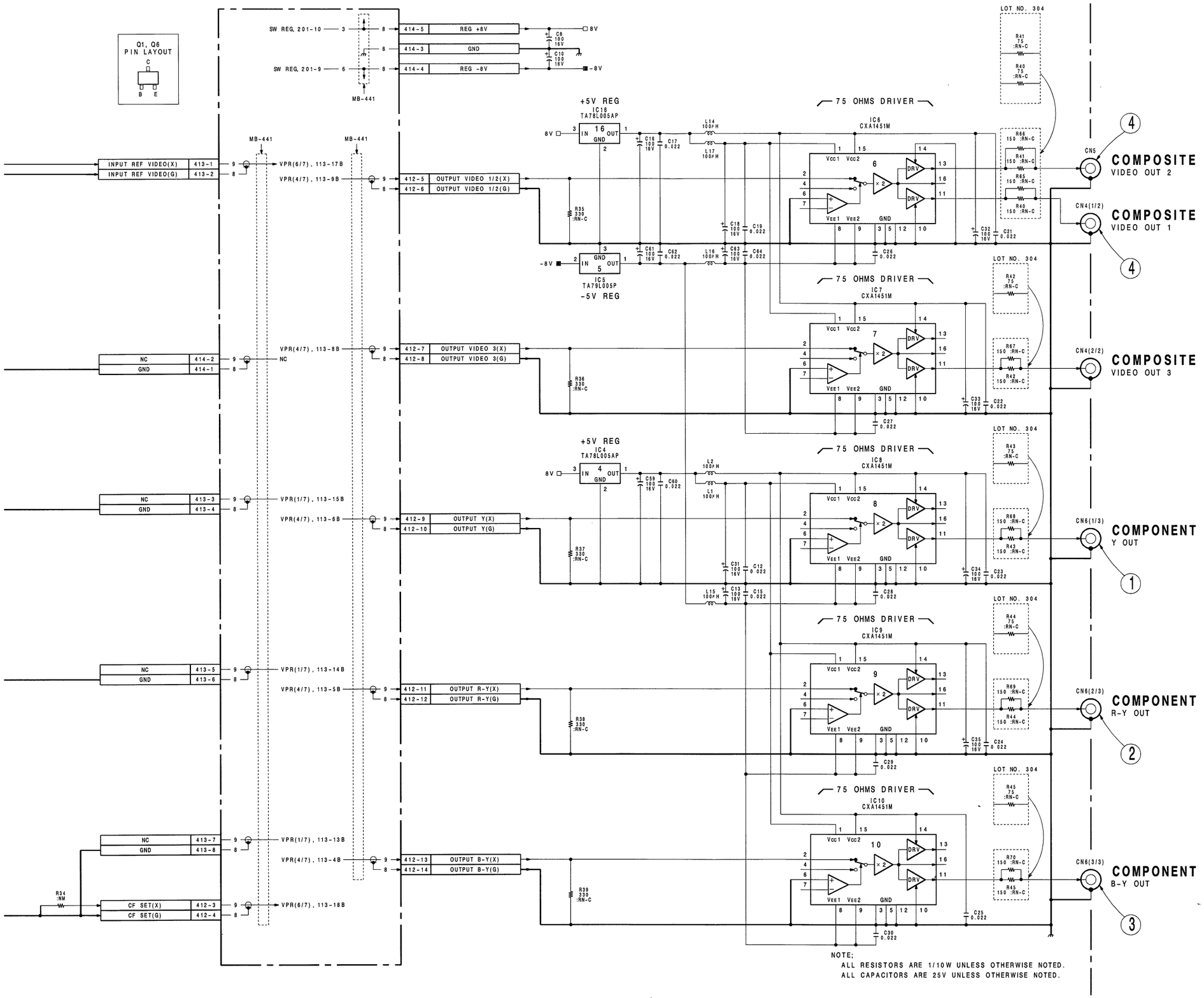
For DVW-A510P/510P/CA510P

Measurement Condition
MODE : PB mode
TAPE : ZR5-1P

For DVW-A510/510/CA510

Measurement Condition
MODE : PB mode
SETUP MENU 709 : D-1
(CAV LEVEL FORMAT)
TAPE : ZR5-1


VPR(5/7), 113-19B
VPR(5/7), 113-19A
MB-441
412-1
412-2
REF CONT 1
REF CONT 0
+5V REG
IC1
TA78L005AP
SWICTH
IC11
CXA1450M
REF. VIDEO SELECT
IC3
MC14052BF
BUFFER
Q1
2SA1611
Q6
2SC4177
REF VIDEO
IN
(THRU. OUT)
CN1(1/2)
CN1(2/2)
S1
ON
OFF
75Ω
IC2
TA79L005P
-5V REG
8V
-8V
L3
100μH
L13
100μH
C1
100
16V
C55
100
16V
C56
0.022
C57
100
16V
C58
0.022
C65
100
16V
C66
0.022
C14
0.022
C6
0.022
C7
0.022
C42
0.022
C43
100
16V
R1
75
:RN-C
R6
15k
:RN-C
R11
22
R17
47k
R16
47k
R55
470
R56
470
R18
47
R19
47
R20
680
R21
47
R53
47
R29
22
R28
680



LOT NO.	BOARD NO.
304	1-648-555-21
307-	1-648-555-22

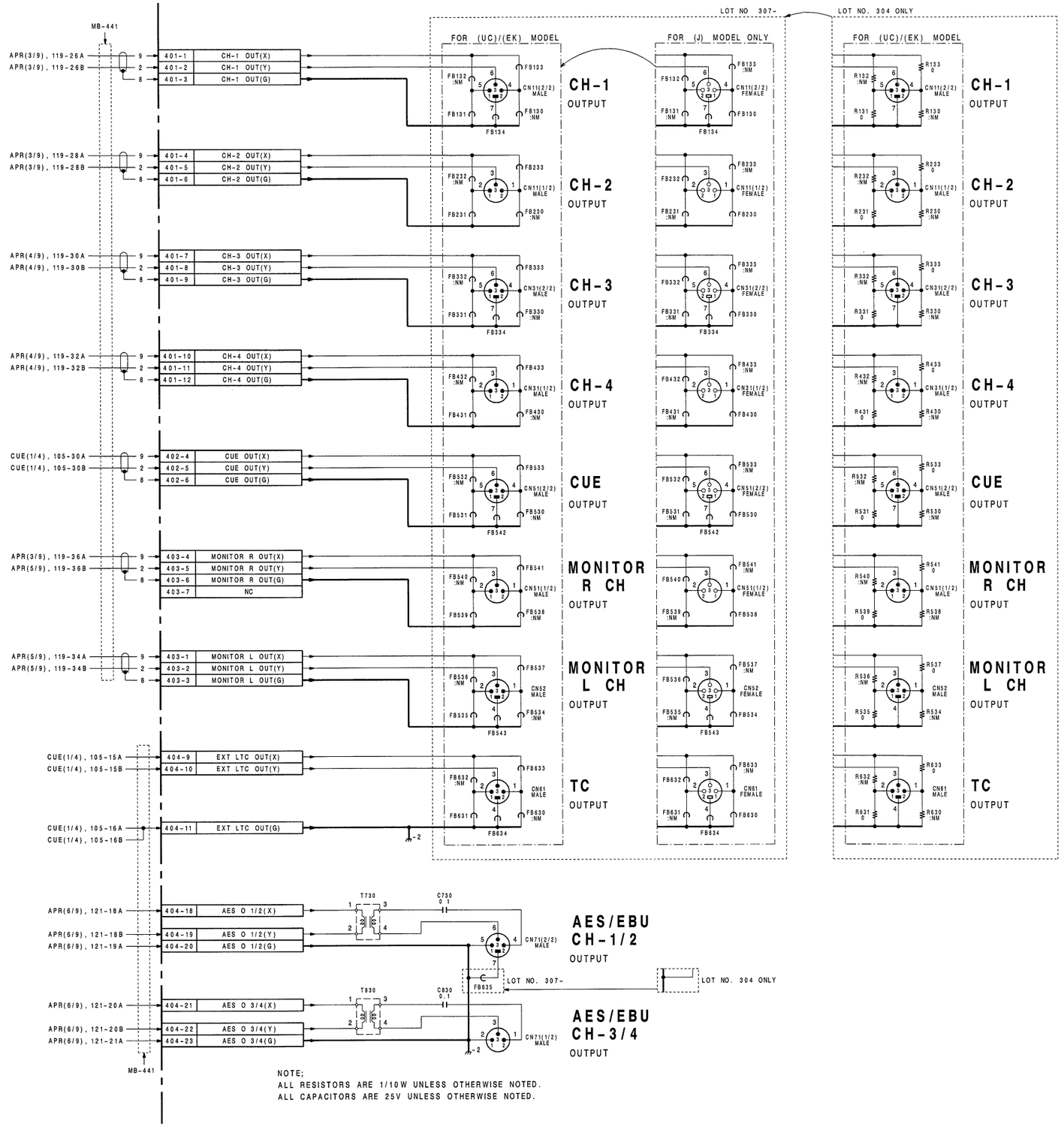
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

Rear Connector Board (Analog Video)

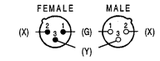
CP-218B BOARD

BOARD NO. 1-648-555-22
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :CP-218B MCB
DVW-A510P (EK) :CP-218B MCB
DVW-510 (J, UC) :CP-218B MCB
DVW-510P (EK) :CP-218B MCB
DVW-CA510(J, UC) :CP-218B MCB
DVW-CA510P(EK) :CP-218B MCB

DVW-CP218-ALL-PLAY-S/M-02


LOT NO. 307-
LOT NO. 304 ONLY
FOR (UC)/(EK) MODEL
FOR (J) MODEL ONLY
FOR (UC)/(EK) MODEL
MB-441
APR(3/9), 119-26A
APR(3/9), 119-26B
401-1 CH-1 OUT(X)
401-2 CH-1 OUT(Y)
401-3 CH-1 OUT(G)
CH-1 OUTPUT
APR(3/9), 119-28A
APR(3/9), 119-28B
401-4 CH-2 OUT(X)
401-5 CH-2 OUT(Y)
401-6 CH-2 OUT(G)
CH-2 OUTPUT
APR(4/9), 119-30A
APR(4/9), 119-30B
401-7 CH-3 OUT(X)
401-8 CH-3 OUT(Y)
401-9 CH-3 OUT(G)
CH-3 OUTPUT
APR(4/9), 119-32A
APR(4/9), 119-32B
401-10 CH-4 OUT(X)
401-11 CH-4 OUT(Y)
401-12 CH-4 OUT(G)
CH-4 OUTPUT
CUE(1/4), 105-30A
CUE(1/4), 105-30B
402-4 CUE OUT(X)
402-5 CUE OUT(Y)
402-6 CUE OUT(G)
CUE OUTPUT
APR(3/9), 119-36A
APR(5/9), 119-36B
403-4 MONITOR R OUT(X)
403-5 MONITOR R OUT(Y)
403-6 MONITOR R OUT(G)
403-7 NC
MONITOR R CH OUTPUT
APR(5/9), 119-34A
APR(5/9), 119-34B
403-1 MONITOR L OUT(X)
403-2 MONITOR L OUT(Y)
403-3 MONITOR L OUT(G)
MONITOR L CH OUTPUT
CUE(1/4), 105-15A
CUE(1/4), 105-15B
404-9 EXT LTC OUT(X)
404-10 EXT LTC OUT(Y)
CUE(1/4), 105-16A
CUE(1/4), 105-16B
404-11 EXT LTC OUT(G)
TC OUTPUT
APR(6/9), 121-18A
APR(6/9), 121-18B
APR(6/9), 121-19A
404-18 AES O 1/2(X)
404-19 AES O 1/2(Y)
404-20 AES O 1/2(G)
T730
C730 0.1
AES/EBU CH-1/2 OUTPUT
LOT NO. 307-
LOT NO. 304 ONLY
APR(6/9), 121-20A
APR(6/9), 121-20B
APR(6/9), 121-21A
404-21 AES O 3/4(X)
404-22 AES O 3/4(Y)
404-23 AES O 3/4(G)
T830
C830 0.1
AES/EBU CH-3/4 OUTPUT
MB-441
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

XLR CONNECTORS LOCATION OF REAR PANEL

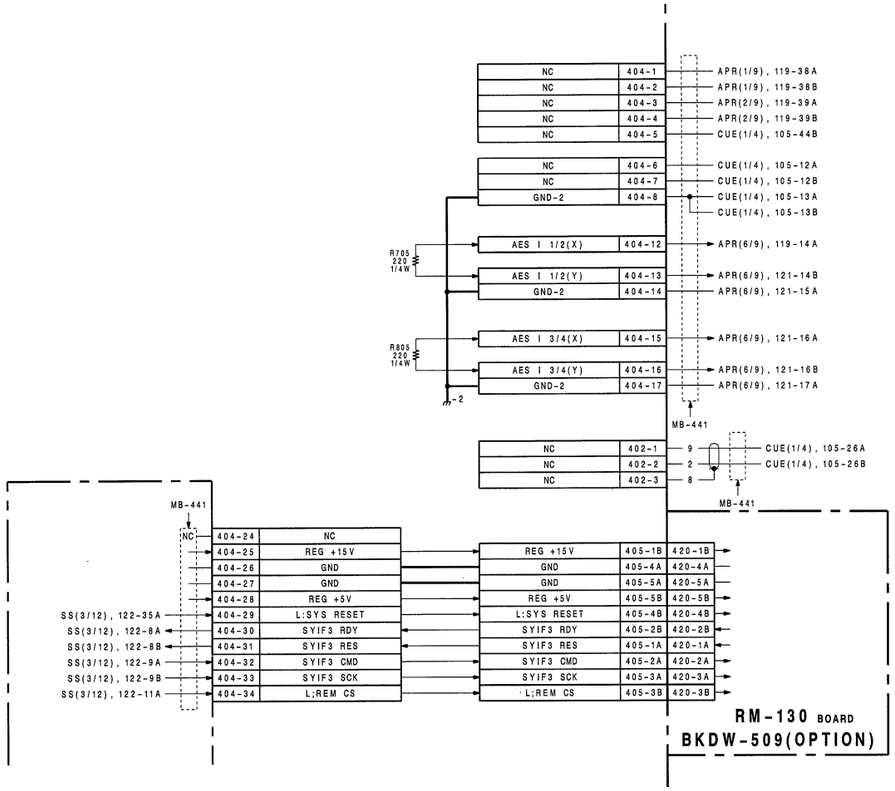


For (UC)/(EK) model

	TIME CODE OUT CN61 (MALE)	
AUDIO OUTPUT: CH-1 CN11(2/2) (MALE); CH-2 CN11(1/2) (MALE); CH-3 CN31(2/2) (MALE); CH-4 CN31(1/2) (MALE); CUE CN51(2/2) (MALE)	MONITOR OUTPUT: R CN51(1/2) (MALE); L CN52 (MALE)	AUDIO OUTPUT (AES/EBU): CH-1/2 CN71(2/2) (MALE); CH-3/4 (MALE)

For (J) model only

	TIME CODE OUT CN61 (FEMALE)	
AUDIO OUTPUT: CH-1 CN11(2/2) (FEMALE); CH-2 CN11(1/2) (FEMALE); CH-3 CN31(2/2) (FEMALE); CH-4 CN31(1/2) (FEMALE); CUE CN51(2/2) (FEMALE)	MONITOR OUTPUT: R CN51(1/2) (FEMALE); L CN52 (FEMALE)	AUDIO OUTPUT (AES/EBU): CH-1/2 CN71(2/2) (MALE); CH-3/4 (MALE)



LOT No.	BOARD No.	
304	1-648-556-21	← CP-220B MCB ONLY
307-	1-648-556-22	

Rear Connector Board (Analog/Digital Audio, TC)

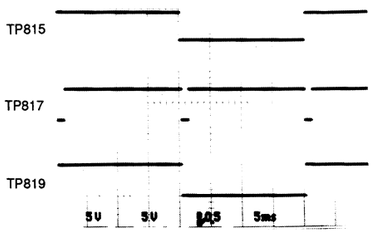
CP-220B BOARD

BOARD NO. 1-648-556-22
BOARD' S LOT NO. 307-
DVW-A510 (J) :CP-220BJ MCB
DVW-A510 (UC) :CP-220B MCB
DVW-A510P (EK) :CP-220B MCB
DVW-510 (J) :CP-220BJ MCB
DVW-510 (UC) :CP-220B MCB
DVW-510P (EK) :CP-220B MCB
DVW-CA510 (J) :CP-220BJ MCB
DVW-CA510 (UC) :CP-220B MCB
DVW-CA510P(EK) :CP-220B MCB

DVW-CP220-ALL-PLAY-S/M-02

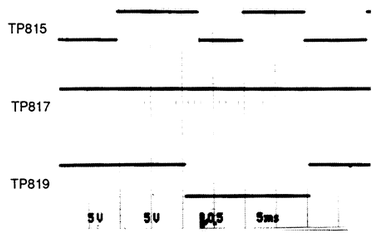
CR5-1BPS (DVW-A510P/CA510P only)

①TP815(H-1) PB mode
TP817(H-1) PB mode
TP819(J-1) PB mode



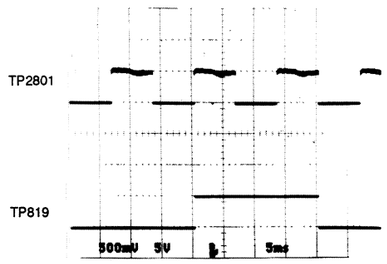
ZR5-1P

①TP815(H-1) PB mode
TP817(H-1) PB mode
TP819(J-1) PB mode

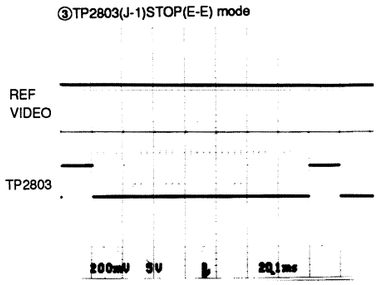


ZR2-1P

②TP2801(K-1) PB mode
TP819(J-1)(TRIG)

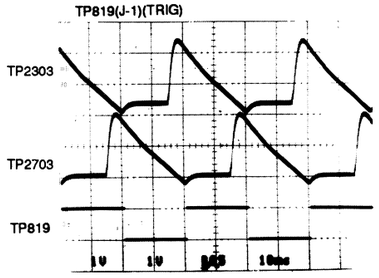


③TP2803(J-1)STOP(E-E) mode



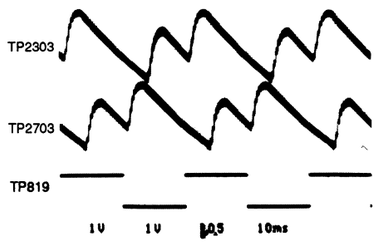
CR5-1BPS (DVW-A510P/CA510P only)

③TP2703(J-1) STILL mode
TP2303(J-1) STILL mode
TP819(J-1)(TRIG)



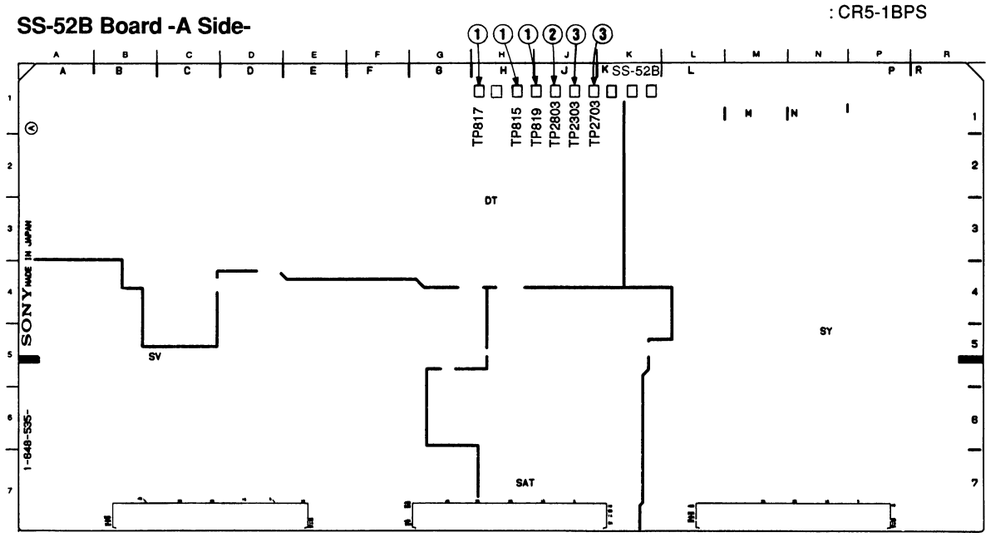
ZR5-1P

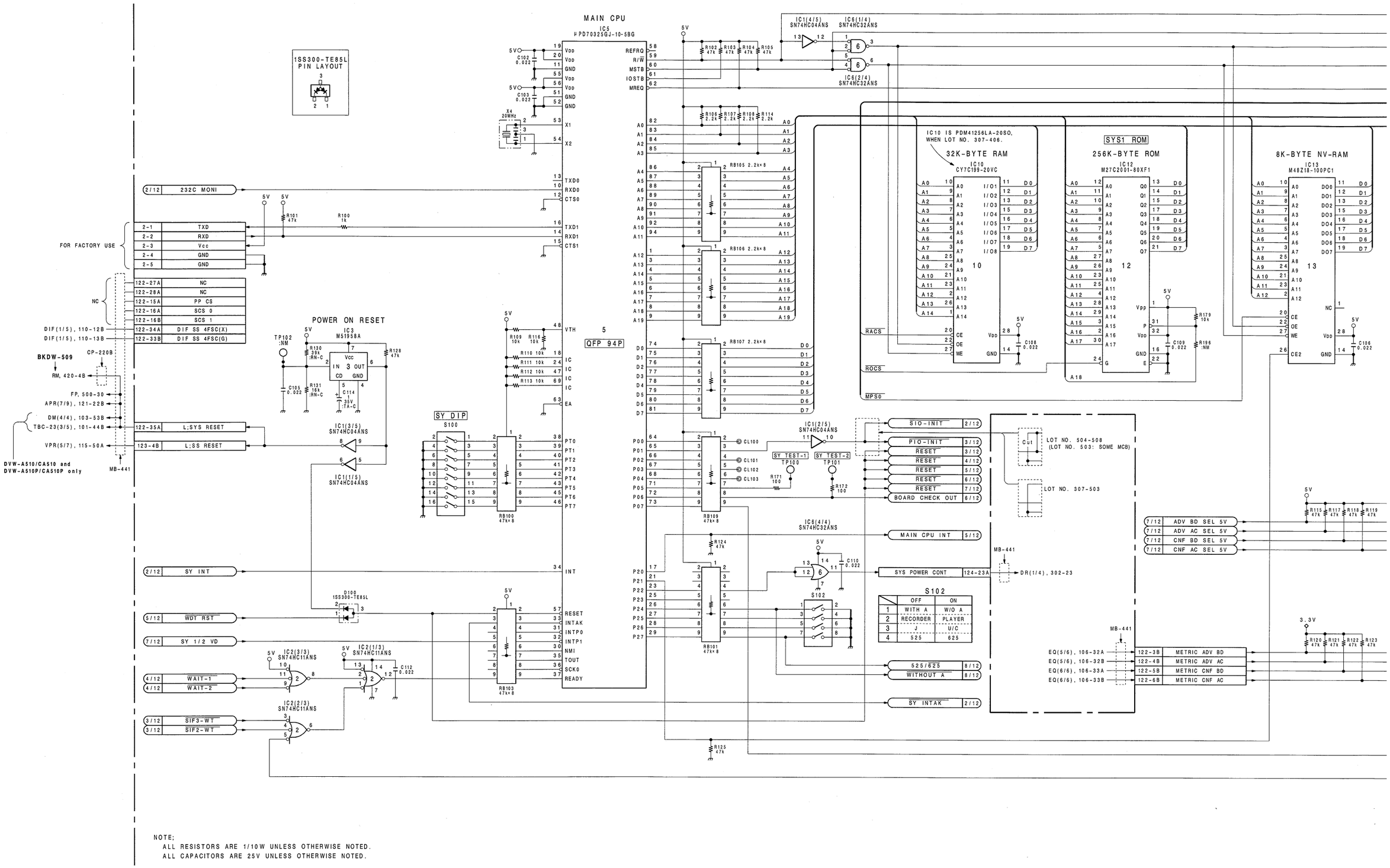
③TP2703(J-1) STILL mode
TP2303(J-1) STILL mode
TP819(J-1)(TRIG)



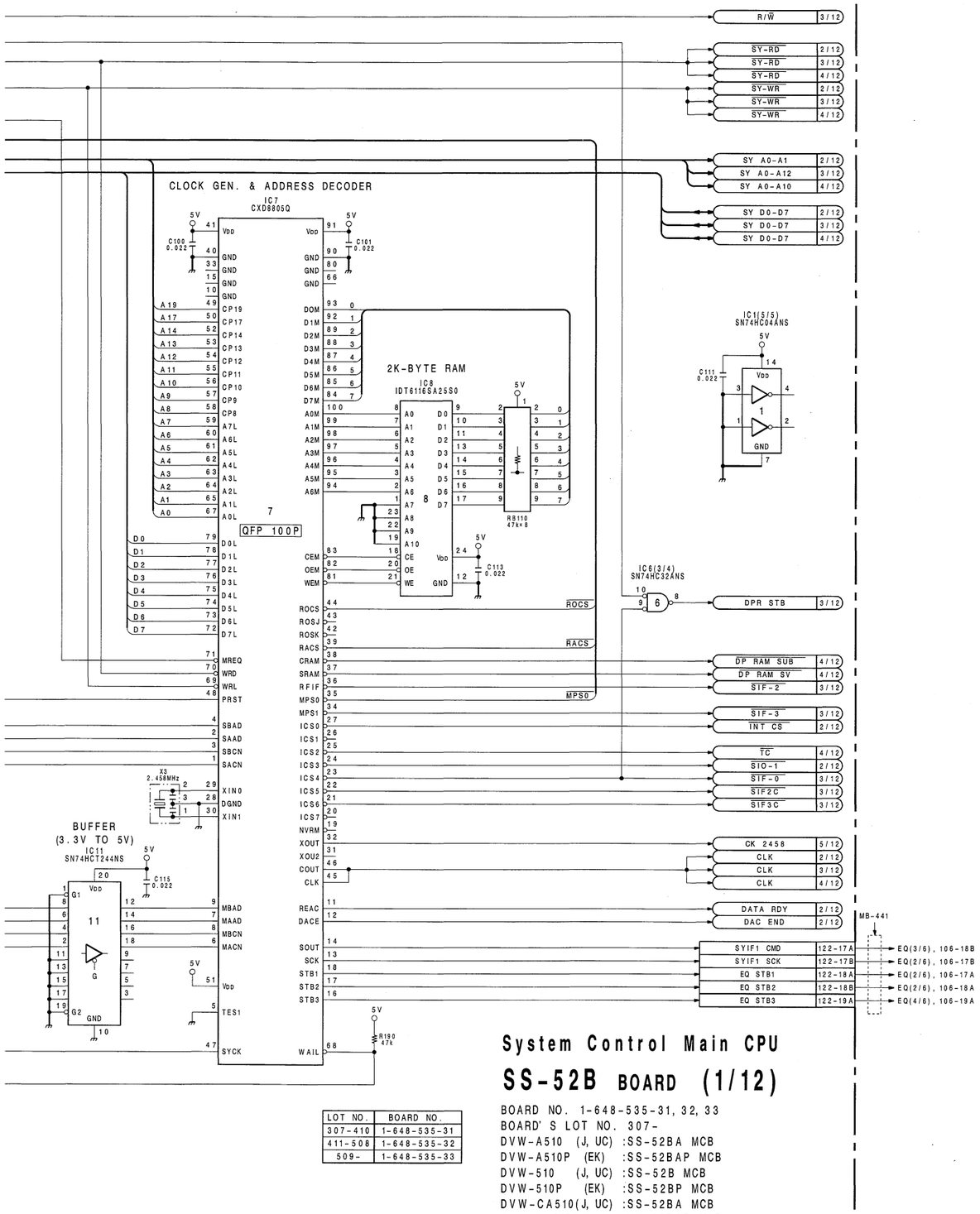
Measurement Condition
MODE : PB mode
: STOP (E-E) mode
: STILL mode
TAPE : ZR5-1P
: ZR2-1P
: CR5-1BPS

SS-52B Board -A Side-





NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.



LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

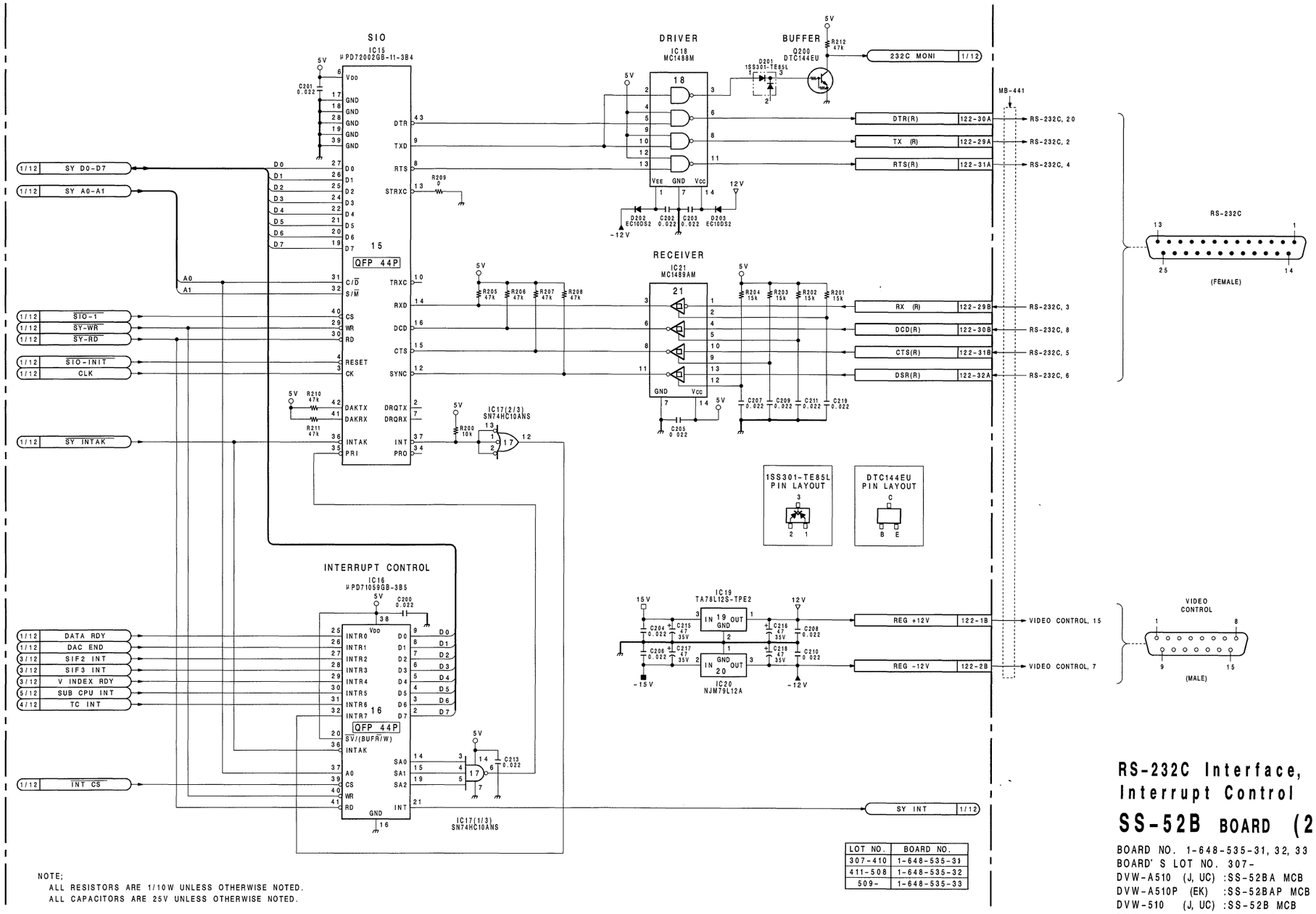
System Control Main CPU

SS-52B BOARD (1/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03

SS-52B (2/12)



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

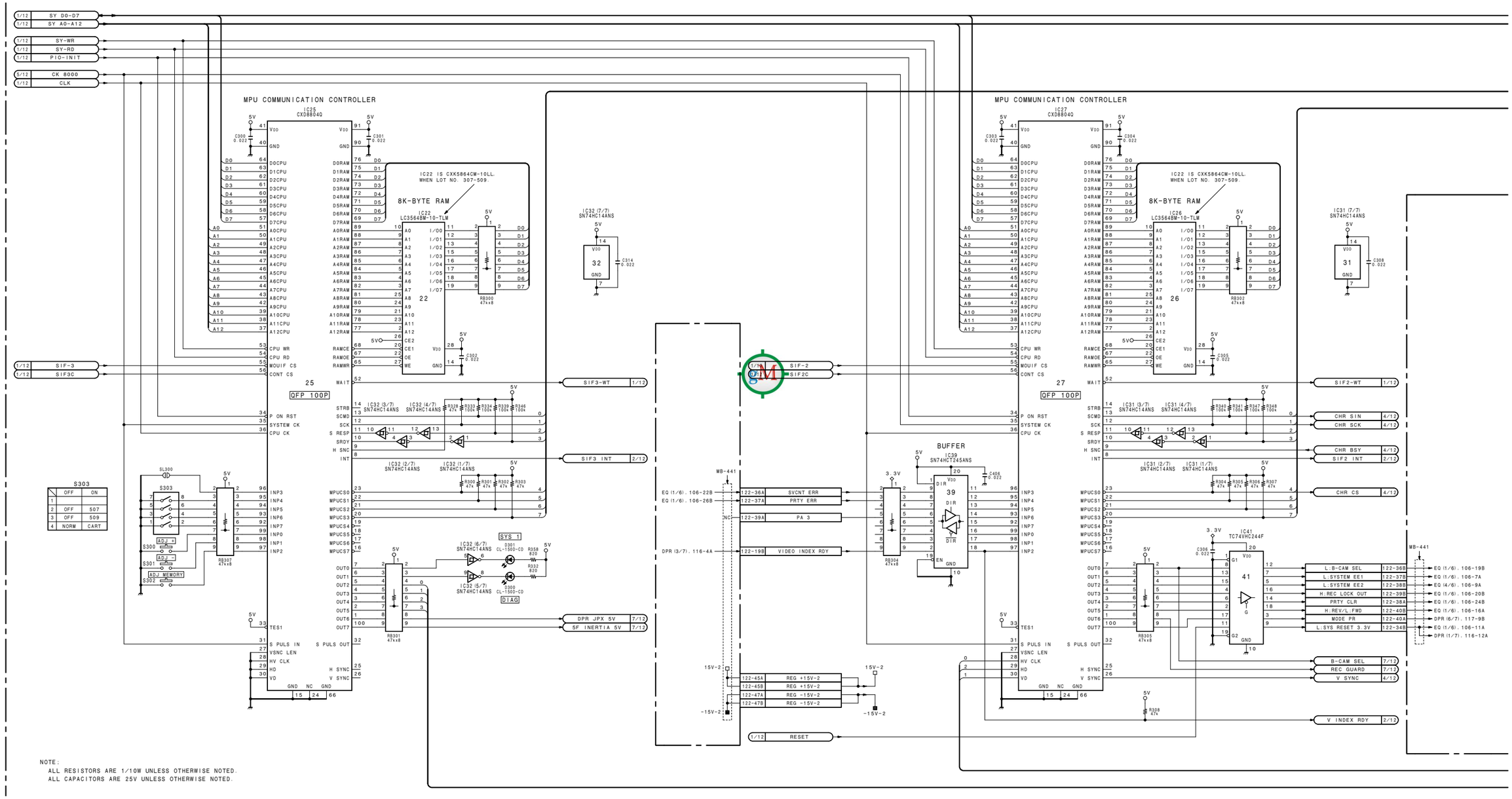
RS-232C Interface, Interrupt Control

SS-52B BOARD (2/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

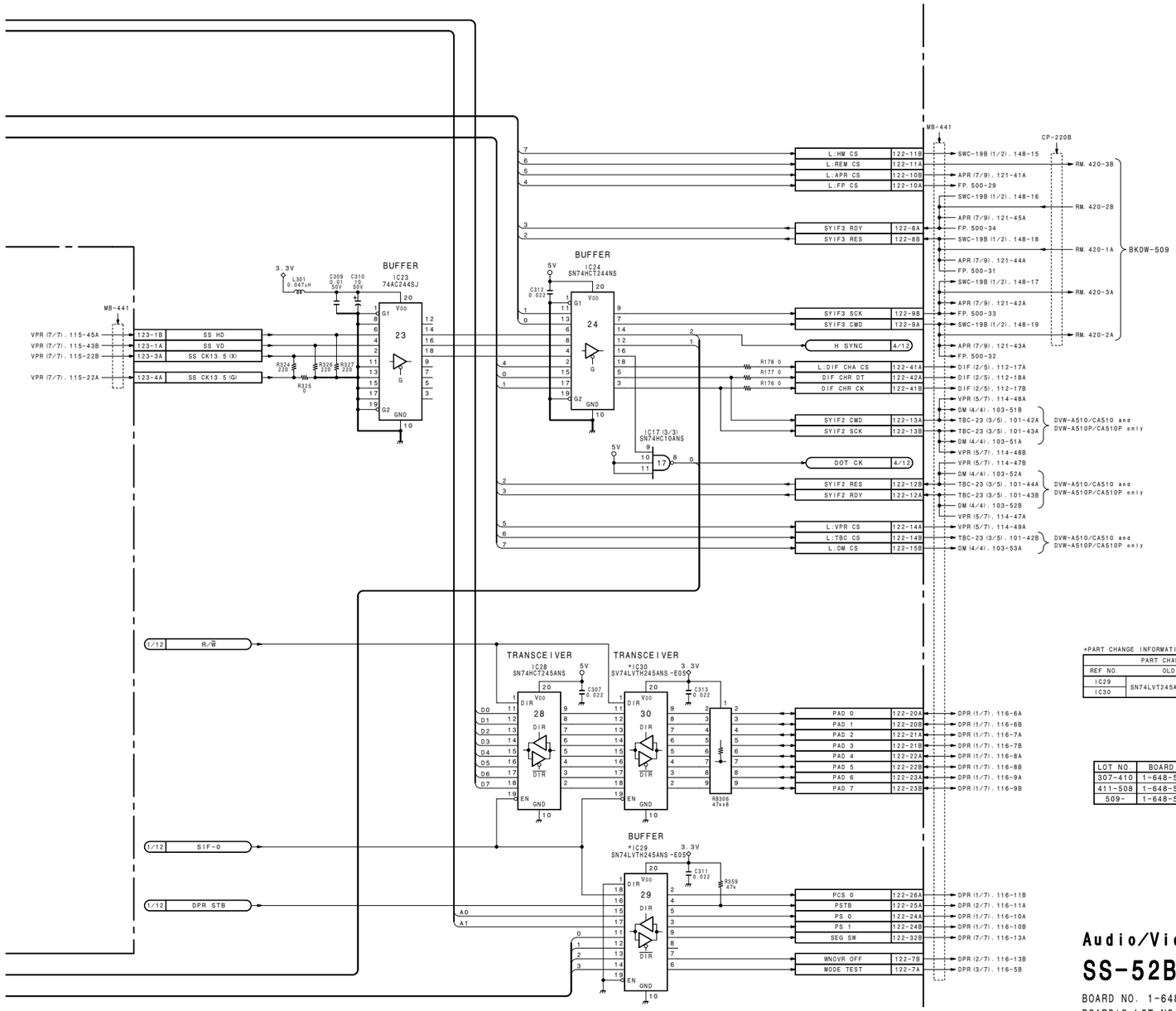
DVW-SS52-ALL-PLAY-S/M-03

SS-52B (3/12)



1-128

SS-52B (3/12)



*PART CHANGE INFORMATION

PART CHANGE INFORMATION			CHANGE	REPAIR PART	SIMULATANEOUSIY
REF NO.	OLD	NEW	LOT NO.	FOR OLD PART	CHANGE PART
IC29	SN74LVT245ANS-E05	SN74LVTH245ANS-E05	905	SN74LVTH245ANS-E05	IC30
IC30					IC29

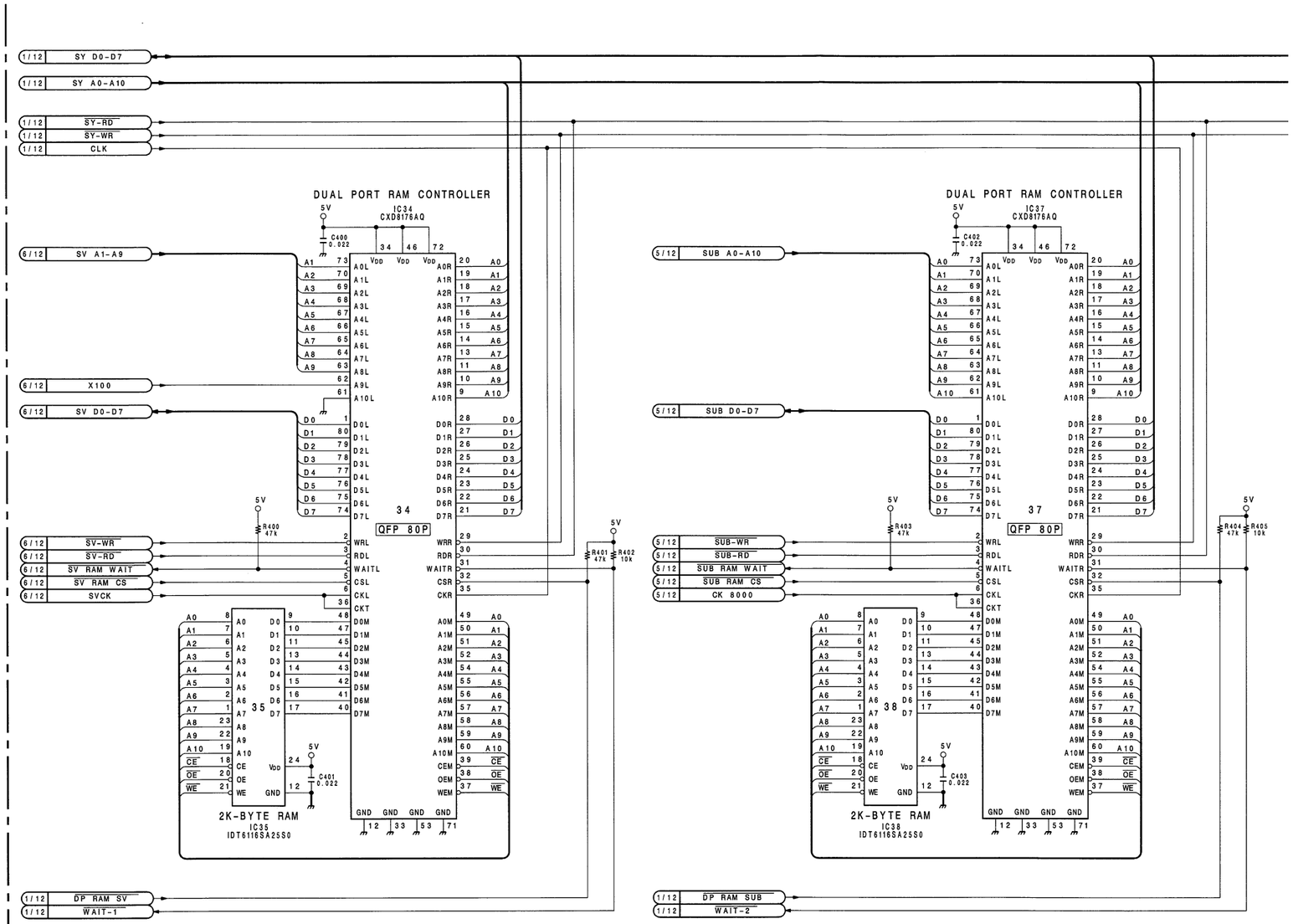
LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

Audio/Video System Control

SS-52B BOARD (3/12)

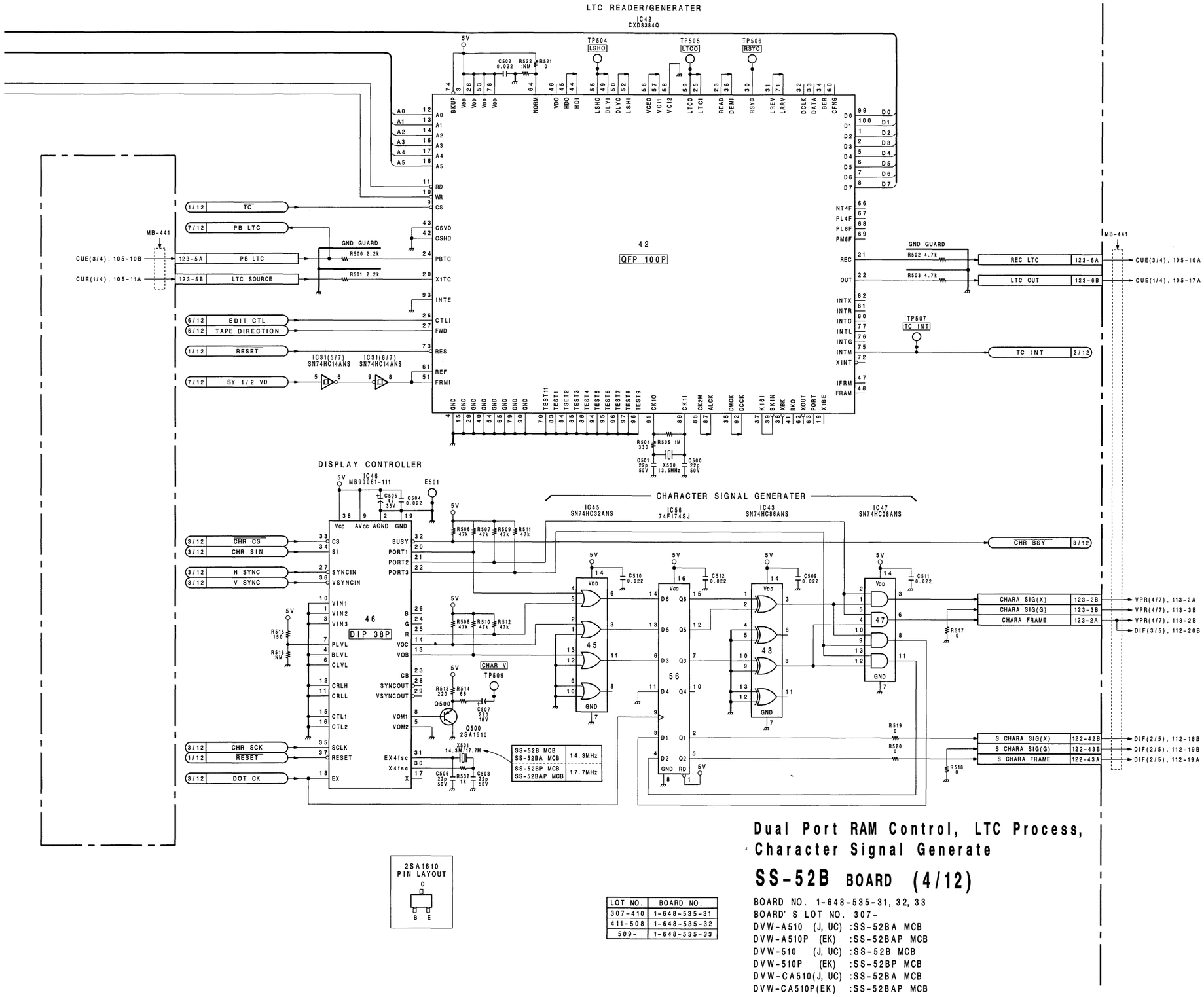
BOARD NO. 1-648-535-31, 32, 33
BOARD'S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510 (J, UC) :SS-52BA MCB
DVW-CA510P (EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

SS-52B (4/12)



Dual Port RAM Control, LTC Process, Character Signal Generate

SS-52B BOARD (4/12)

LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03

SS-52B (5/12)

IC52 IS CXK5864CM-10LL, WHEN LOT NO. 307-509.

8K-BYTE RAM
IC52
LC3564BM-10-TLM

SYS2 ROM
256K-BYTE ROM
IC54
M27C2001-80XF1 (F8)

BOARD NO. 1-648-535-31 ONLY
64K-BYTE ROM
IC54
M27C512-12F1

SUB CPU
IC50
Z8401510FEC
QFP 100P

ADDRESS DECODE AND REMOTE CONTROL I/F
IC53
CXD8813Q
QFP 44P

IC55
DS8691M

IC49
SN75C1168NS-E05

IC48(1/4) IC48(2/4) IC48(3/4) IC48(4/4)
AM26LS32ACNS

SUB D0-D7 4/12
SUB A0-A10 4/12
SUB RAM CS 4/12
SUB-RD 4/12
SUB-WR 4/12
SUB CPU INT 2/12
WDT RST 1/12

7/12 SY 1/2 VD
1/12 MAIN CPU INT
3/12 CK 8000
4/12 CK 8000
1/12 RESET
4/12 SUB RAM WAIT
1/12 CK 2458

X600 16MHz
RB600 2.2k×8
TP606 :NM
TP602 9PIN TX
TP603 9PIN RX
TP601 IEO
TP604 KY TX
TP605 KY RX
CL602
CL601
CL600
D601 CL-150D-CD SYS 2
1SS301-TE85L PIN LAYOUT
D600 1SS301-TE85L

A16
A17
NC
NC
BOARD NO. 1-648-535-31 ONLY

MB-441

DM TBC SS JP1 123-15B
DM TBC SS JP0 123-15A
VPR SS JP1 123-38B
TBC-24(3/3), 102-31A
DM(3/4), 103-49A
TBC-24(2/3), 102-17B
DM(3/4), 103-48A
DVW-A510/CA510 and DVW-A510P/CA510P only
VPR(5/7), 115-40B

RM TX(+) 122-1A
RM TX(-) 122-2A
RM RX(+) 122-3A
RM RX(-) 122-4A
KEY TX(+) 122-27B
KEY TX(-) 122-28B
KEY RX(+) 122-25B
KEY RX(-) 122-26B
PRIORITY OUT 122-5A
PRIORITY IN 122-6A

REMOTE 1 OUT, 7
REMOTE 1 IN, 7
REMOTE 1 IN, 2
REMOTE 1 OUT, 2
REMOTE 1 OUT, 3
REMOTE 1 IN, 3
REMOTE 1 IN, 8
REMOTE 1 OUT, 8
CONTROL PANEL, 10
SWC-19B(2/2), 148-7
SWC-19B(2/2), 148-8
CONTROL PANEL, 12
CONTROL PANEL, 2
SWC-19B(2/2), 148-9
SWC-19B(2/2), 148-10
CONTROL PANEL, 1
REMOTE 1 OUT, 5
REMOTE 1 IN, 5

REMOTE 1 OUT(9P) OR REMOTE 1 IN(9P)
(FEMALE)

CONTROL PANEL
(FEMALE)

LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

LINE DRIVER/RECEIVER

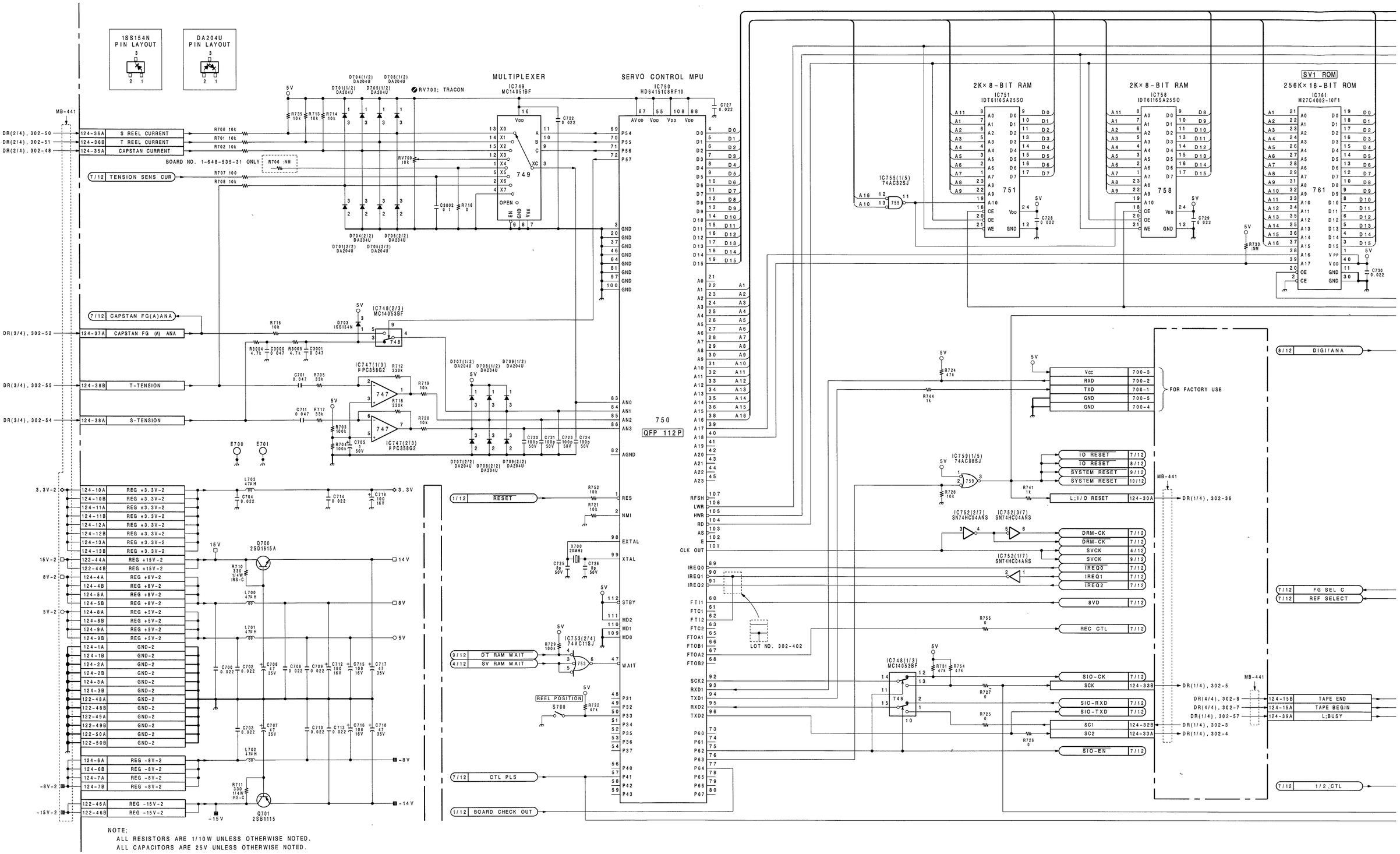
System Control Sub CPU, RS-422A Control

SS-52B BOARD (5/12)

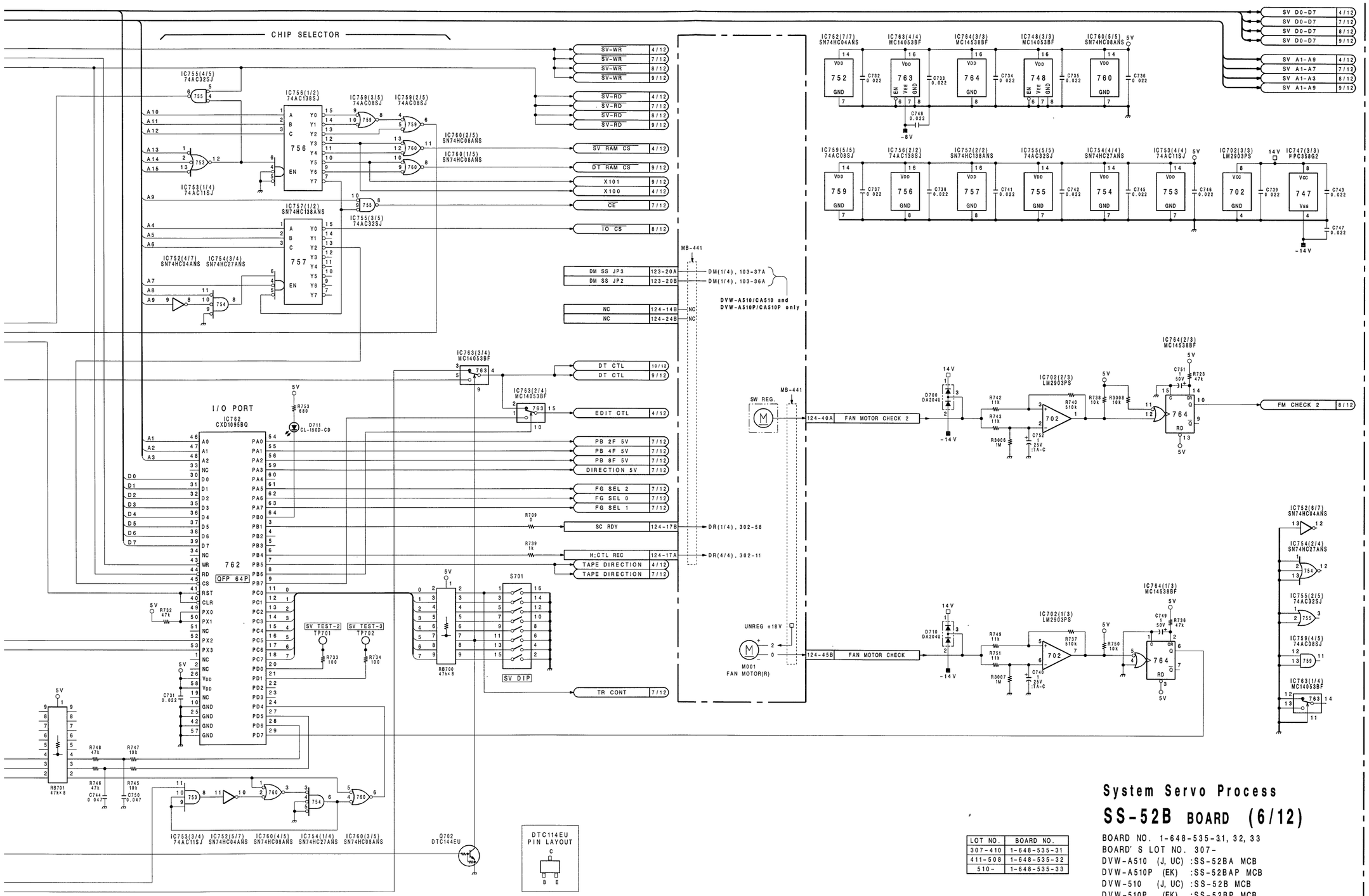
BOARD NO. 1-648-535-31, 32, 33
BOARD'S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03

1-133


1SS154N PIN LAYOUT
DA204U PIN LAYOUT
MULTIPLEXER
IC749 MC14051BF
SERVO CONTROL MPU
IC750 HD6415108RF10
RV700: TRACON
MB-441
DR(2/4), 302-50
DR(2/4), 302-51
DR(2/4), 302-48
124-36A S REEL CURRENT
124-36B T REEL CURRENT
124-35A CAPSTAN CURRENT
BOARD NO. 1-648-535-31 ONLY
R706 :NM
7/12 TENSION SENS CUR
DR(3/4), 302-52
124-37A CAPSTAN FG (A) ANA
7/12 CAPSTAN FG(A)ANA
DR(3/4), 302-55
124-38B T-TENSION
DR(3/4), 302-54
124-38A S-TENSION
IC748(2/3) MC14053BF
IC747(1/3) μPC358G2
IC747(2/3) μPC358G2
750
QFP 112P
E700
E701
3.3V-2
15V-2
8V-2
5V-2
-8V-2
-15V-2
REG +3.3V-2
REG +15V-2
REG +8V-2
REG +5V-2
GND-2
REG -8V-2
REG -15V-2
Q700 2SD1615A
Q701 2SB1115
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.
1/12 RESET
9/12 DT RAM WAIT
4/12 SV RAM WAIT
REEL POSITION
S700
7/12 CTL PLS
1/12 BOARD CHECK OUT
X700 20MHz
IC753(2/4) 74AC11SJ
2K×8-BIT RAM
IC751 IDT6116SA25SO
IC758 IDT6116SA25SO
SV1 ROM
256K×16-BIT ROM
IC761 M27C4002-10F1
IC755(1/5) 74AC32SJ
LOT NO. 302-402
IC759(1/5) 74AC08SJ
IC752(2/7) SN74HC04ANS
IC752(3/7) SN74HC04ANS
IC752(1/7) SN74HC04ANS
IC748(1/3) MC14053BF
FOR FACTORY USE
Vcc 700-3
RXD 700-2
TXD 700-1
GND 700-5
GND 700-4
8/12 DIGI/ANA
I/O RESET 7/12
I/O RESET 8/12
SYSTEM RESET 9/12
SYSTEM RESET 10/12
L;I/O RESET 124-30A
DR(1/4), 302-36
DRM-CK 7/12
DRM-CK 7/12
SVCK 4/12
SVCK 9/12
IREQ0 7/12
IREQ1 7/12
IREQ2 7/12
8VD 7/12
REC CTL 7/12
SIO-CK 7/12
SCK 124-33B
DR(1/4), 302-5
SIO-RXD 7/12
SIO-TXD 7/12
SC1 124-32B
SC2 124-33A
DR(1/4), 302-3
DR(1/4), 302-4
SIO-EN 7/12
7/12 FG SEL C
7/12 REF SELECT
MB-441
DR(4/4), 302-8
DR(4/4), 302-7
DR(1/4), 302-57
124-15B TAPE END
124-15A TAPE BEGIN
124-39A L;BUSY
7/12 1/2;CTL

SS-52B (6/12)



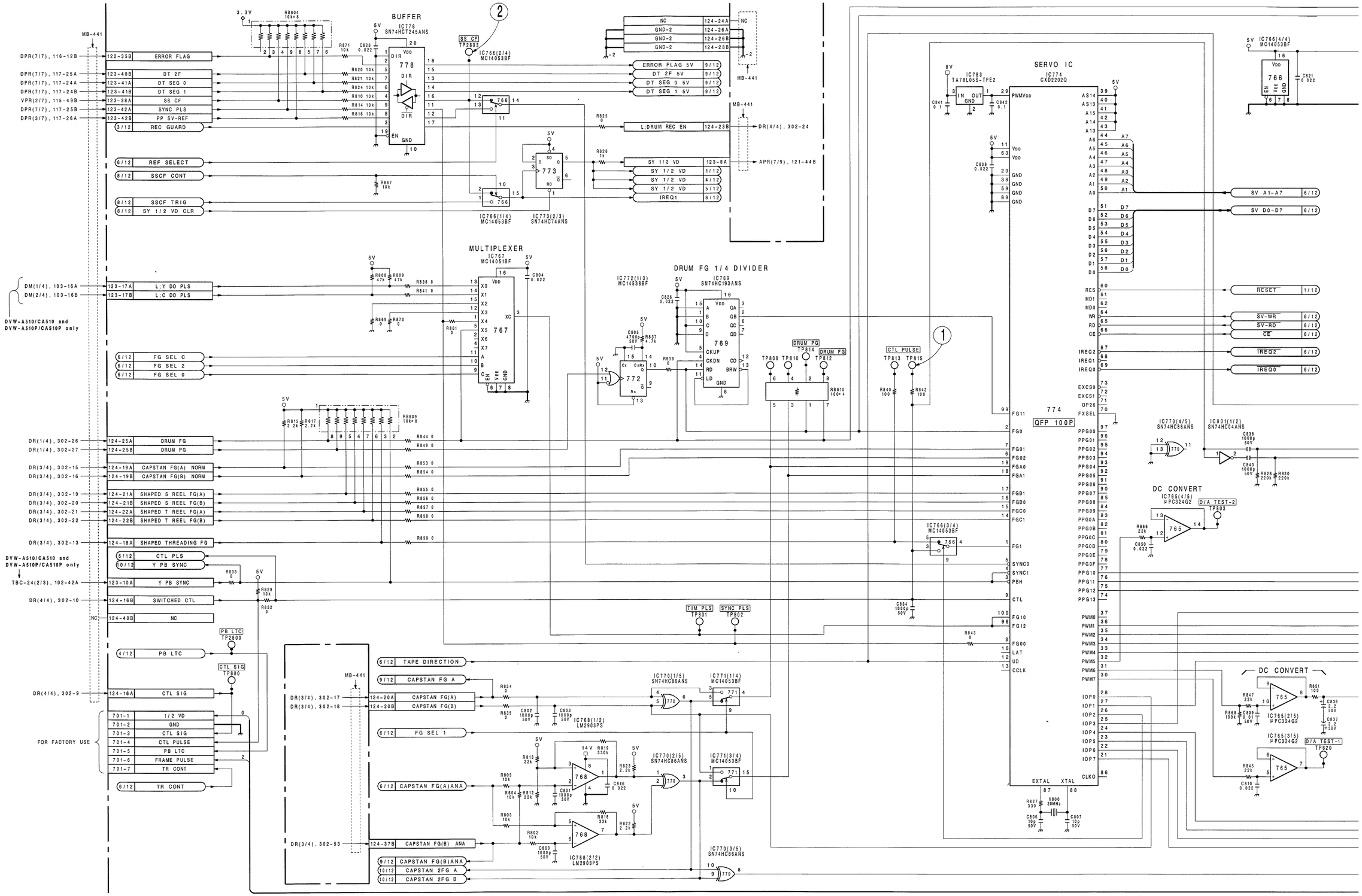
LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
510-	1-648-535-33

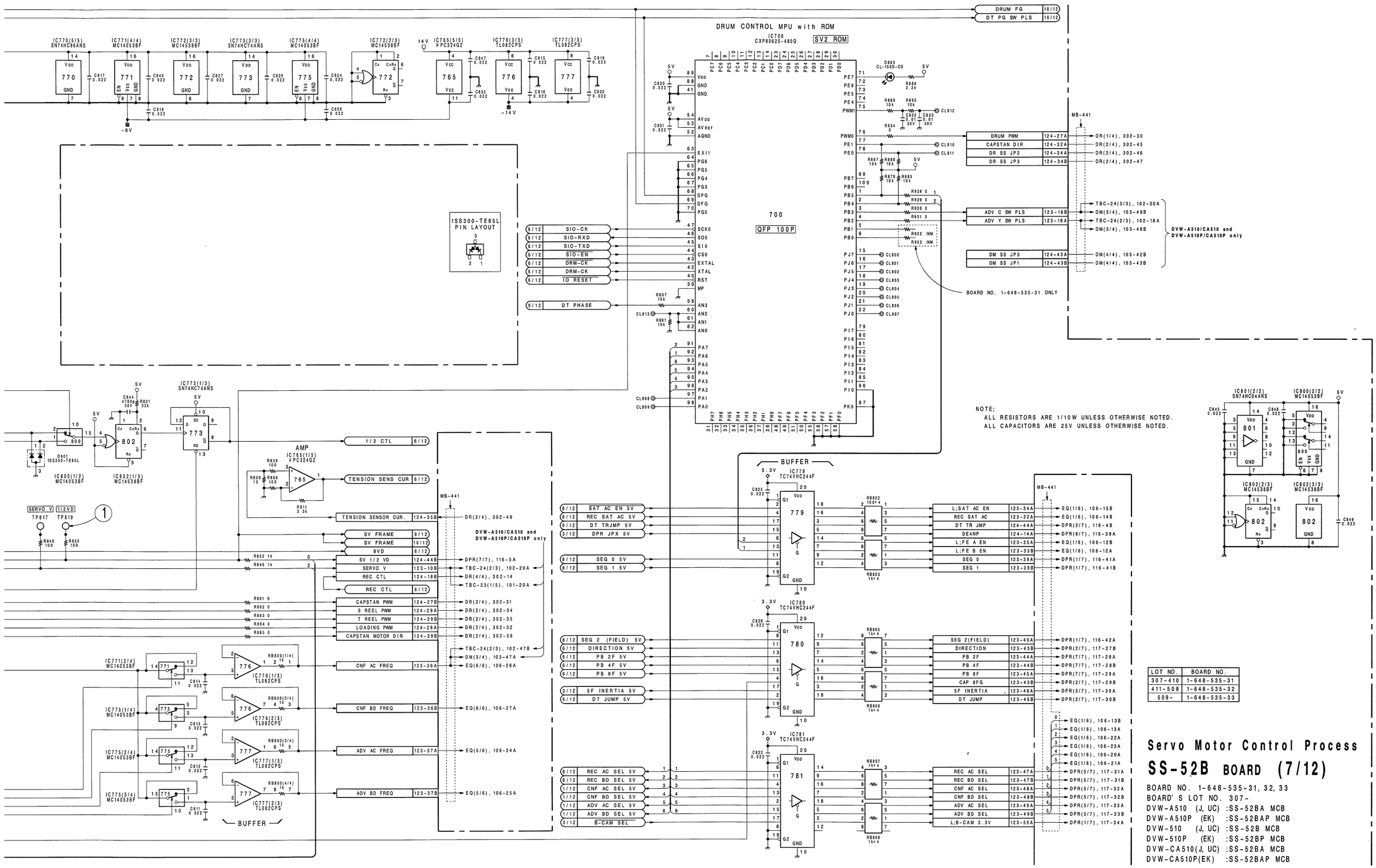
System Servo Process

SS-52B BOARD (6/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03


SERVO IC
IC774 CXD2202Q
774 QFP 100P
IC783 TA78L05S-TPE2
IC766(4/4) MC14053BF
IC766(2/4) MC14053BF
IC766(1/4) MC14053BF
IC773(2/3) SN74HC74ANS
MULTIPLEXER
IC767 MC14051BF
DRUM FG 1/4 DIVIDER
IC772(1/3) MC14538BF
IC769 SN74HC193ANS
BUFFER
IC778 SN74HCT245ANS
DC CONVERT
IC765(4/5) μPC324G2
IC765(2/5) μPC324G2
IC765(3/5) μPC324G2
IC770(4/5) SN74HC86ANS
IC770(1/5) SN74HC86ANS
IC770(2/5) SN74HC86ANS
IC770(3/5) SN74HC86ANS
IC771(1/4) MC14053BF
IC771(3/4) MC14053BF
IC768(1/2) LM2903PS
IC768(2/2) LM2903PS
IC801(1/2) SN74HC04ANS
MB-441
DVW-A510/CA510 and DVW-A510P/CA510P only
FOR FACTORY USE
DRUM FG
CTL PULSE
TIM PLS
SYNC PLS
PB LTC
CTL SIG
SV A1-A7
SV D0-D7
RESET
SV-WR
SV-RD
CE
IREQ2
IREQ0
EXTAL
XTAL
X800 20MHz
DR(1/4), 302-26
DR(1/4), 302-27
DR(3/4), 302-15
DR(3/4), 302-16
DR(3/4), 302-19
DR(3/4), 302-20
DR(3/4), 302-21
DR(3/4), 302-22
DR(3/4), 302-13
DR(4/4), 302-10
DR(4/4), 302-9
DR(3/4), 302-17
DR(3/4), 302-18
DR(3/4), 302-53
TBC-24(2/3), 102-42A
DM(1/4), 103-16A
DM(2/4), 103-16B
DPR(7/7), 116-12B
DPR(7/7), 117-25A
DPR(7/7), 117-24A
DPR(7/7), 117-24B
VPR(2/7), 115-49B
DPR(7/7), 117-25B
DPR(3/7), 117-26A
DR(4/4), 302-24
APR(7/9), 121-44B



LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

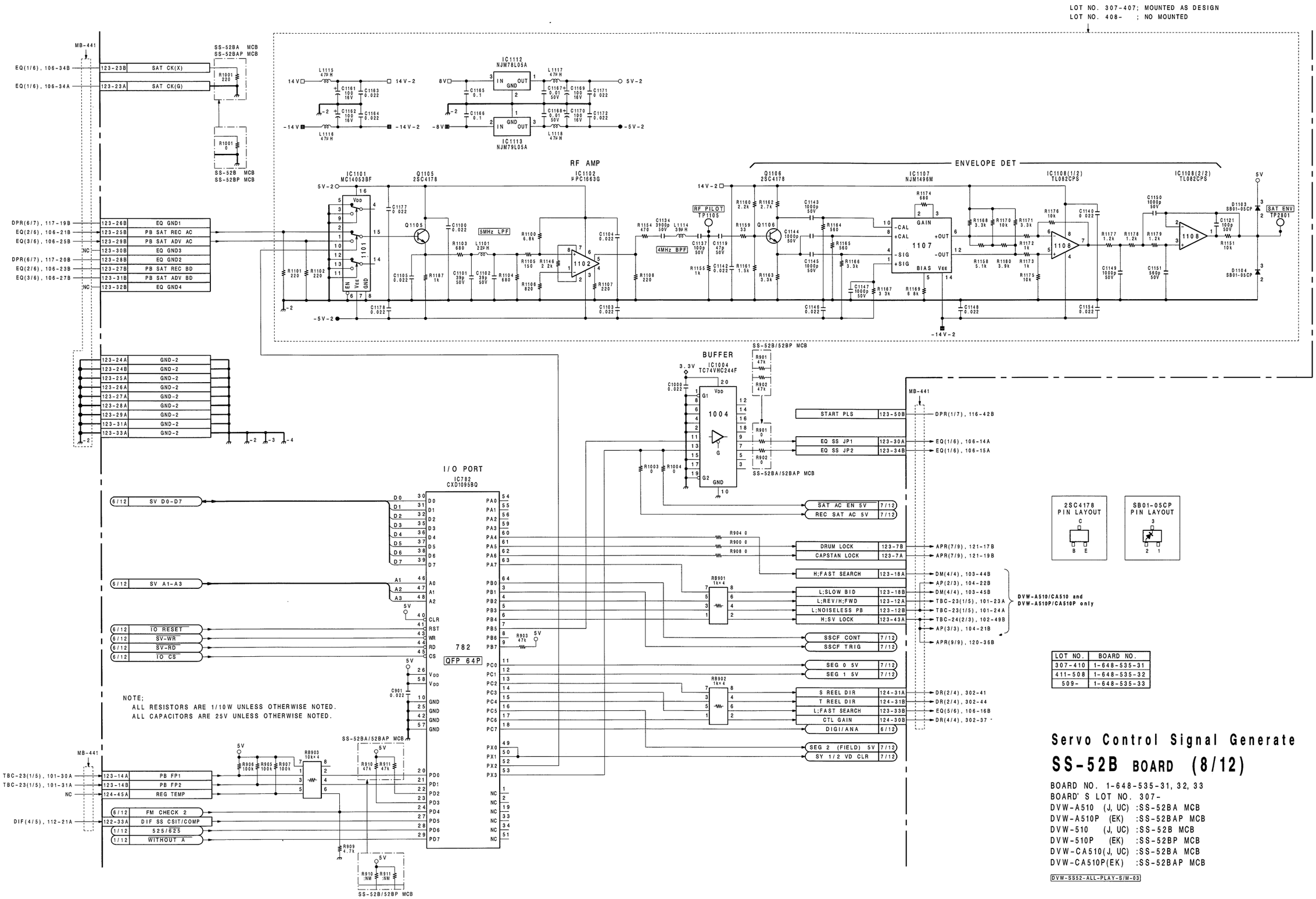
Servo Motor Control Process

SS-52B BOARD (7/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03

SS-52B (8/12)



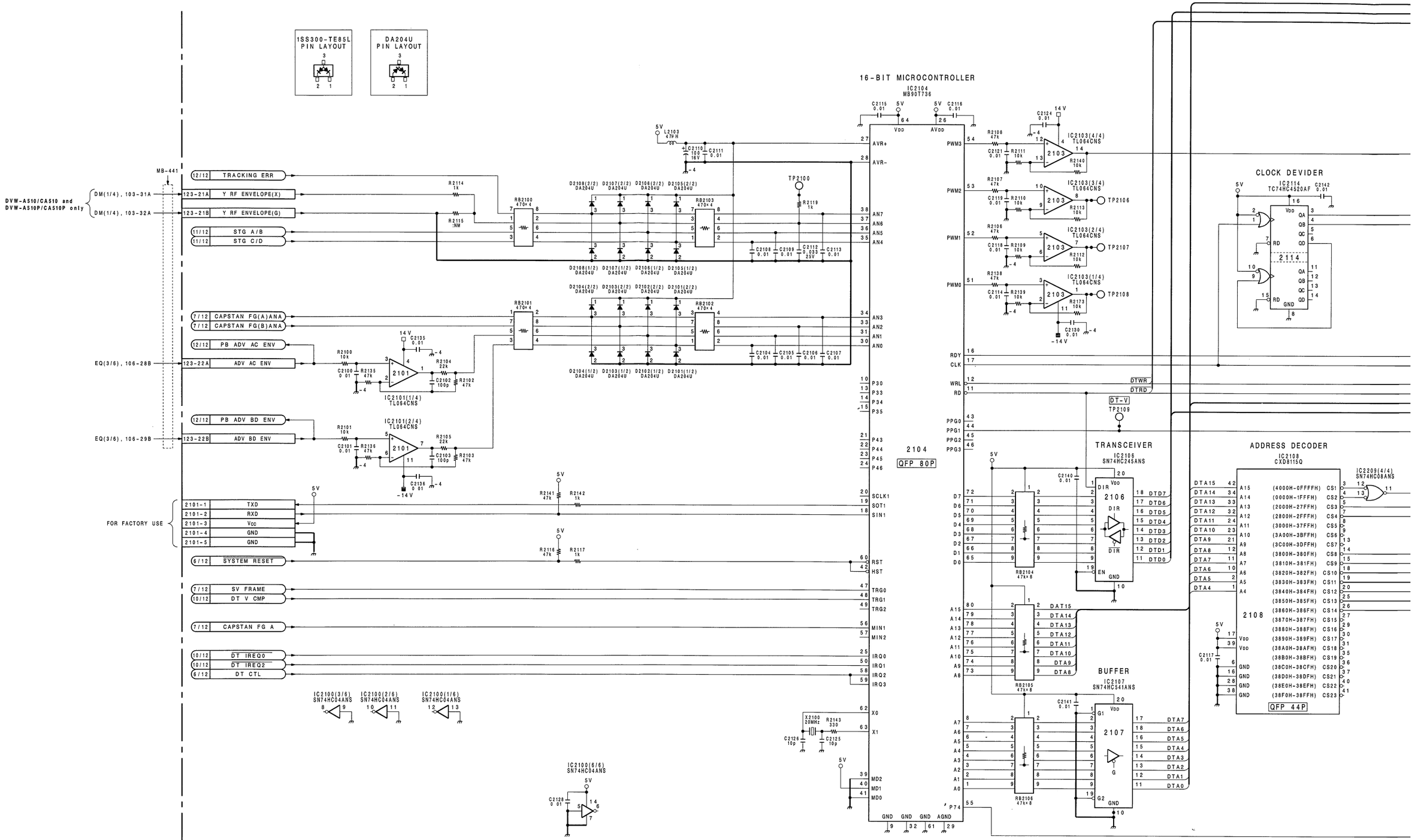
LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

Servo Control Signal Generate

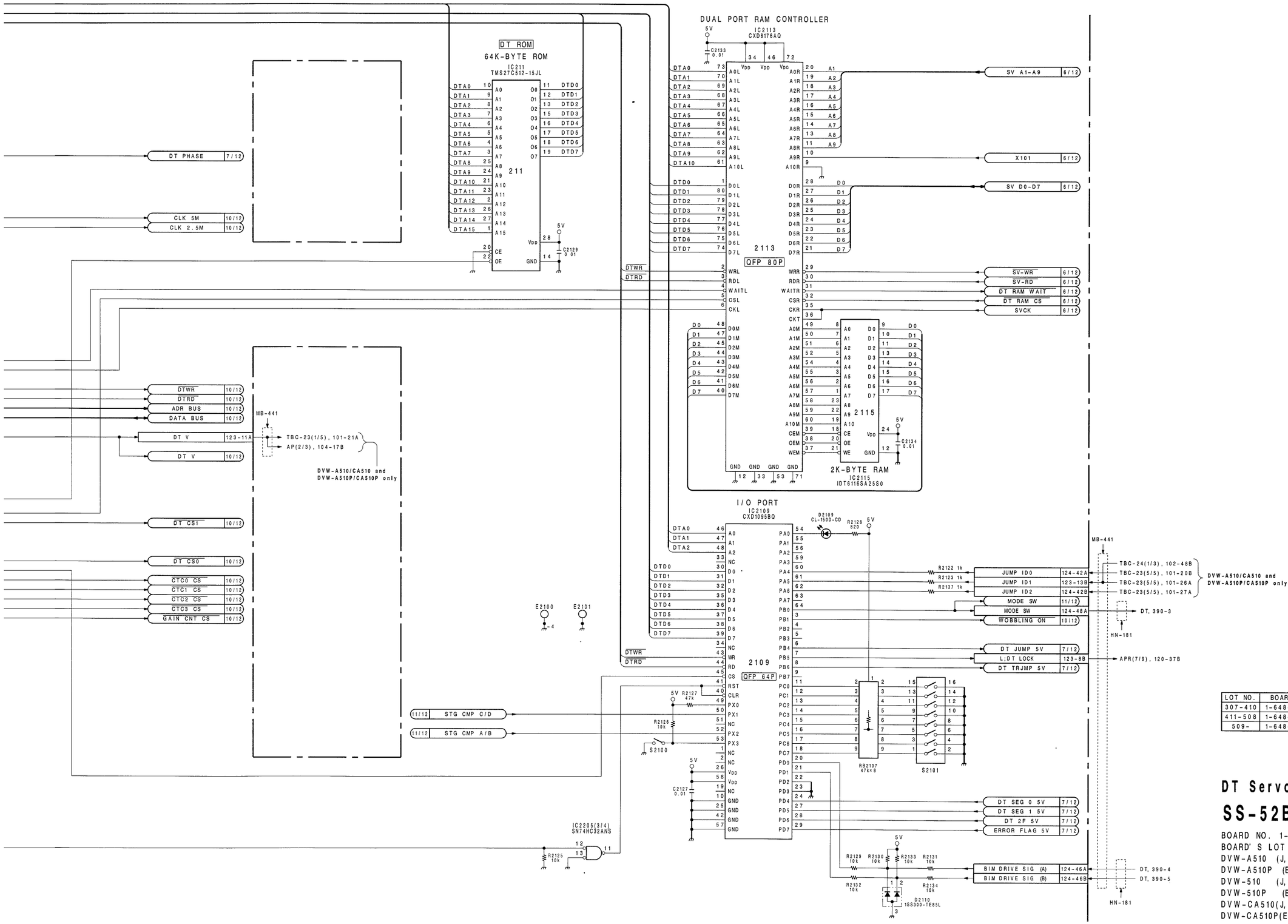
SS-52B BOARD (8/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.



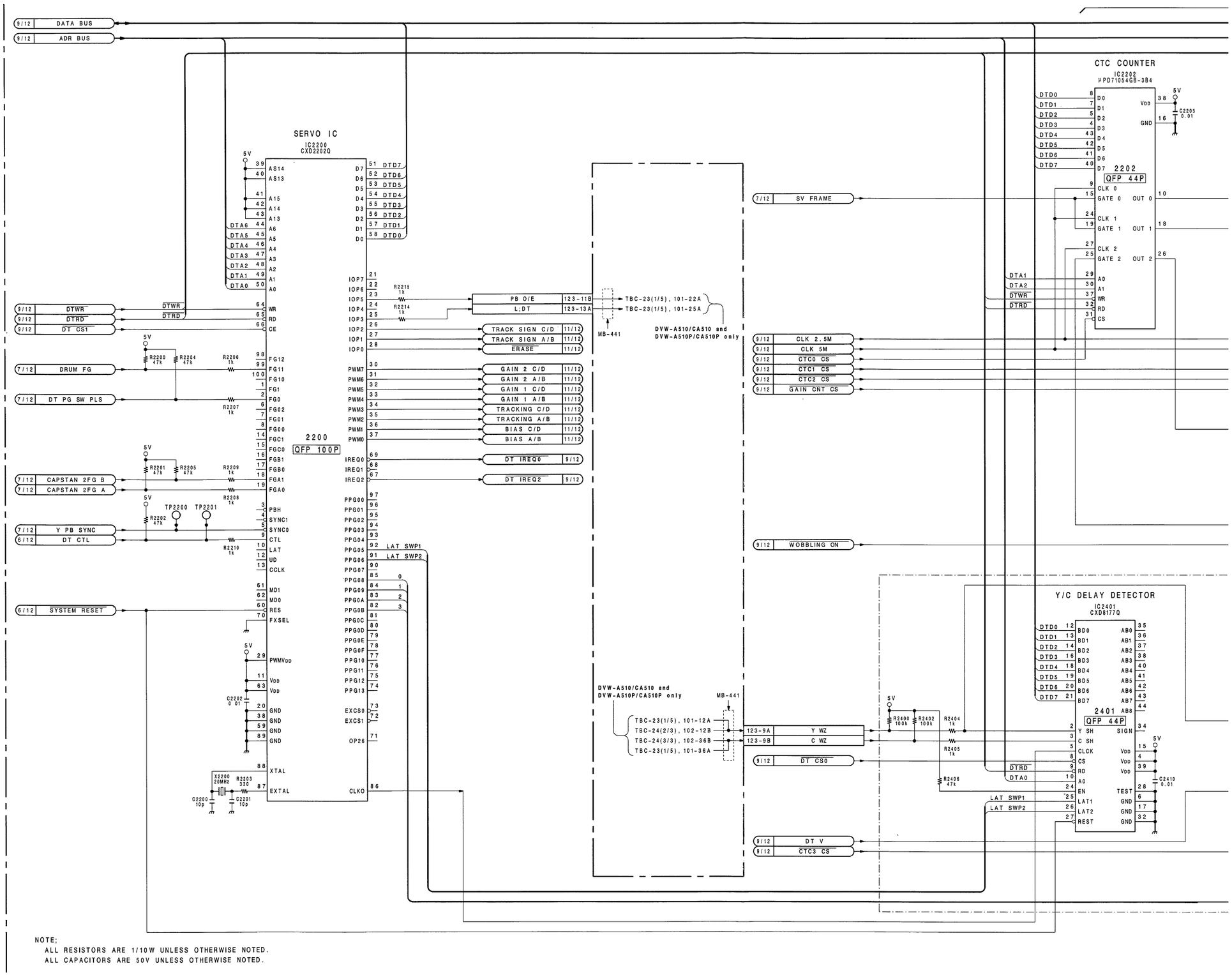
LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

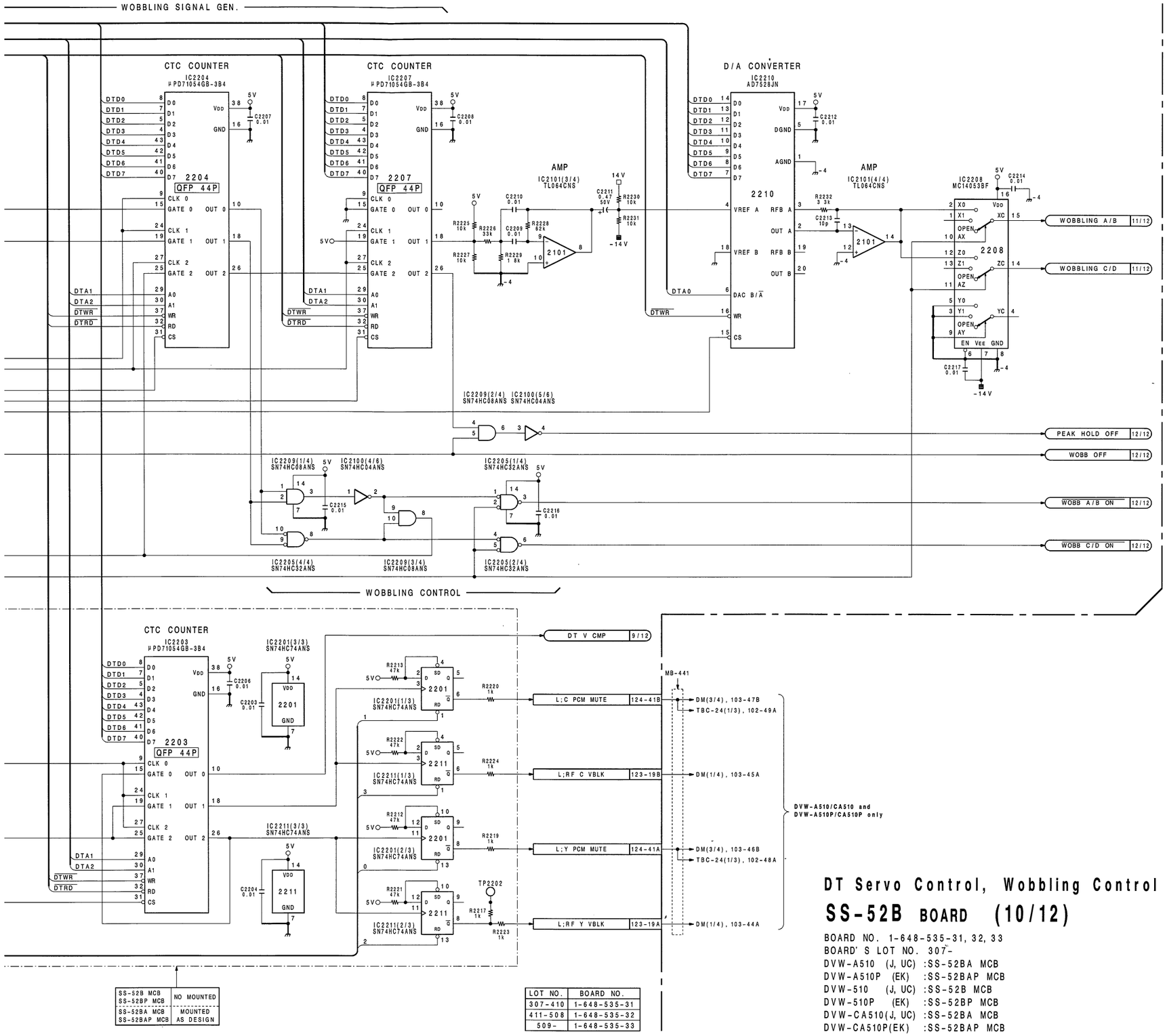
DT Servo Process Control

SS-52B BOARD (9/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03


SERVO IC
IC2200
CXD2202Q
2200
QFP 100P
CTC COUNTER
IC2202
μPD71054GB-3B4
2202
QFP 44P
Y/C DELAY DETECTOR
IC2401
CXD8177Q
2401
QFP 44P
DATA BUS
ADR BUS
SV FRAME
CLK 2.5M
CLK 5M
CTC0 CS
CTC1 CS
CTC2 CS
GAIN CNT CS
WOBBLING ON
DT V
CTC3 CS
DTWR
DTRD
DT CS1
DRUM FG
DT PG SW PLS
CAPSTAN 2FG B
CAPSTAN 2FG A
Y PB SYNC
DT CTL
SYSTEM RESET
PB O/E
L;DT
TRACK SIGN C/D
TRACK SIGN A/B
ERASE
GAIN 2 C/D
GAIN 2 A/B
GAIN 1 C/D
GAIN 1 A/B
TRACKING C/D
TRACKING A/B
BIAS C/D
BIAS A/B
DT IREQ0
DT IREQ2
LAT SWP1
LAT SWP2
TBC-23(1/5), 101-22A
TBC-23(1/5), 101-25A
MB-441
DVW-A510/CA510 and
DVW-A510P/CA510P only
TBC-23(1/5), 101-12A
TBC-24(2/3), 102-12B
TBC-24(3/3), 102-36B
TBC-23(1/5), 101-36A
123-9A
123-9B
Y WZ
C WZ
DT CS0
DTA0
DTA1
DTA2
TP2200
TP2201
X2200
20MHz
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.



SS-52B MCB SS-52BP MCB	NO MOUNTED
SS-52BA MCB SS-52BAP MCB	MOUNTED AS DESIGN

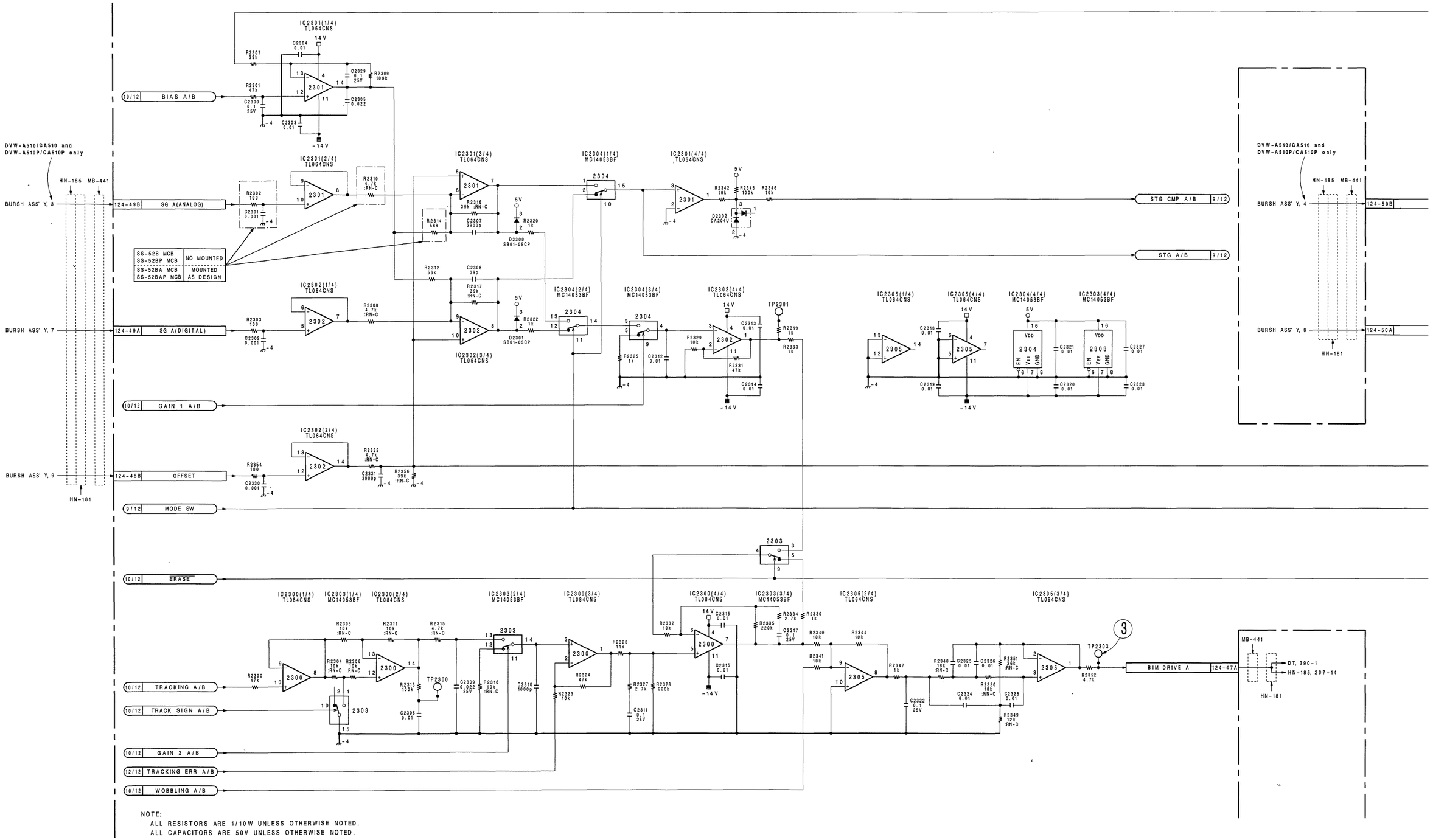
LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

DT Servo Control, Wobbling Control

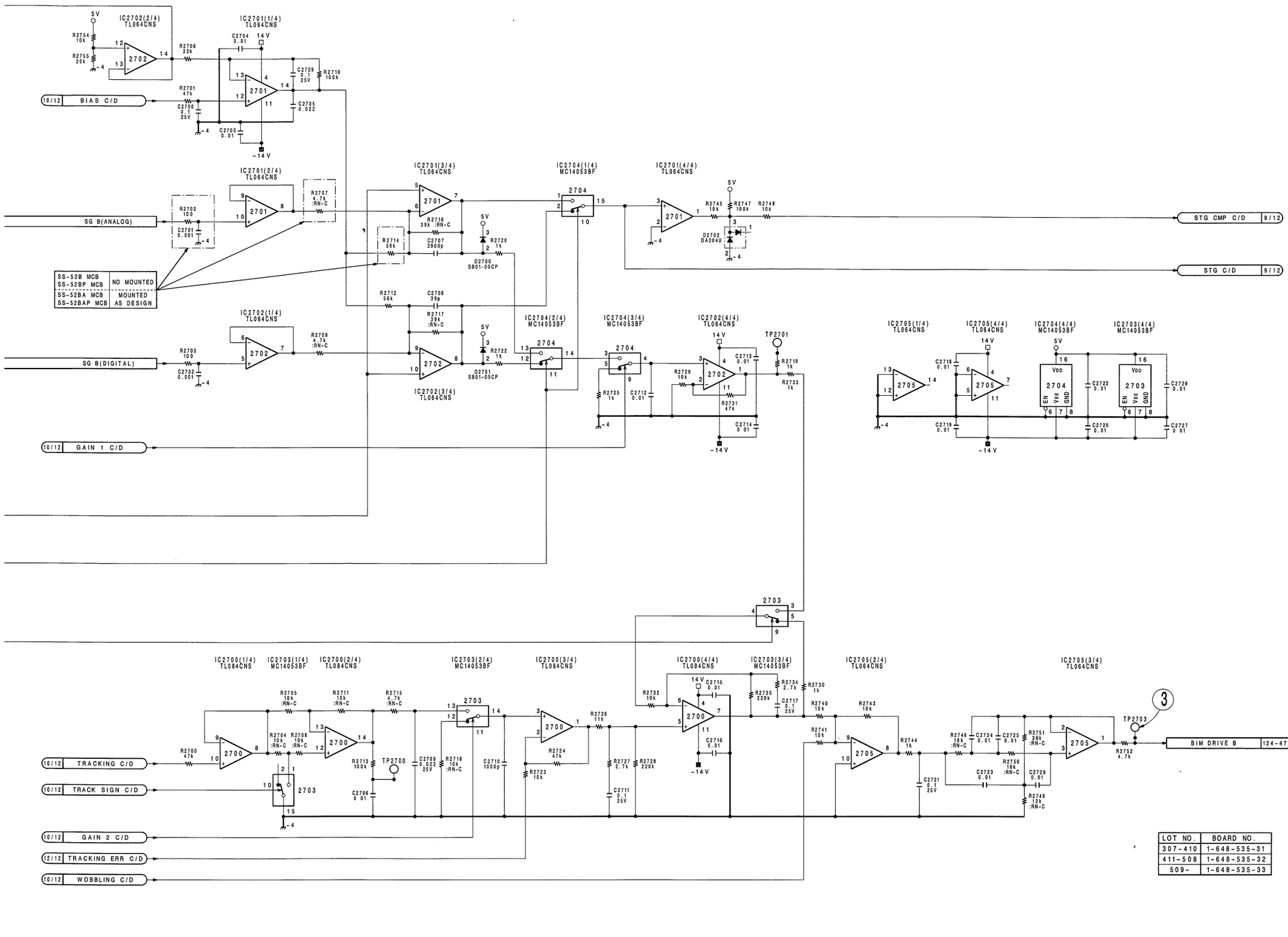
SS-52B BOARD (10/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

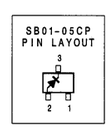
DVW-SS52-ALL-PLAY-S/M-03



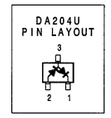
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.



SB01-05CP PIN LAYOUT



DA204U PIN LAYOUT



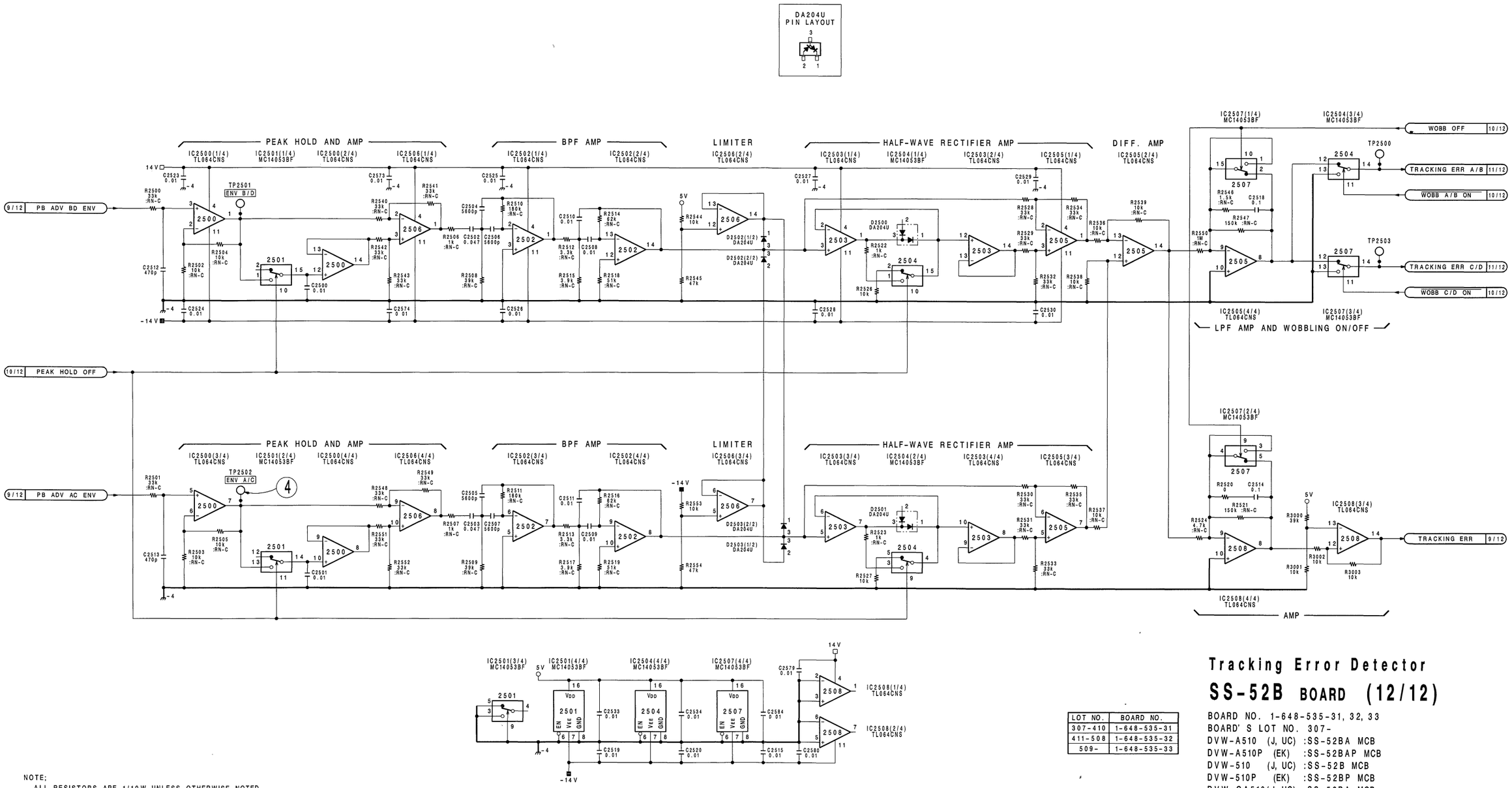
LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

Bimorph Drive Control

SS-52B BOARD (11/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

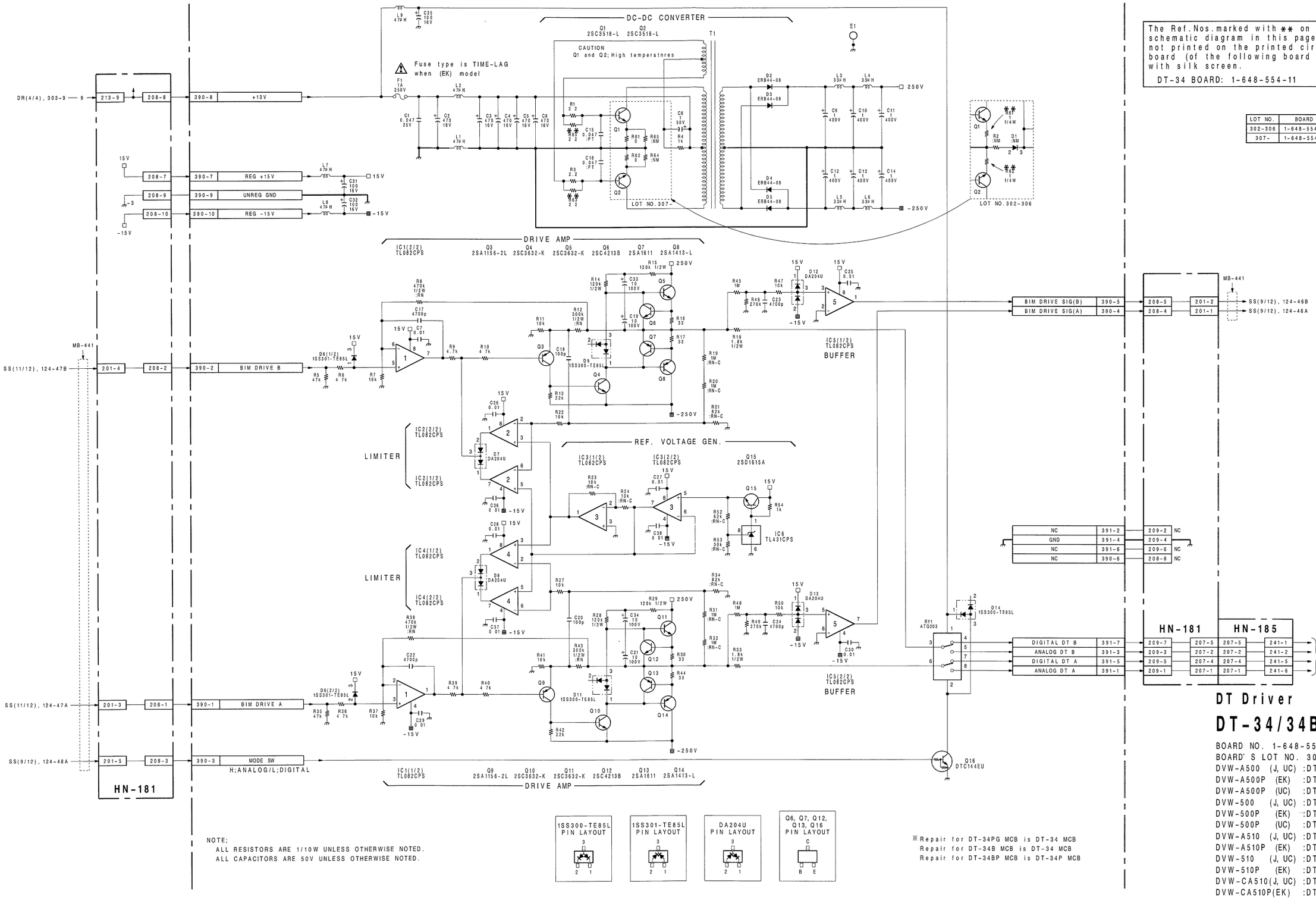
LOT NO.	BOARD NO.
307-410	1-648-535-31
411-508	1-648-535-32
509-	1-648-535-33

Tracking Error Detector

SS-52B BOARD (12/12)

BOARD NO. 1-648-535-31, 32, 33
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SS-52BA MCB
DVW-A510P (EK) :SS-52BAP MCB
DVW-510 (J, UC) :SS-52B MCB
DVW-510P (EK) :SS-52BP MCB
DVW-CA510(J, UC) :SS-52BA MCB
DVW-CA510P(EK) :SS-52BAP MCB

DVW-SS52-ALL-PLAY-S/M-03



The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

DT-34 BOARD: 1-648-554-11

LOT NO.	BOARD NO.
302-306	1-648-554-11
307-	1-648-554-12/22

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

※Repair for DT-34PG MCB is DT-34 MCB
Repair for DT-34B MCB is DT-34 MCB
Repair for DT-34BP MCB is DT-34P MCB

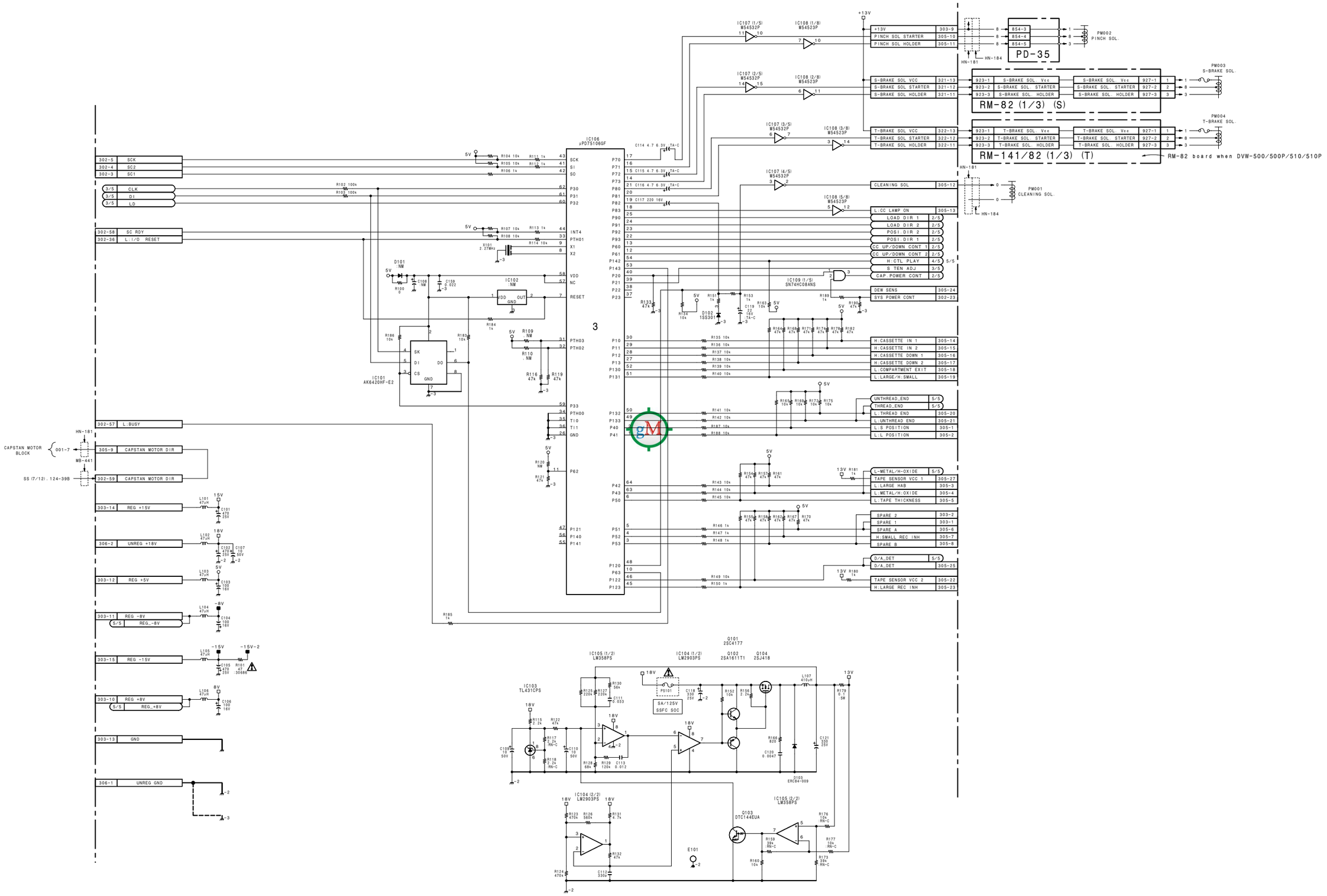
DT Driver

DT-34/34B BOARD

BOARD NO. 1-648-554-11, 12/22
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :DT-34 MCB
DVW-A500P (EK) :DT-34P MCB
DVW-A500P (UC) :DT-34PG MCB
DVW-500 (J, UC) :DT-34 MCB
DVW-500P (EK) :DT-34P MCB
DVW-500P (UC) :DT-34PG MCB
DVW-A510 (J, UC) :DT-34B MCB
DVW-A510P (EK) :DT-34BP MCB
DVW-510 (J, UC) :DT-34B MCB
DVW-510P (EK) :DT-34BP MCB
DVW-CA510(J, UC) :DT-34B MCB
DVW-CA510P(EK) :DT-34BP MCB

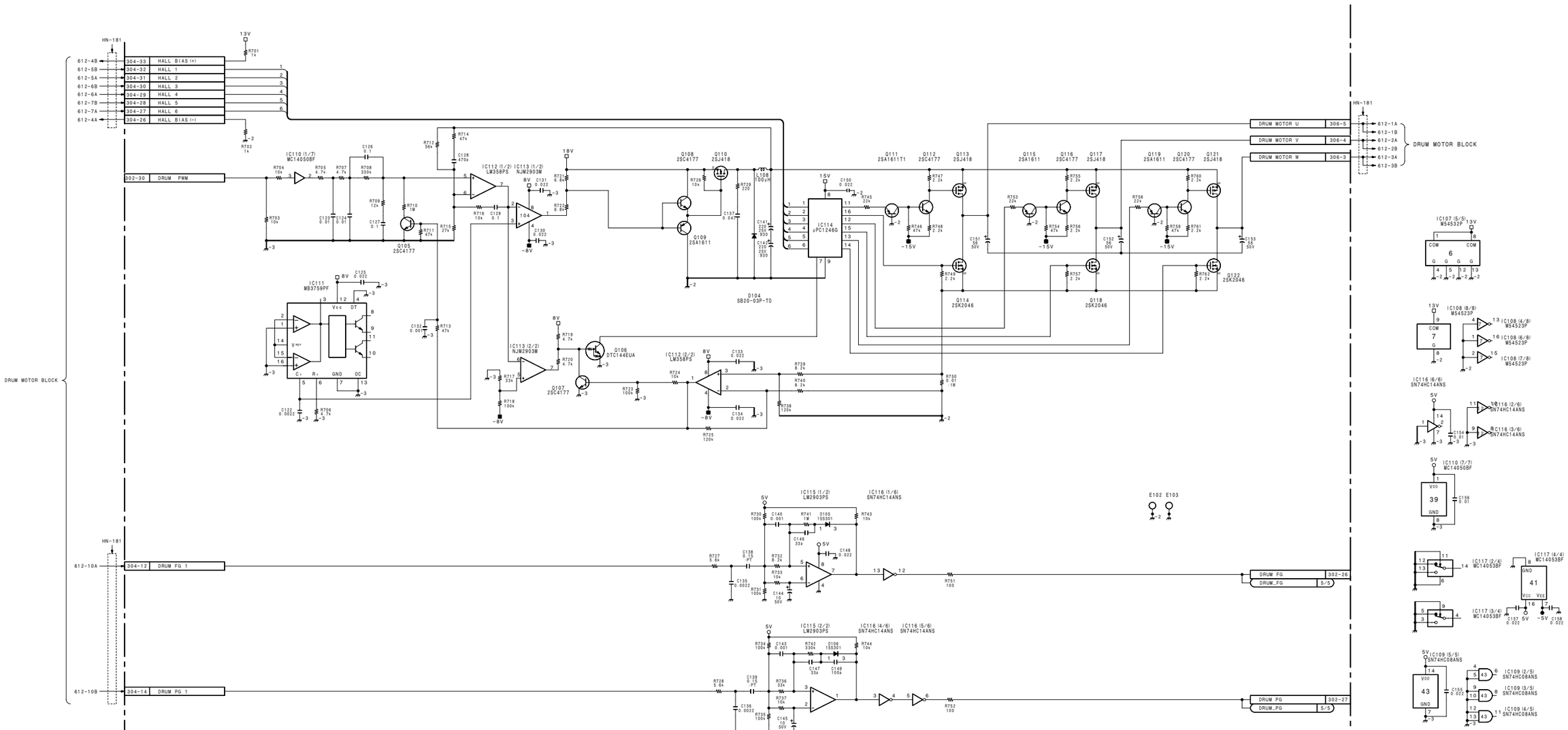
DVW-DT34-ALL-ALL-SM-04

DR-307 (1/5), RM-82/141 (1/3)



1-148 (b) 1-148 (b)

DR-307 (1/5), RM-82/141 (1/3)



Motors (Drum, Reel Capstan, etc) driver, Solenoids driver

DR-307 BOARD (1/5)

BOARD NO. 1-664-481-12
BOARD'S LOT NO. 912-
DVW-A500 (J, UC) : DR-307A MCB
DVW-A500P (EK) : DR-307A MCB
DVW-A500P (UC) : DR-307A MCB
DVW-500 (J, UC) : DR-307D MCB
DVW-500P (EK) : DR-307D MCB
DVW-500P (UC) : DR-307D MCB
DVW-A510 (J, UC) : DR-307A MCB
DVW-A510P (EK) : DR-307A MCB
DVW-510 (J, UC) : DR-307D MCB
DVW-510P (EK) : DR-307D MCB
DVW-CA510 (J, UC) : DR-307A MCB
DVW-CA510P (EK) : DR-307A MCB

S/T Brake Sol. Connection

RM-82 BOARD (1/3)

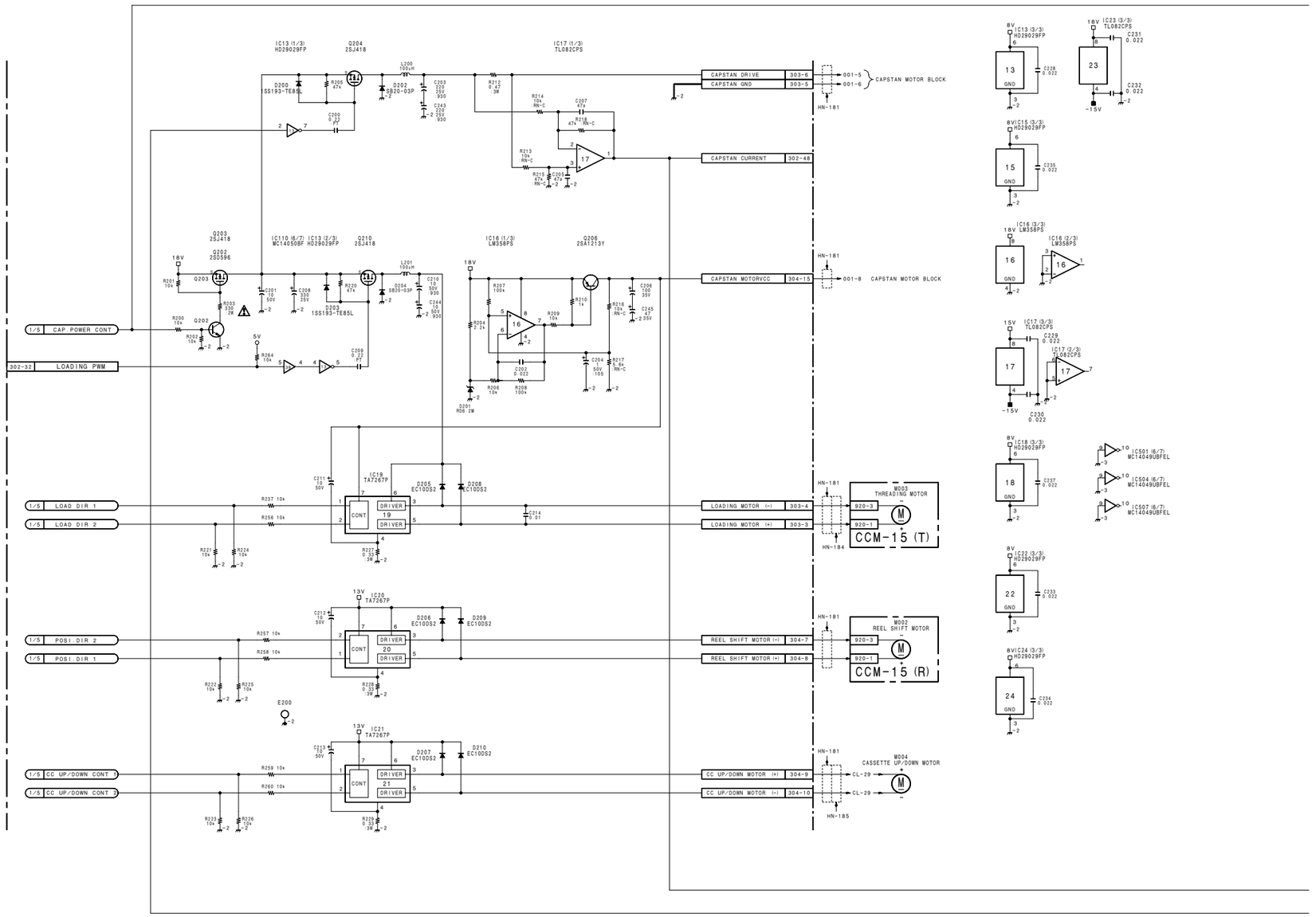
BOARD NO. 1-640-166-13

T Brake Sol. Connection

RM-141 BOARD (1/3)

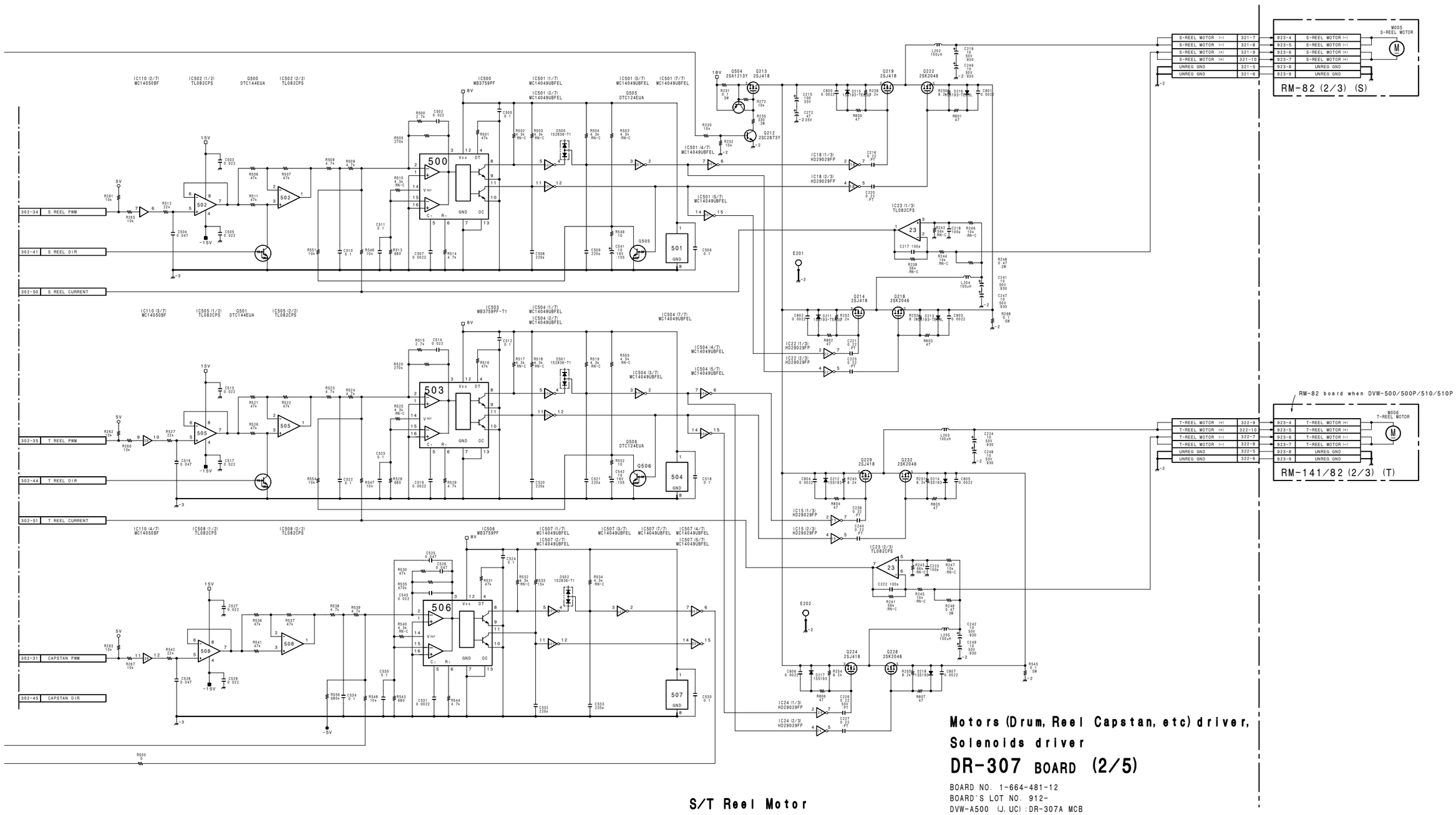
BOARD NO. 1-651-533-12

DR-307 (2/5), RM-82/141 (2/3)



1-150 (b)

DR-307 (2/5), RM-82/141 (2/3)



S/T Reel Motor

RM-82 BOARD (2/3)

BOARD NO. 1-640-166-13

T Reel Motor

RM-141 BOARD (2/3)

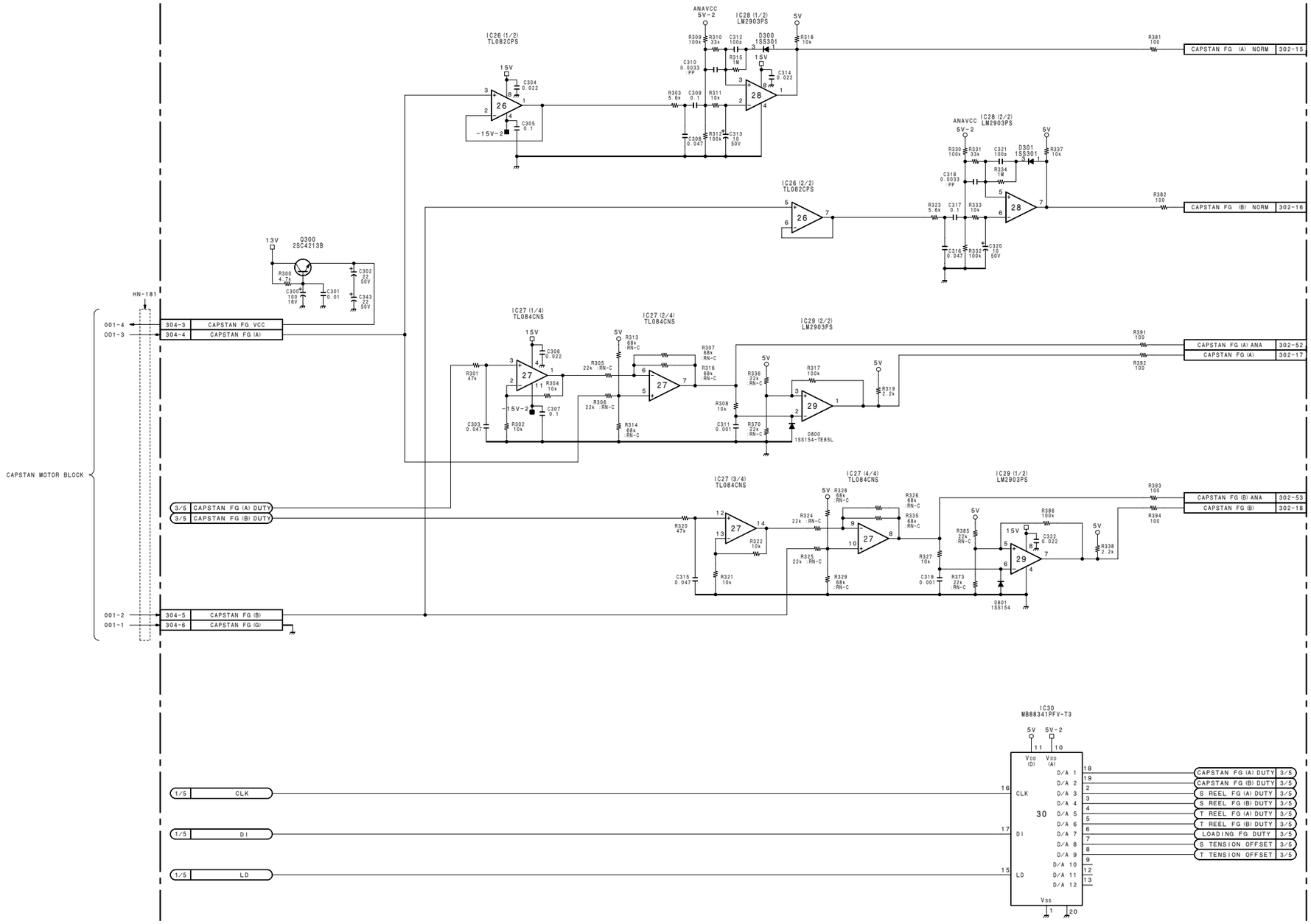
BOARD NO. 1-651-533-12

Motors (Drum, Reel Capstan, etc) driver, Solenoids driver

DR-307 BOARD (2/5)

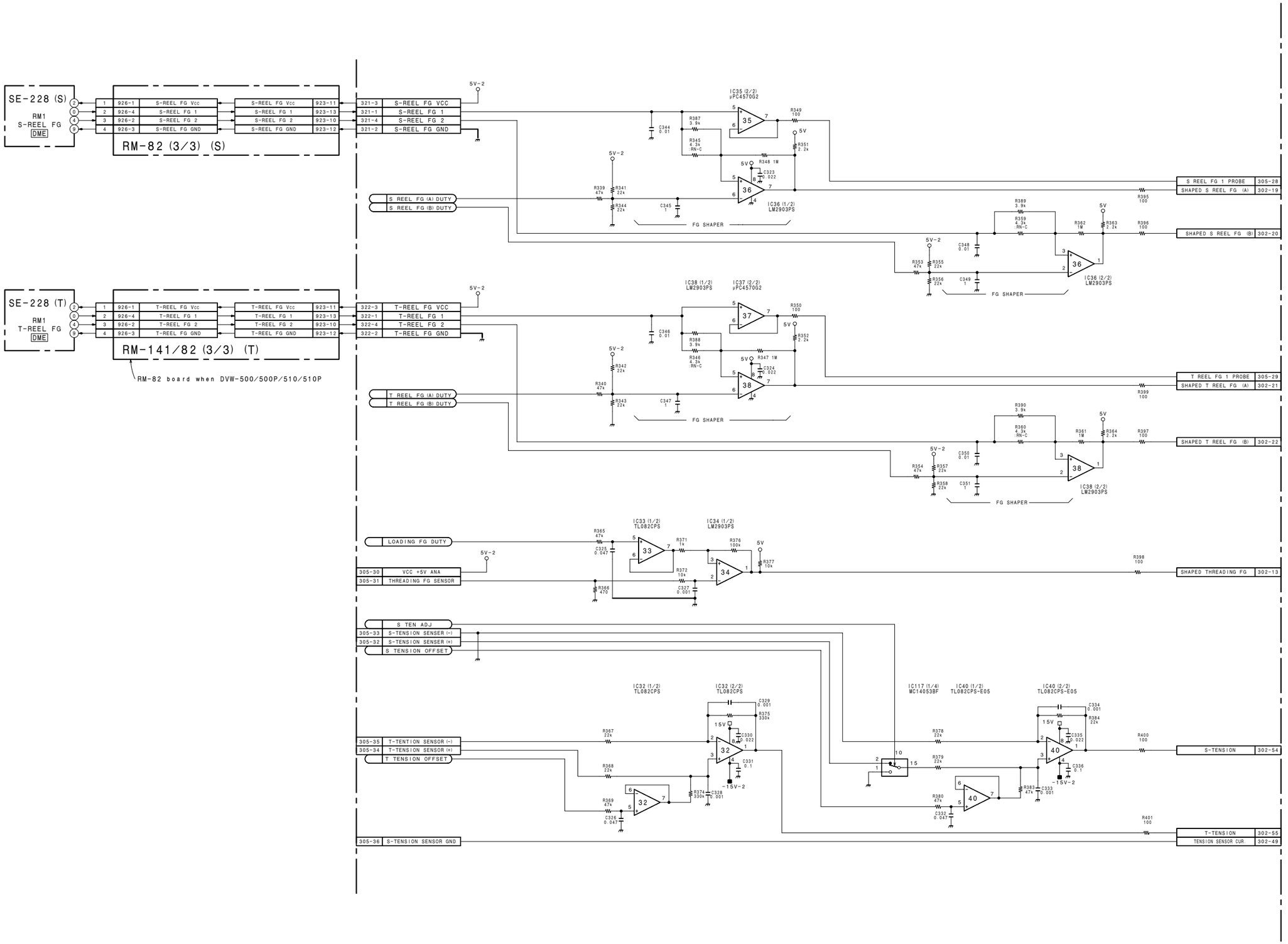
BOARD NO. 1-664-481-12
BOARD'S LOT NO. 912-
DVW-A500 (J, UC) : DR-307A MCB
DVW-A500P (EK) : DR-307A MCB
DVW-A500P (UC) : DR-307A MCB
DVW-500 (J, UC) : DR-307D MCB
DVW-500P (EK) : DR-307D MCB
DVW-500P (UC) : DR-307D MCB
DVW-A510 (J, UC) : DR-307A MCB
DVW-A510P (EK) : DR-307A MCB
DVW-510 (J, UC) : DR-307D MCB
DVW-510P (EK) : DR-307D MCB
DVW-CA510 (J, UC) : DR-307A MCB
DVW-CA510P (EK) : DR-307A MCB

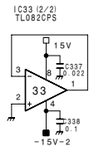
DR-307 (3/5), RM-82/141 (3/3)



1-152 (b)

DR-307 (3/5), RM-82/141 (3/3)





S/T Reel FG

SE-228 BOARD

BOARD NO. 1-649-617-11

S/T Reel FG Connection

RM-82 BOARD (3/3)

BOARD NO. 1-640-166-13

T Reel FG Connection

RM-141 BOARD (3/3)

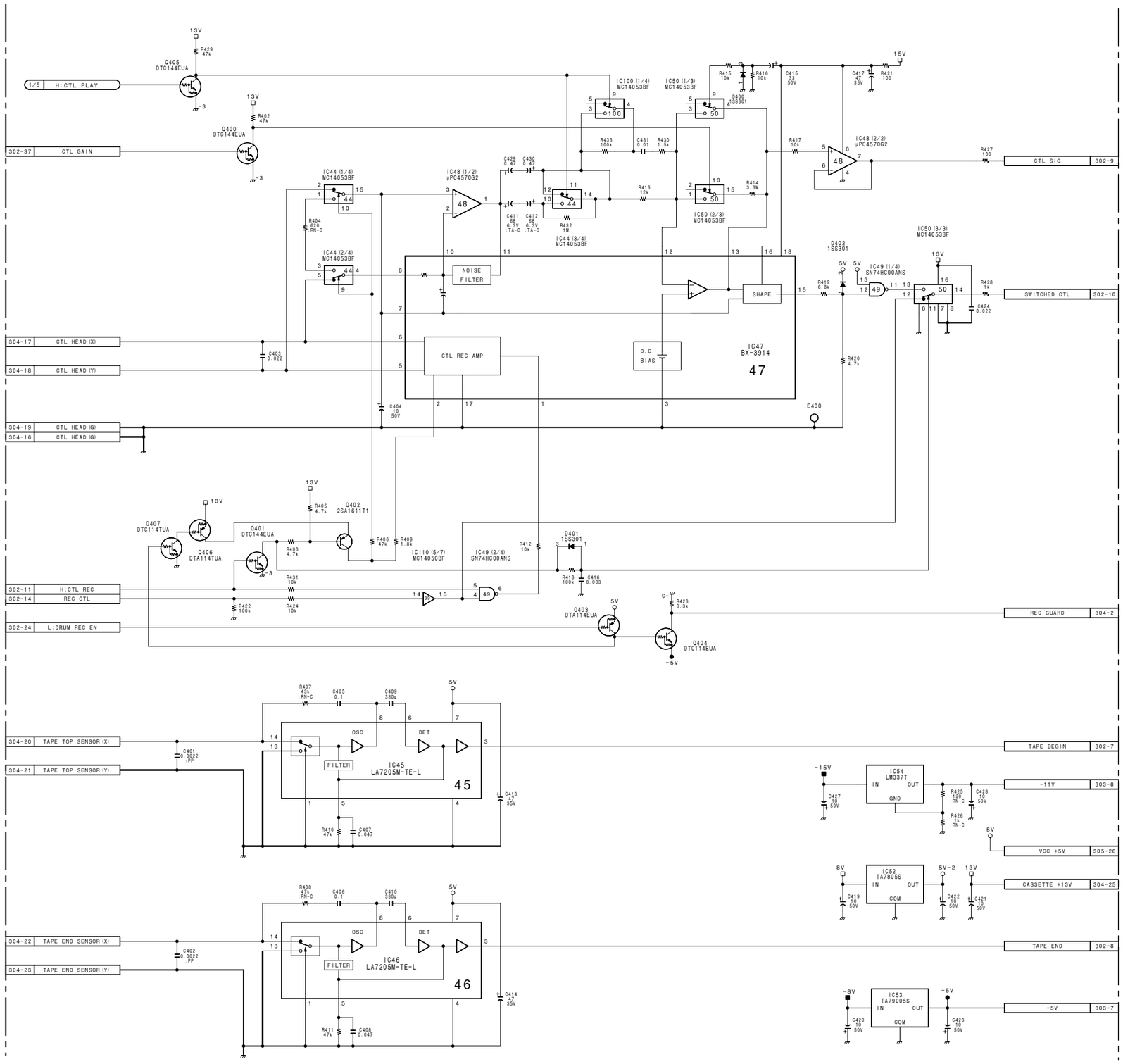
BOARD NO. 1-651-533-12

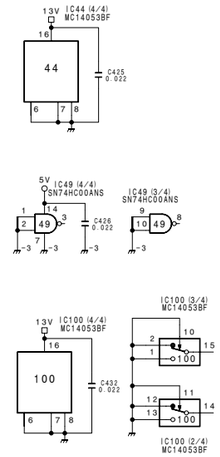
Motors (Drum, Reel Capstan, etc) driver, Solenoids driver

DR-307 BOARD (3/5)

BOARD NO. 1-664-481-12
BOARD'S LOT NO. 912-
DVW-A500 (J, UC) : DR-307A MCB
DVW-A500P (EK) : DR-307A MCB
DVW-A500P (UC) : DR-307A MCB
DVW-500 (J, UC) : DR-307D MCB
DVW-500P (EK) : DR-307D MCB
DVW-500P (UC) : DR-307D MCB
DVW-A510 (J, UC) : DR-307A MCB
DVW-A510P (EK) : DR-307A MCB
DVW-510 (J, UC) : DR-307D MCB
DVW-510P (EK) : DR-307D MCB
DVW-CA510 (J, UC) : DR-307A MCB
DVW-CA510P (EK) : DR-307A MCB

DR-307 (4/5)





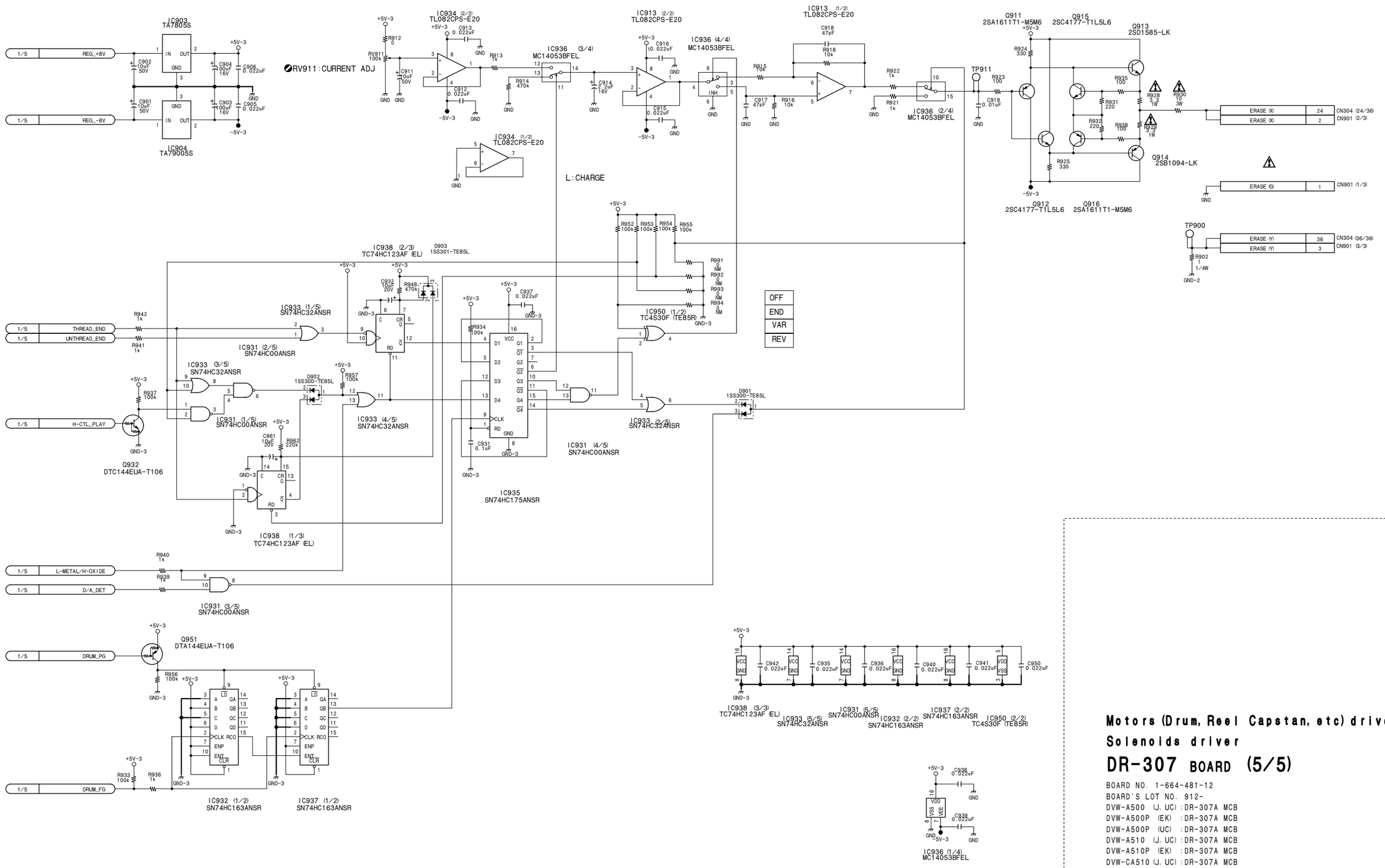
Motors (Drum, Reel Capstan, etc) driver, Solenoids driver

DR-307 BOARD (4/5)

BOARD NO. 1-664-481-12
BOARD'S LOT NO. 912-

DVW-A500 (J, UC) : DR-307A MCB
DVW-A500P (EK) : DR-307A MCB
DVW-A500P (UC) : DR-307A MCB
DVW-500 (J, UC) : DR-307D MCB
DVW-500P (EK) : DR-307D MCB
DVW-500P (UC) : DR-307D MCB
DVW-A510 (J, UC) : DR-307A MCB
DVW-A510P (EK) : DR-307A MCB
DVW-510 (J, UC) : DR-307D MCB
DVW-510P (EK) : DR-307D MCB
DVW-CA510 (J, UC) : DR-307A MCB
DVW-CA510P (EK) : DR-307A MCB

DR-307A MCB ONLY
(DR-307D NO MOUNTED)

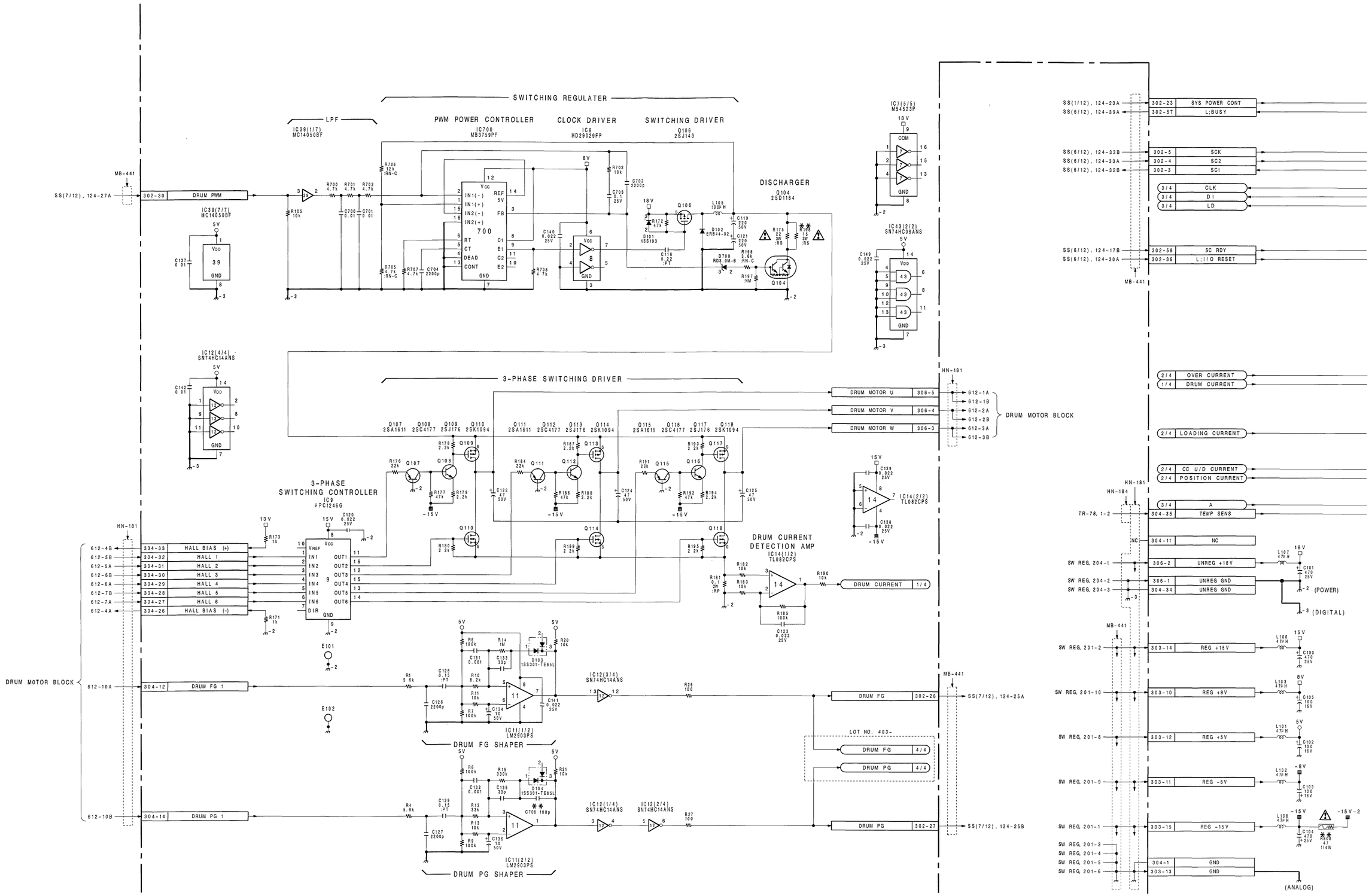


Motors (Drum, Reel Capstan, etc) driver, Solenoids driver

DR-307 BOARD (5/5)

BOARD NO. 1-664-481-12
BOARD'S LOT NO. 912-
DVW-A500 (J, UC) : DR-307A MCB
DVW-A500P (EK) : DR-307A MCB
DVW-A500P (UC) : DR-307A MCB
DVW-A510 (J, UC) : DR-307A MCB
DVW-A510P (EK) : DR-307A MCB
DVW-CA510 (J, UC) : DR-307A MCB
DVW-CA510P (EK) : DR-307A MCB

DR-200 (1/4), RM-82/141 (1/3)

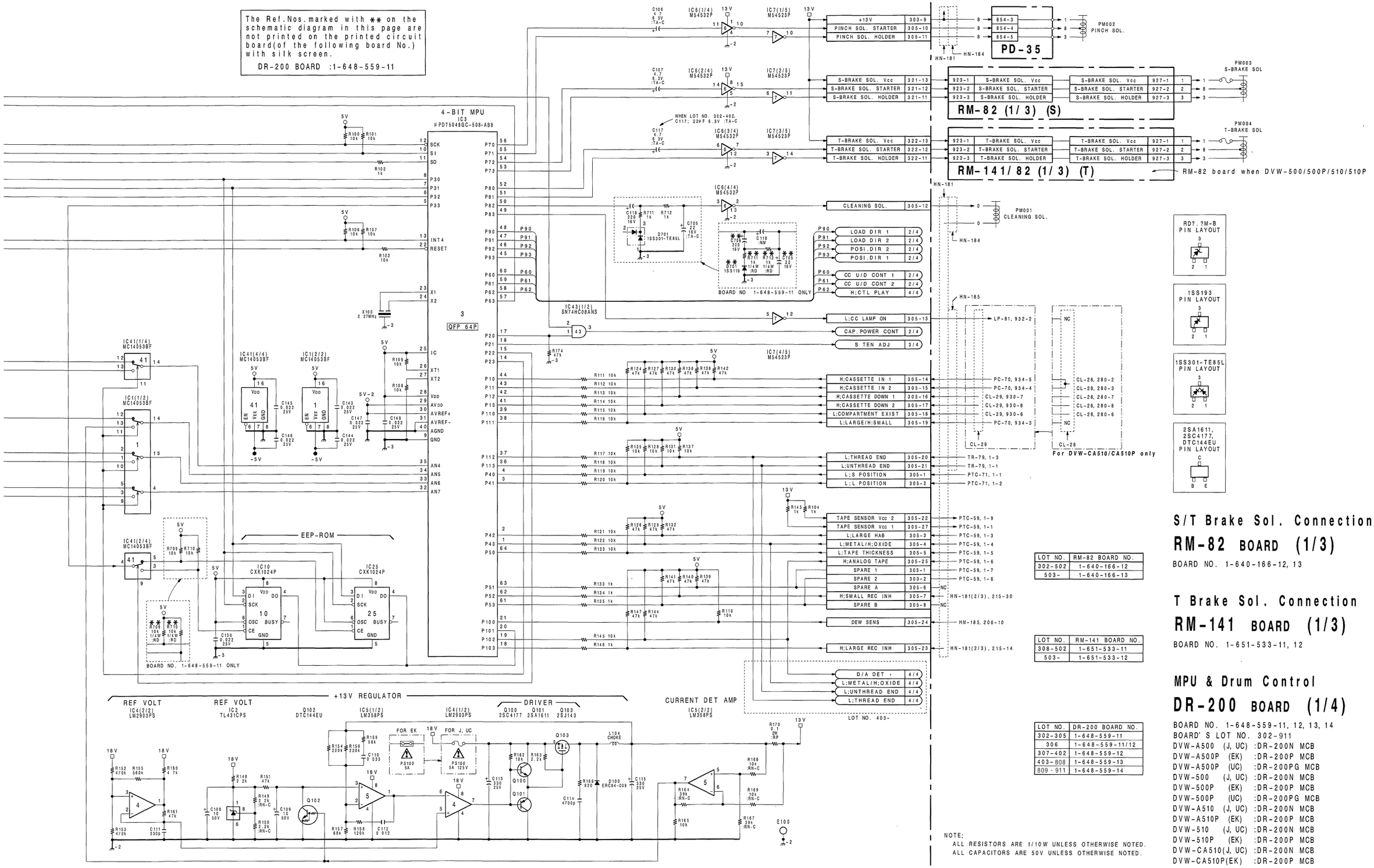


1-148 (a)

DR-200 (1/4), RM-82/141 (1/3)

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board(of the following board No.) with silk screen.

DR-200 BOARD :1-648-559-11



LOT NO.	RM-82 BOARD NO.
302-502	1-640-166-12
503-	1-640-166-13

LOT NO.	RM-141 BOARD NO.
308-502	1-651-533-11
503-	1-651-533-12

LOT NO.	DR-200 BOARD NO.
302-305	1-648-559-11
306	1-648-559-11/12
307-402	1-648-559-12
403-808	1-648-559-13
809-911	1-648-559-14

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

S/T Brake Sol. Connection

RM-82 BOARD (1/3)

BOARD NO. 1-640-166-12, 13

T Brake Sol. Connection

RM-141 BOARD (1/3)

BOARD NO. 1-651-533-11, 12

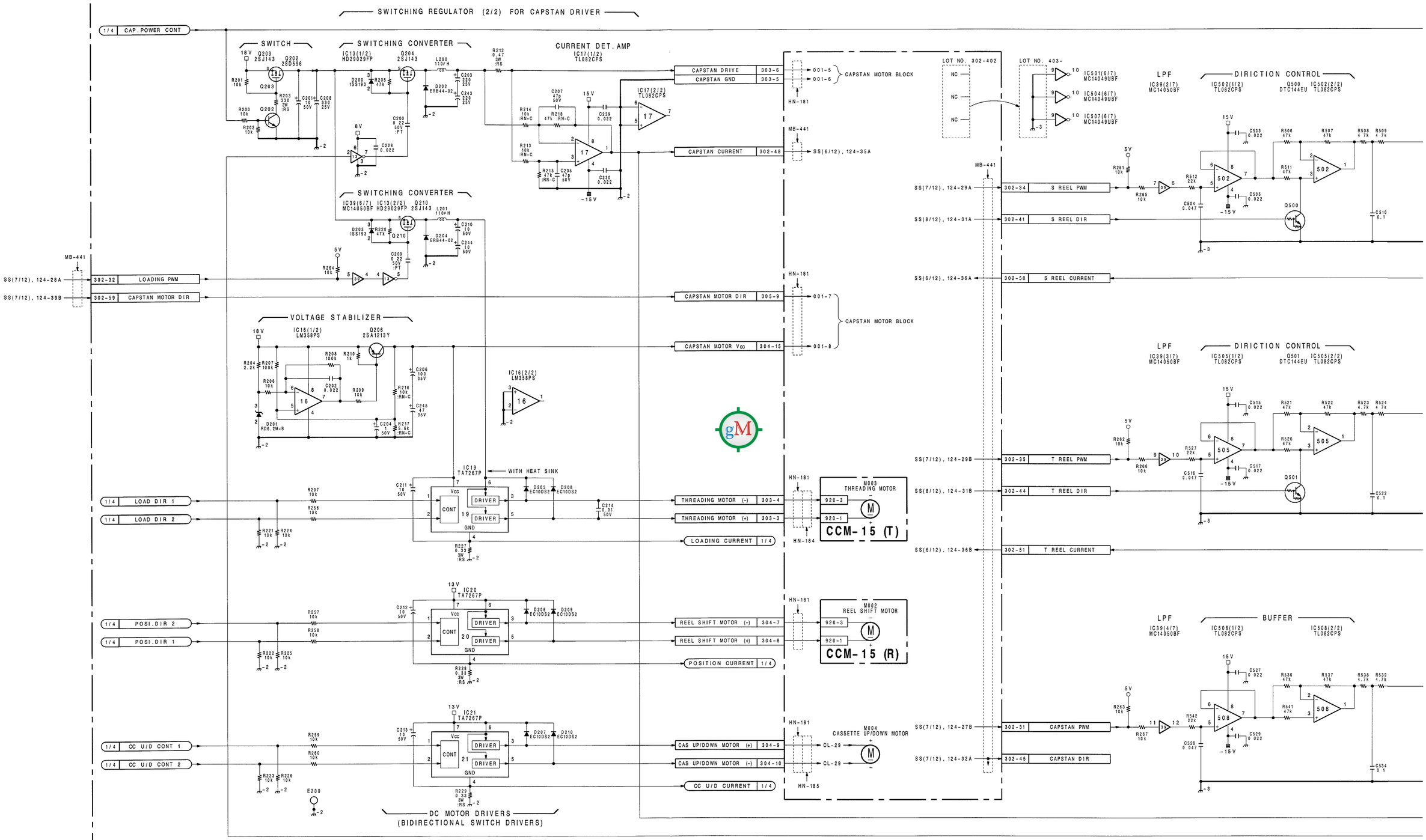
MPU & Drum Control

DR-200 BOARD (1/4)

BOARD NO. 1-648-559-11, 12, 13, 14
BOARD' S LOT NO. 302-911
DVW-A500 (J, UC) :DR-200N MCB
DVW-A500P (EK) :DR-200P MCB
DVW-A500P (UC) :DR-200PG MCB
DVW-500 (J, UC) :DR-200N MCB
DVW-500P (EK) :DR-200P MCB
DVW-500P (UC) :DR-200PG MCB
DVW-A510 (J, UC) :DR-200N MCB
DVW-A510P (EK) :DR-200P MCB
DVW-510 (J, UC) :DR-200N MCB
DVW-510P (EK) :DR-200P MCB
DVW-CA510(J, UC) :DR-200N MCB
DVW-CA510P(EK) :DR-200P MCB

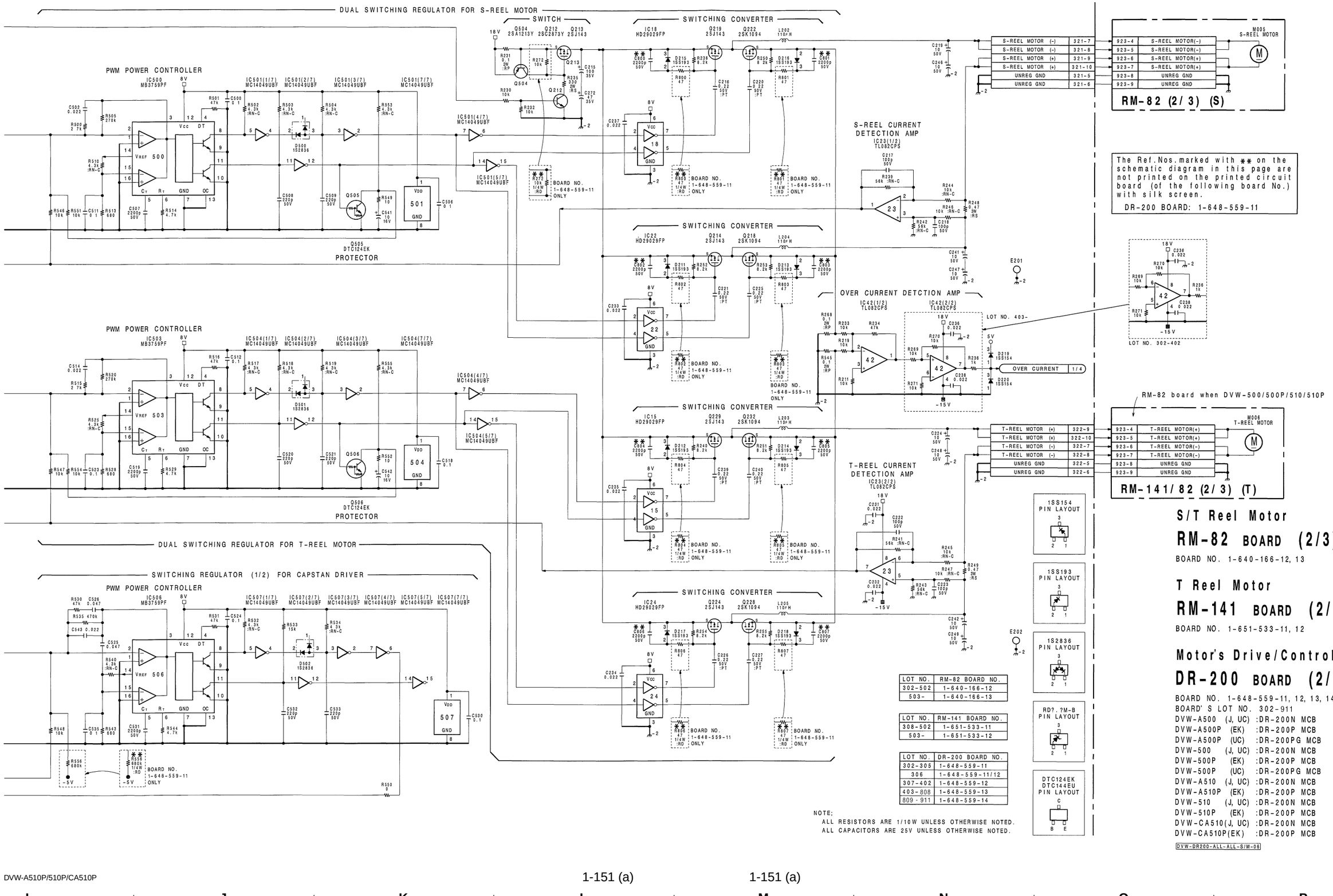
DVW-DR200-ALL-ALL-S/M-08

DR-200 (2/4), RM-82/141 (2/3)



1-150 (a)

DR-200 (2/4), RM-82/141 (2/3)



S/T Reel Motor

RM-82 BOARD (2/3)

BOARD NO. 1-640-166-12, 13

T Reel Motor

RM-141 BOARD (2/3)

BOARD NO. 1-651-533-11, 12

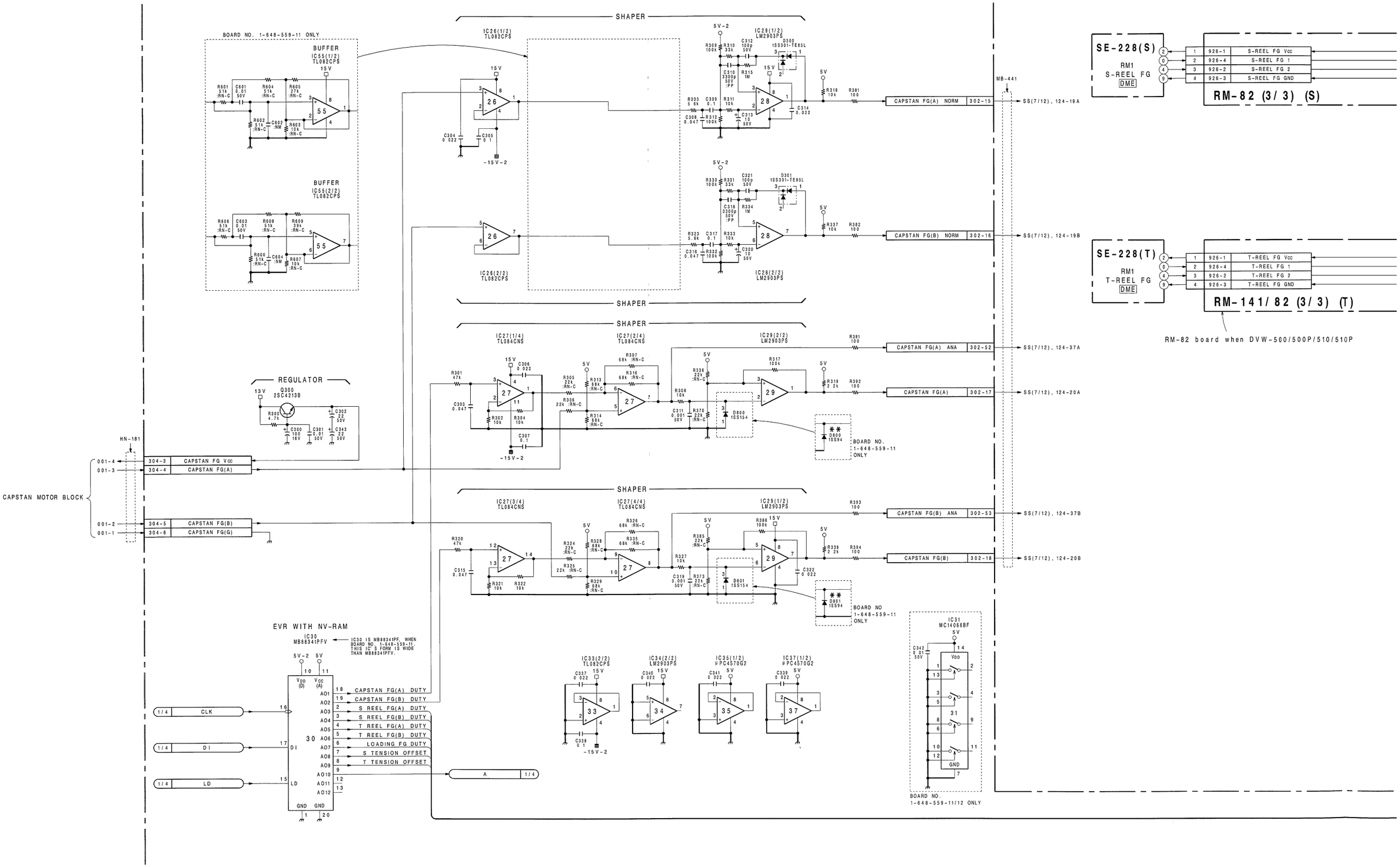
Motor's Drive/Control

DR-200 BOARD (2/4)

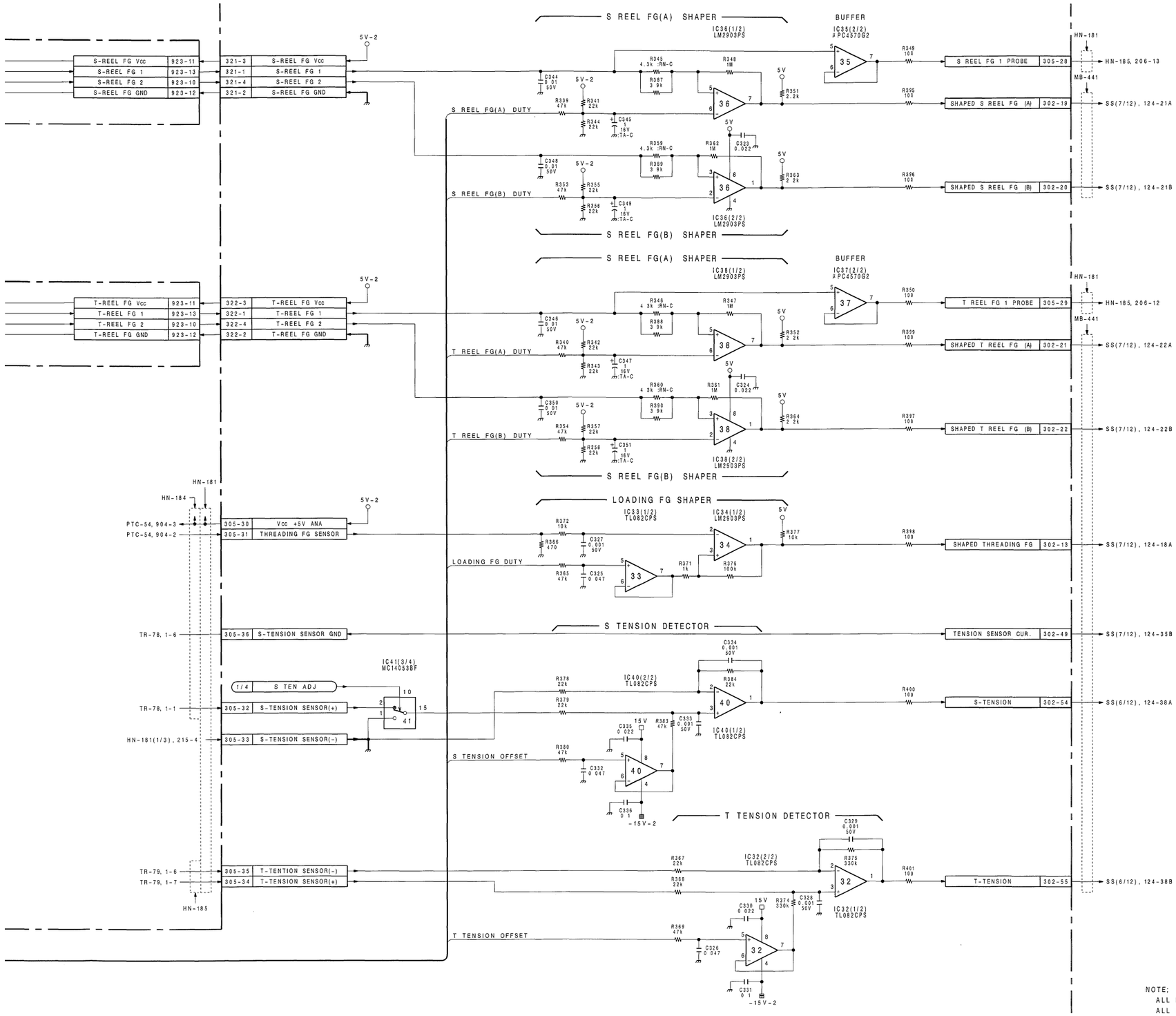
BOARD NO. 1-648-559-11, 12, 13, 14
BOARD' S LOT NO. 302-911
DVW-A500 (J, UC) :DR-200N MCB
DVW-A500P (EK) :DR-200P MCB
DVW-A500P (UC) :DR-200PG MCB
DVW-500 (J, UC) :DR-200N MCB
DVW-500P (EK) :DR-200P MCB
DVW-500P (UC) :DR-200PG MCB
DVW-A510 (J, UC) :DR-200N MCB
DVW-A510P (EK) :DR-200P MCB
DVW-510 (J, UC) :DR-200N MCB
DVW-510P (EK) :DR-200P MCB
DVW-CA510(J, UC) :DR-200N MCB
DVW-CA510P(EK) :DR-200P MCB

DVW-DR200-ALL-ALL-S/M-08

1-151 (a)

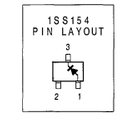

BOARD NO. 1-648-559-11 ONLY
BUFFER
IC55(1/2) TL082CPS
BUFFER
IC55(2/2) TL082CPS
SHAPER
IC26(1/2) TL082CPS
IC26(2/2) TL082CPS
IC28(1/2) LM2903PS
IC28(2/2) LM2903PS
SHAPER
SHAPER
IC27(1/4) TL084CNS
IC27(2/4) TL084CNS
IC29(2/2) LM2903PS
IC27(3/4) TL084CNS
IC27(4/4) TL084CNS
IC29(1/2) LM2903PS
REGULATOR
Q300 2SC4213B
HN-181
CAPSTAN MOTOR BLOCK
304-3 CAPSTAN FG Vcc
304-4 CAPSTAN FG(A)
304-5 CAPSTAN FG(B)
304-6 CAPSTAN FG(G)
CAPSTAN FG(A) NORM 302-15
CAPSTAN FG(B) NORM 302-16
CAPSTAN FG(A) ANA 302-52
CAPSTAN FG(A) 302-17
CAPSTAN FG(B) ANA 302-53
CAPSTAN FG(B) 302-18
MB-441
SS(7/12), 124-19A
SS(7/12), 124-19B
SS(7/12), 124-37A
SS(7/12), 124-20A
SS(7/12), 124-37B
SS(7/12), 124-20B
BOARD NO. 1-648-559-11 ONLY
BOARD NO 1-648-559-11 ONLY
EVR WITH NV-RAM
IC30 MB88341PFV
IC30 IS MB88341PF. WHEN BOARD NO. 1-648-559-11. THIS IC'S FORM IS WIDE THAN MB88341PFV.
CAPSTAN FG(A) DUTY
CAPSTAN FG(B) DUTY
S REEL FG(A) DUTY
S REEL FG(B) DUTY
T REEL FG(A) DUTY
T REEL FG(B) DUTY
LOADING FG DUTY
S TENSION OFFSET
T TENSION OFFSET
CLK
DI
LD
IC33(2/2) TL082CPS
IC34(2/2) LM2903PS
IC35(1/2) μPC4570G2
IC37(1/2) μPC4570G2
IC31 MC14066BF
BOARD NO. 1-648-559-11/12 ONLY
SE-228(S)
RM1 S-REEL FG DME
S-REEL FG Vcc
S-REEL FG 1
S-REEL FG 2
S-REEL FG GND
RM-82 (3/3) (S)
SE-228(T)
RM1 T-REEL FG DME
T-REEL FG Vcc
T-REEL FG 1
T-REEL FG 2
T-REEL FG GND
RM-141/82 (3/3) (T)
RM-82 board when DVW-500/500P/510/510P

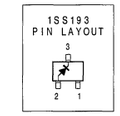
DR-200 (3/4), RM-82/141 (3/3), SE-228

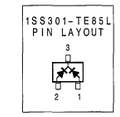


The Ref.Nos. marked with ** on the schematic diagram in this page are not printed on the printed circuit board(of the following board No.) with silk screen.

DR-200 BOARD :1-648-559-11







LOT NO.	RM-82 BOARD NO.
302-502	1-640-166-12
503-	1-640-166-13

LOT NO.	RM-141 BOARD NO.
308-502	1-651-533-11
503-	1-651-533-12

LOT NO.	DR-200 BOARD NO.
302-305	1-648-559-11
306	1-648-559-11/12
307-402	1-648-559-12
403-808	1-648-559-13
809 - 911	1-648-559-14

NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

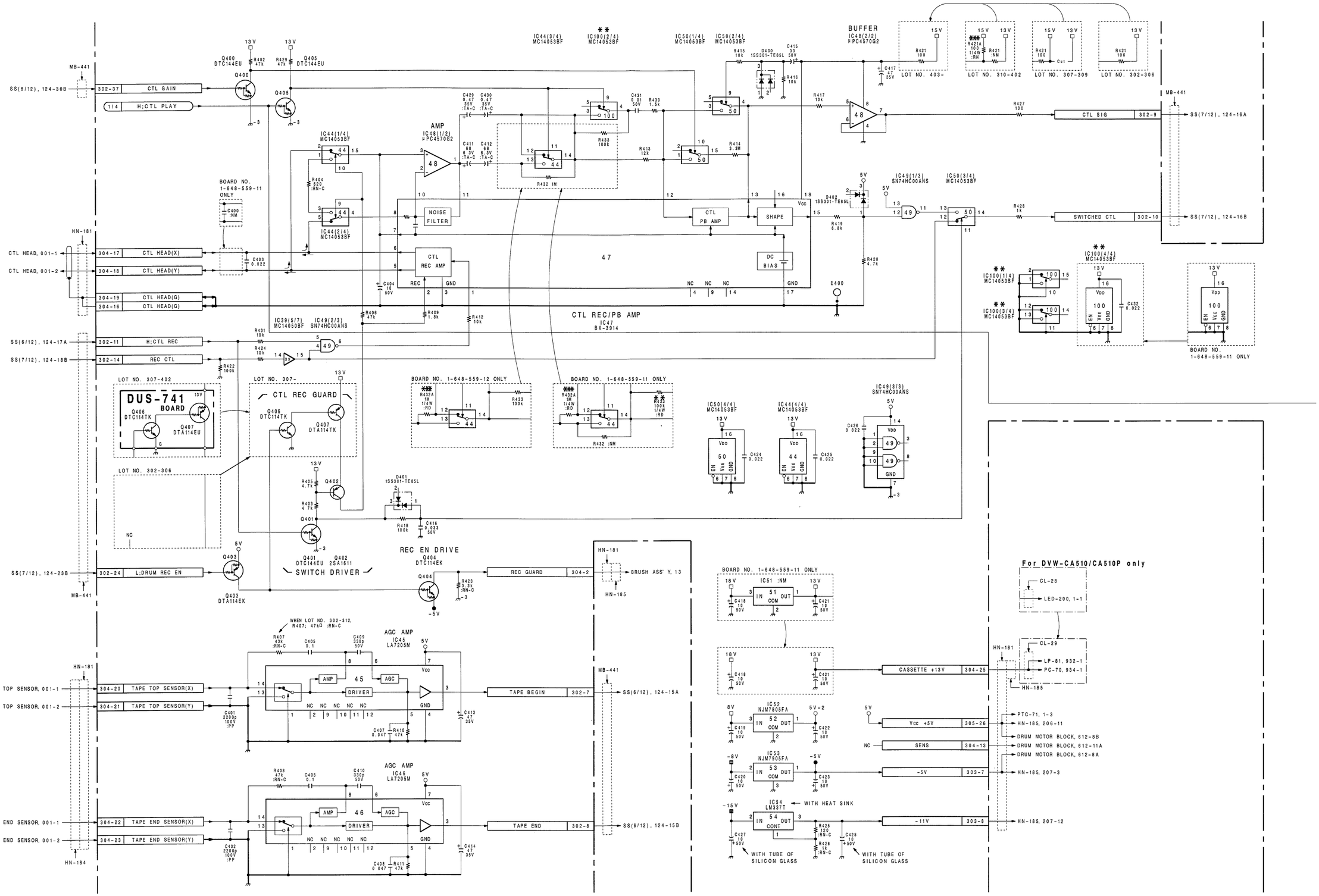
S/T Reel FG
SE-228 BOARD
BOARD NO. 1-649-617-11

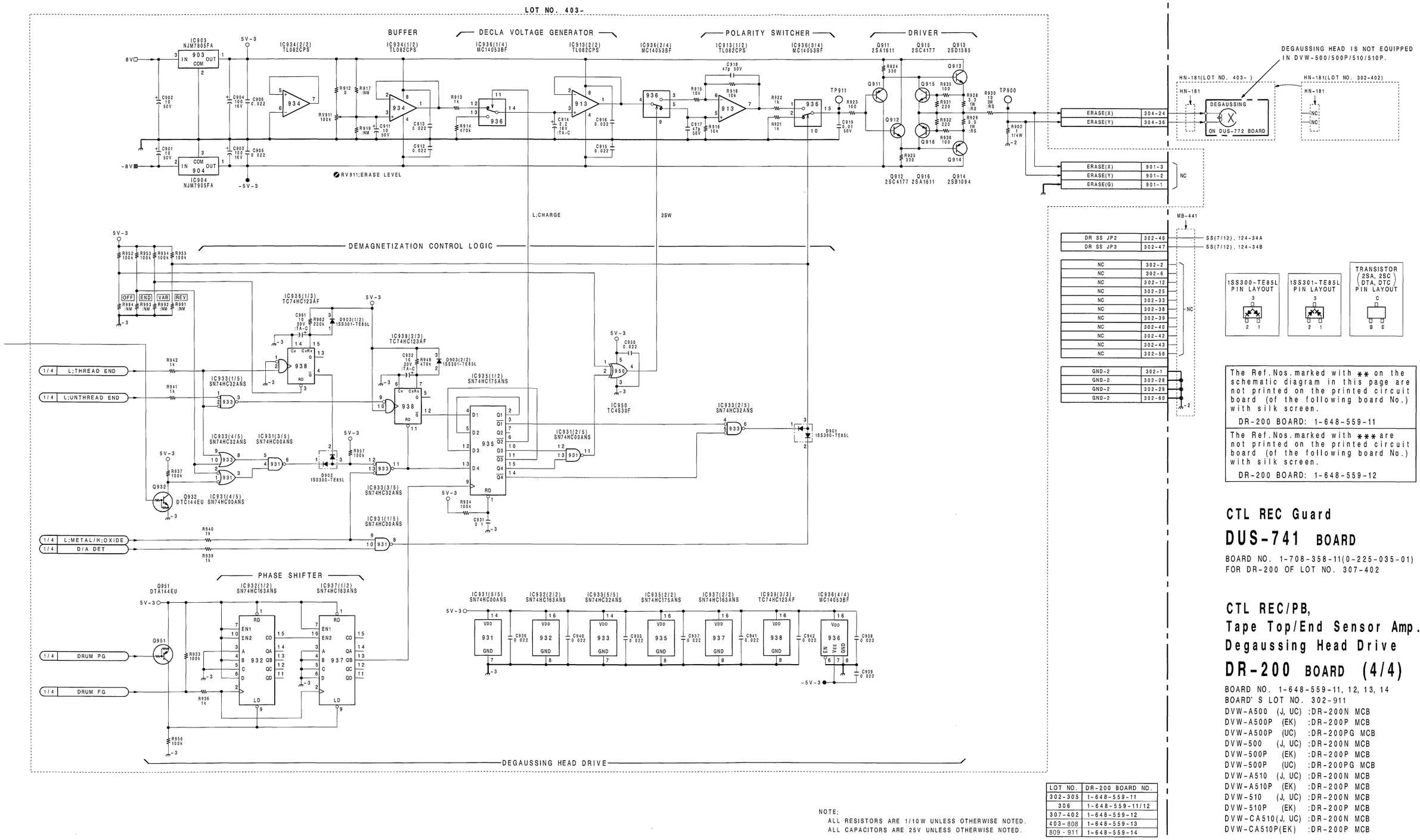
S/T Reel FG Connection
RM-82 BOARD (3/3)
BOARD NO. 1-640-166-12, 13

T Reel FG Connection
RM-141 BOARD (3/3)
BOARD NO. 1-651-533-11, 12

Wavefrom Shaper
DR-200 BOARD (3/4)
BOARD NO. 1-648-559-11, 12, 13, 14
BOARD' S LOT NO. 302-911
DVW-A500 (J, UC) :DR-200N MCB
DVW-A500P (EK) :DR-200P MCB
DVW-A500P (UC) :DR-200PG MCB
DVW-500 (J, UC) :DR-200N MCB
DVW-500P (EK) :DR-200P MCB
DVW-500P (UC) :DR-200PG MCB
DVW-A510 (J, UC) :DR-200N MCB
DVW-A510P (EK) :DR-200P MCB
DVW-510 (J, UC) :DR-200N MCB
DVW-510P (EK) :DR-200P MCB
DVW-CA510(J, UC) :DR-200N MCB
DVW-CA510P(EK) :DR-200P MCB

DVW-DR200-ALL-ALL-S/M-06


MB-441
SS(8/12), 124-30B
302-37 CTL GAIN
1/4 H;CTL PLAY
Q400 DTC144EU
Q405 DTC144EU
IC44(3/4) MC14053BF
IC100(2/4) MC14053BF
IC50(1/4) MC14053BF
IC50(2/4) MC14053BF
BUFFER
IC48(2/2) μPC4570G2
D400 1SS301-TE85L
LOT NO. 403-
LOT NO. 310-402
LOT NO. 307-309
LOT NO. 302-306
CTL SIG 302-9
SS(7/12), 124-16A
AMP
IC49(1/2) μPC4570G2
IC44(1/4) MC14053BF
IC44(2/4) MC14053BF
BOARD NO. 1-648-559-11 ONLY
C400 :NM
HN-181
CTL HEAD, 001-1
CTL HEAD, 001-2
304-17 CTL HEAD(X)
304-18 CTL HEAD(Y)
304-19 CTL HEAD(G)
304-16 CTL HEAD(G)
C403 0.022
NOISE FILTER
CTL REC AMP
CTL PB AMP
SHAPE
DC BIAS
D402 1SS301-TE85L
IC49(1/3) SN74HC00ANS
IC50(3/4) MC14053BF
SWITCHED CTL 302-10
SS(7/12), 124-16B
IC47 BX-3914
CTL REC/PB AMP
IC39(5/7) MC14050BF
IC49(2/3) SN74HC00ANS
SS(6/12), 124-17A
SS(7/12), 124-18B
302-11 H;CTL REC
302-14 REC CTL
IC100(4/4) MC14053BF
IC100(1/4) MC14053BF
IC100(3/4) MC14053BF
BOARD NO. 1-648-559-11 ONLY
LOT NO. 307-402
DUS-741 BOARD
Q406 DTC114TK
Q407 DTA114EU
LOT NO. 307-
CTL REC GUARD
Q407 DTA114TK
BOARD NO. 1-648-559-12 ONLY
R432A 1M 1/4W :RD
R432 :NM
R433 100k
R435 100k 1/4W :RD
IC50(4/4) MC14053BF
IC44(4/4) MC14053BF
IC49(3/3) SN74HC00ANS
LOT NO. 302-306
Q402
Q401 1SS301-TE85L
Q401 DTC144EU
Q402 2SA1811
SWITCH DRIVER
NC
REC EN DRIVE
Q404 DTC114EK
SS(7/12), 124-23B
302-24 L;DRUM REC EN
Q403 DTA114EK
REC GUARD 304-2
BRUSH ASS'Y, 13
HN-185
For DVW-CA510/CA510P only
CL-28
LED-200, 1-1
CL-29
LP-81, 932-1
PC-70, 934-1
WHEN LOT NO. 302-312, R407; 47kΩ :RN-C
AGC AMP
IC45 LA7205M
TAPE TOP SENSOR, 001-1
TAPE TOP SENSOR, 001-2
304-20 TAPE TOP SENSOR(X)
304-21 TAPE TOP SENSOR(Y)
TAPE BEGIN 302-7
SS(6/12), 124-15A
IC46 LA7205M
TAPE END SENSOR, 001-1
TAPE END SENSOR, 001-2
304-22 TAPE END SENSOR(X)
304-23 TAPE END SENSOR(Y)
TAPE END 302-8
SS(6/12), 124-15B
HN-184
BOARD NO. 1-648-559-11 ONLY
IC51 :NM
CASSETTE +13V 304-25
IC52 NJM7805FA
IC53 NJM7905FA
IC54 LM337T ← WITH HEAT SINK
Vcc +5V 305-26
SENS 304-13
-5V 303-7
-11V 303-8
WITH TUBE OF SILICON GLASS
PTC-71, 1-3
HN-185, 206-11
DRUM MOTOR BLOCK, 612-8B
DRUM MOTOR BLOCK, 612-11A
DRUM MOTOR BLOCK, 612-8A
HN-185, 207-3
HN-185, 207-12



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

LOT NO.	DR-200 BOARD NO.
302-305	1-648-559-11
306	1-648-559-11/12
307-402	1-648-559-12
403-808	1-648-559-13
809-911	1-648-559-14

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

DR-200 BOARD: 1-648-559-11

The Ref.Nos.marked with *** are not printed on the printed circuit board (of the following board No.) with silk screen.

DR-200 BOARD: 1-648-559-12

CTL REC Guard

DUS-741 BOARD

BOARD NO. 1-708-358-11(0-225-035-01)
FOR DR-200 OF LOT NO. 307-402

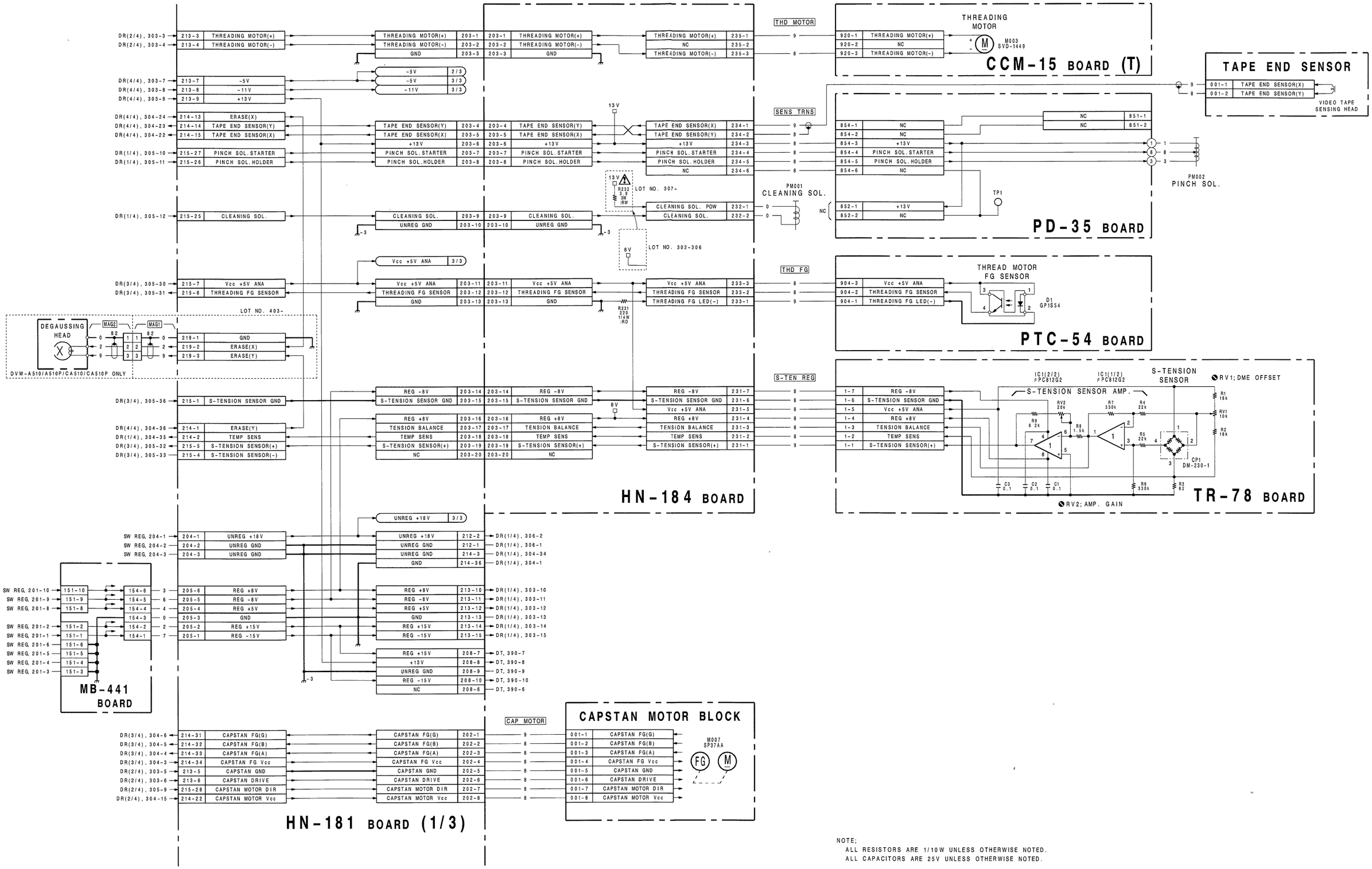
CTL REC/PB, Tape Top/End Sensor Amp., Degaussing Head Drive

DR-200 BOARD (4/4)

BOARD NO. 1-648-559-11, 12, 13, 14
BOARD' S LOT NO. 302-911
DVW-A500 (J, UC) :DR-200N MCB
DVW-A500P (EK) :DR-200P MCB
DVW-A500P (UC) :DR-200PG MCB
DVW-500 (J, UC) :DR-200N MCB
DVW-500P (EK) :DR-200P MCB
DVW-500P (UC) :DR-200PG MCB
DVW-A510 (J, UC) :DR-200N MCB
DVW-A510P (EK) :DR-200P MCB
DVW-510 (J, UC) :DR-200N MCB
DVW-510P (EK) :DR-200P MCB
DVW-CA510(J, UC) :DR-200N MCB
DVW-CA510P(EK) :DR-200P MCB

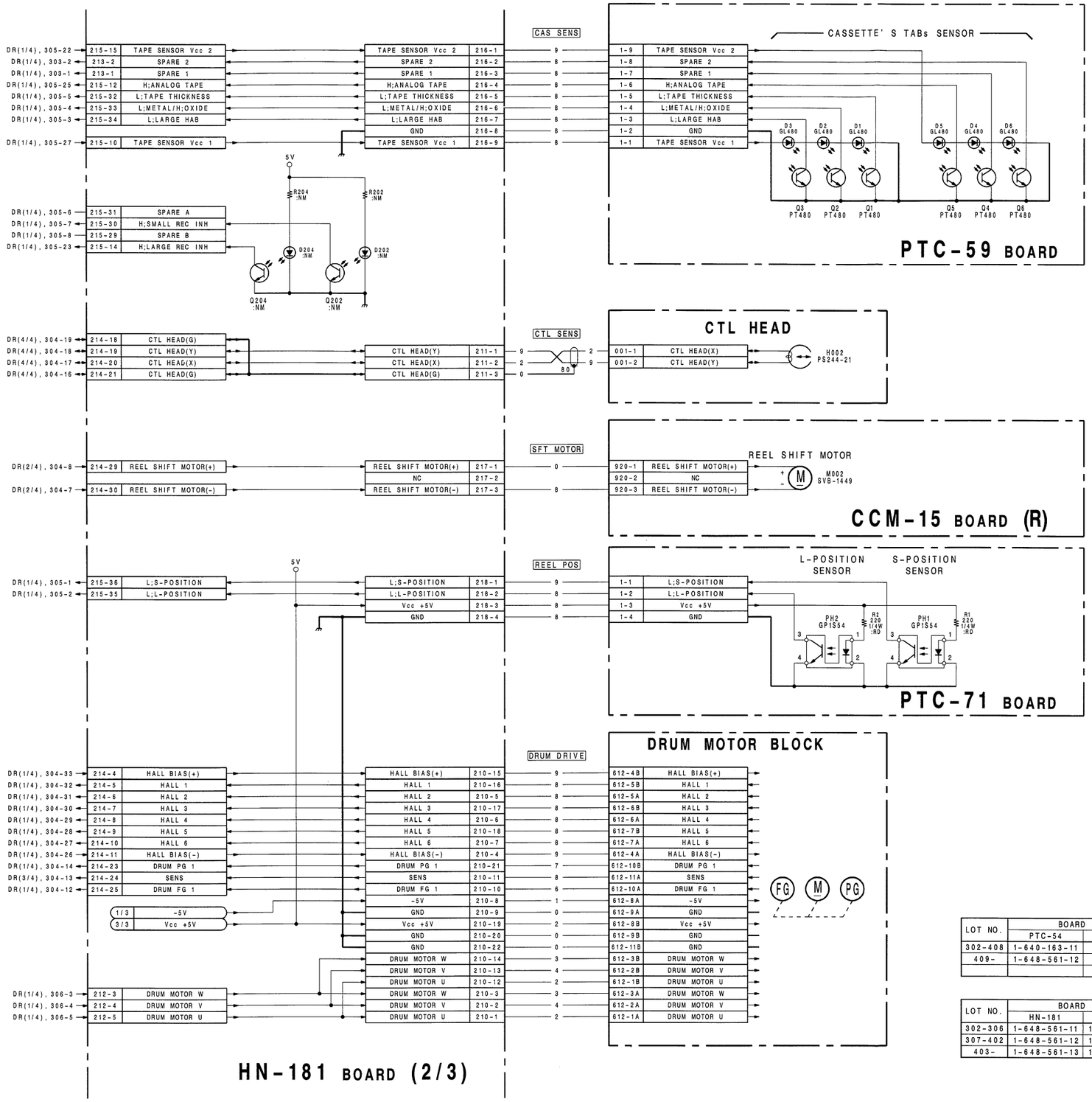
DVW-DR200-ALL-ALL-S/M-06

HN-181 (1/3)/(2/3), HN-184, TR-78, PD-35, PTC-54, PTC-59, PTC-71, CCM-15



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

HN-181 (1/3)/(2/3), HN-184, TR-78, PD-35, PTC-54, PTC-59, PTC-71, CCM-15



LOT NO.	BOARD NO.		
	PTC-54		
302-408	1-640-163-11		
409-	1-648-561-12		

LOT NO.	BOARD NO.	
	HN-181	HN-184
302-306	1-648-561-11	1-648-562-11
307-402	1-648-561-12	1-648-562-12
403-	1-648-561-13	1-648-562-13

S-Tension Sensor

TR-78 BOARD

BOARD NO. 1-648-564-11
ALL DVWs :TR-78 MCB

Threading FG

PTC-54 BOARD

BOARD NO. 1-640-163-11, 12
ALL DVWs :PTC-54 MCB

Cassette's Tabs Sensor

PTC-59 BOARD

BOARD NO. 1-648-567-11
ALL DVWs :PTC-59 MCB

Reel Position Sensor

PTC-71 BOARD

BOARD NO. 1-648-569-11
ALL DVWs :PTC-71 MCB

Pinch Solenoid Connection

PD-35 BOARD

BOARD NO. 1-622-596-11
ALL DVWs

Threading Motor or Reel Shift Motor

CCM-15 BOARD (T)/(R)

BOARD NO. 1-648-570-11
ALL DVWs

Connection Board

HN-184 BOARD

BOARD NO. 1-648-562-11, 12, 13
BOARD' S LOT NO. 302-
ALL DVWs :HN-184 MCB

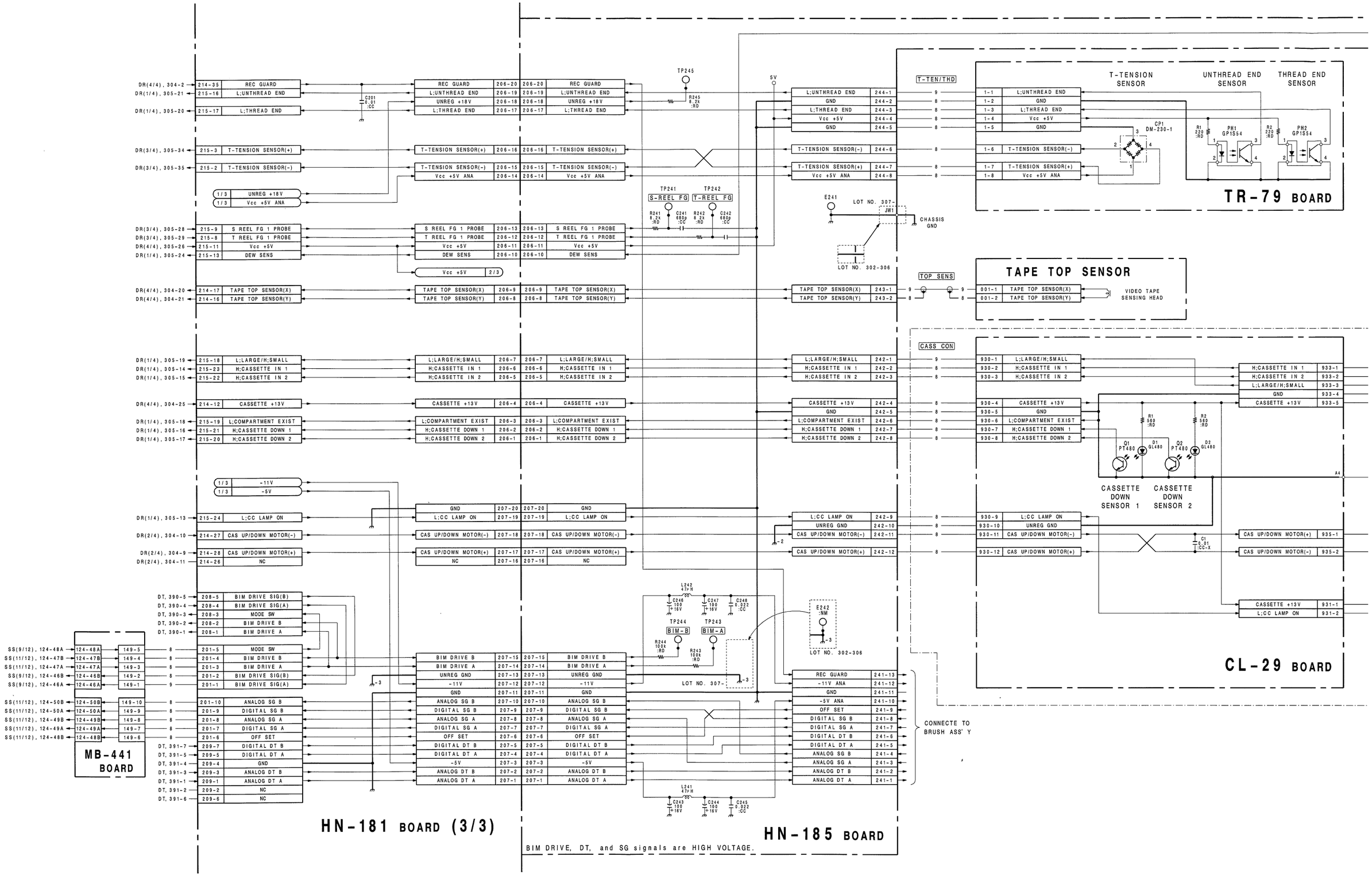
Connection Board

HN-181 BOARD (1/3)/(2/3)

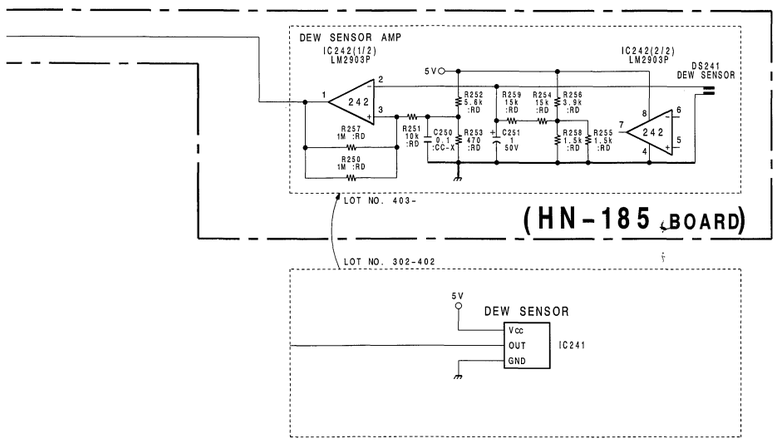
BOARD NO. 1-648-561-12, 13
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :HN-181B MCB
DVW-A510P (EK) :HN-181B MCB
DVW-510 (J, UC) :HN-181B MCB
DVW-510P (EK) :HN-181B MCB
DVW-CA510(J, UC) :HN-181B MCB
DVW-CA510P(EK) :HN-181B MCB

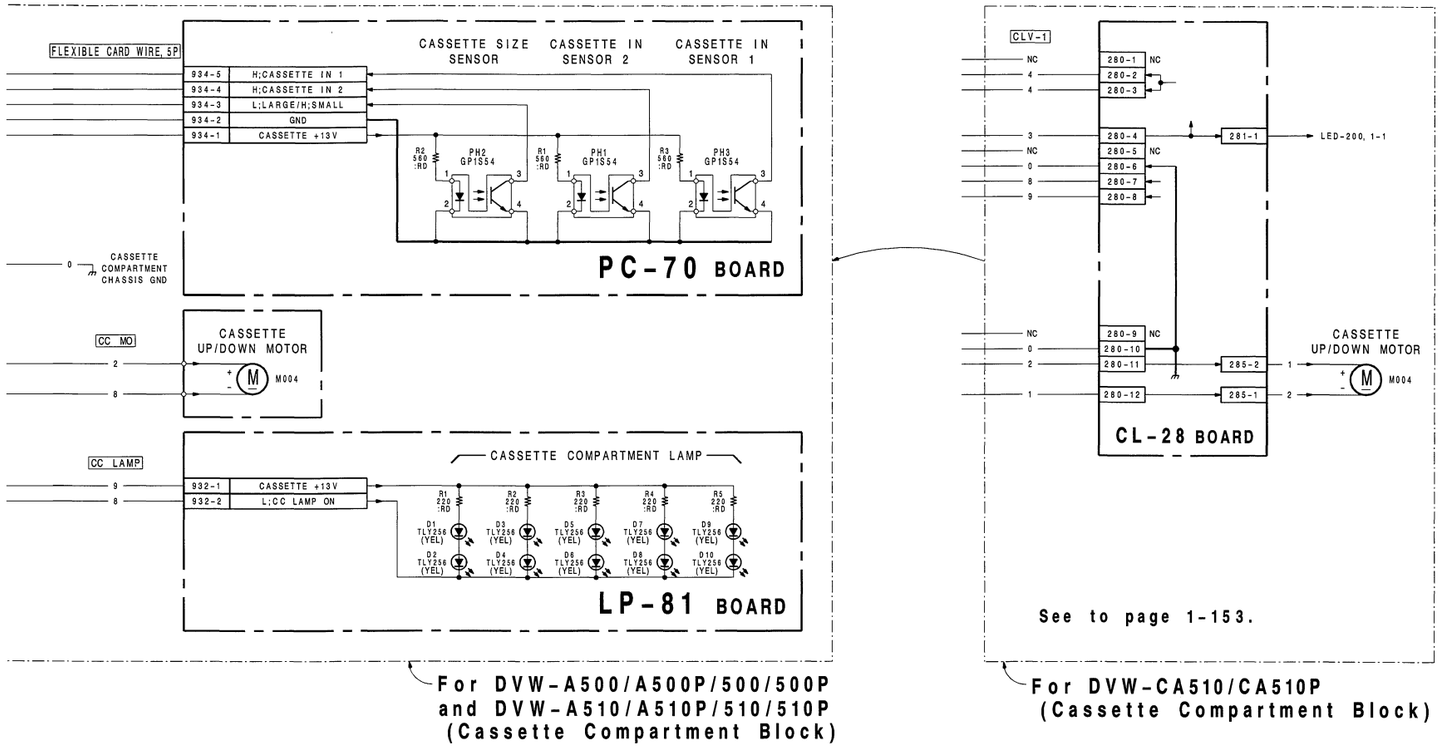
DVW-HN181-ALL-PLAY-S/M-04

HN-181 (3/3), HN-185, TR-79, LP-81, CL-29, PC-70



HN-181 (3/3), HN-185, TR-79, LP-81, CL-29, PC-70





NOTE;
ALL RESISTORS ARE 1/4W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

LOT NO.	BOARD NO.	
	HN-181	HN-185
302-306	1-648-561-11	1-648-563-11
307-402	1-648-561-12	1-648-563-12
403-	1-648-561-13	1-648-563-14

T-Tension Sensor, Thread/Unthread-End Sensor

TR-79 BOARD

BOARD NO. 1-648-565-11
ALL DVWs :TR-79 MCB

Cassette-In Sensor, Cassette Down Sensor

PC-70 BOARD

BOARD NO. 1-648-571-11, 12
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :PC-70 MCB
DVW-A500P (EK) :PC-70 MCB
DVW-A500P (UC) :PC-70 MCB
DVW-500 (J, UC) :PC-70 MCB
DVW-500P(EK, UC) :PC-70 MCB
DVW-A510 (J, UC) :PC-70 MCB
DVW-A510P (EK) :PC-70 MCB
DVW-510 (J, UC) :PC-70 MCB
DVW-510P (EK) :PC-70 MCB

Cassette Up/Down Motor, Cassette Down Sensor

CL-29 BOARD

BOARD NO. 1-648-572-11
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :CL-29 MCB
DVW-A500P (EK) :CL-29 MCB
DVW-A500P (UC) :CL-29 MCB
DVW-500 (J, UC) :CL-29 MCB
DVW-500P(EK, UC) :CL-29 MCB
DVW-A510 (J, UC) :CL-29 MCB
DVW-A510P (EK) :CL-29 MCB
DVW-510 (J, UC) :CL-29 MCB
DVW-510P (EK) :CL-29 MCB

Lamp of Compartment

LP-81 BOARD

BOARD NO. 1-648-573-11
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :LP-81 MCB
DVW-A500P (EK) :LP-81 MCB
DVW-A500P (UC) :LP-81 MCB
DVW-500 (J, UC) :LP-81 MCB
DVW-500P(EK, UC) :LP-81 MCB
DVW-A510 (J, UC) :LP-81 MCB
DVW-A510P (EK) :LP-81 MCB
DVW-510 (J, UC) :LP-81 MCB
DVW-510P (EK) :LP-81 MCB

Connection Board with Dew Sensor

HN-185 BOARD

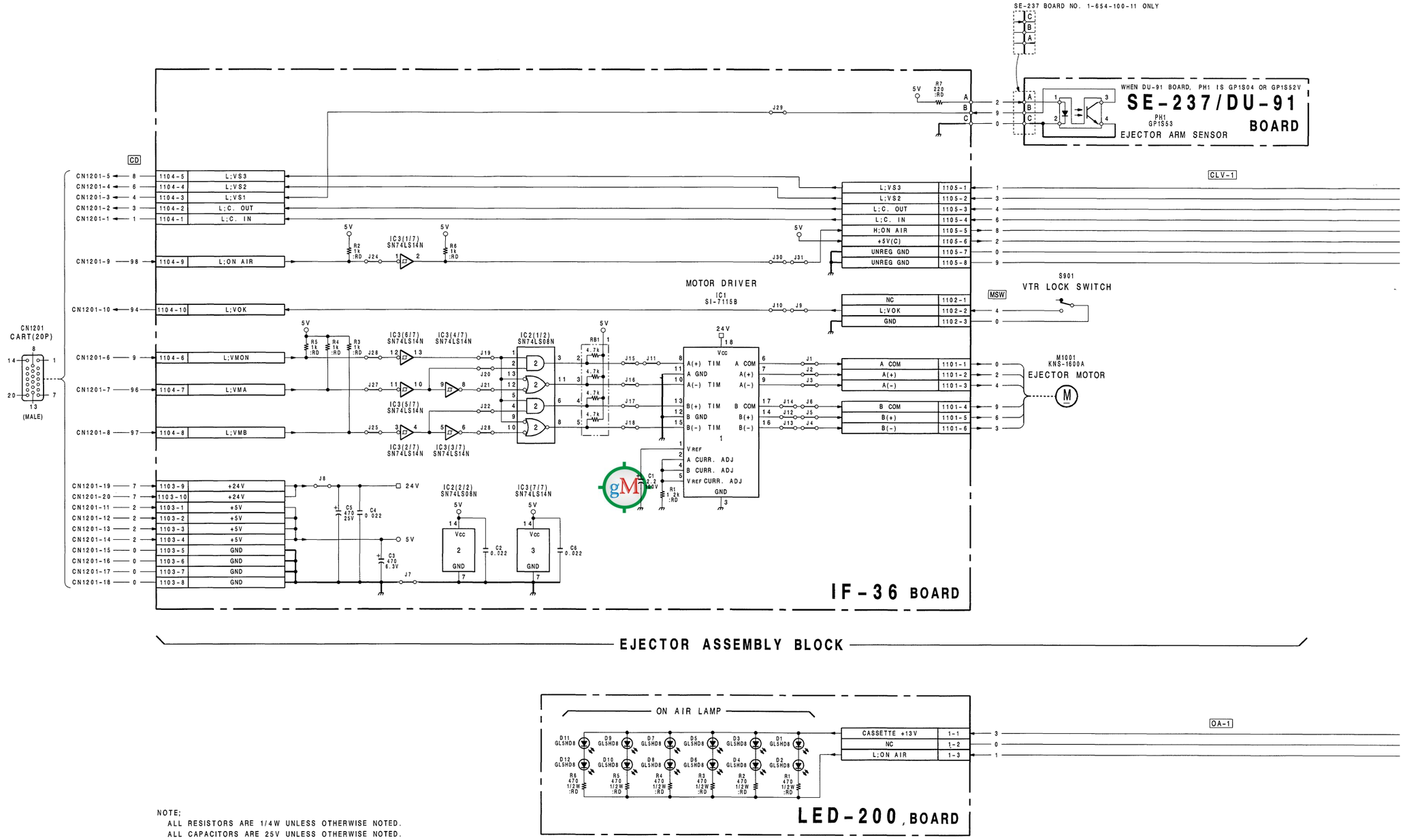
BOARD NO. 1-648-563-11, 12, 14
BOARD' S LOT NO. 302-
ALL DVWs :HN-185 MCB

Connection

HN-181 BOARD (3/3)

BOARD NO. 1-648-561-11, 12, 13
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :HN-181 MCB
DVW-A500P (EK) :HN-181 MCB
DVW-A500P (UC) :HN-181 MCB
DVW-500 (J, UC) :HN-181 MCB
DVW-500P(EK, UC) :HN-181 MCB
DVW-A510 (J, UC) :HN-181B MCB
DVW-A510P (EK) :HN-181B MCB
DVW-510 (J, UC) :HN-181B MCB
DVW-510P (EK) :HN-181B MCB
DVW-CA510(J, UC) :HN-181B MCB
DVW-CA510P(EK) :HN-181B MCB
DVW-HN181-ALL-PLAY-S/M-03

IF-36, CL-28, DU-91, LED-200, SE-225, SE-226, SE-237

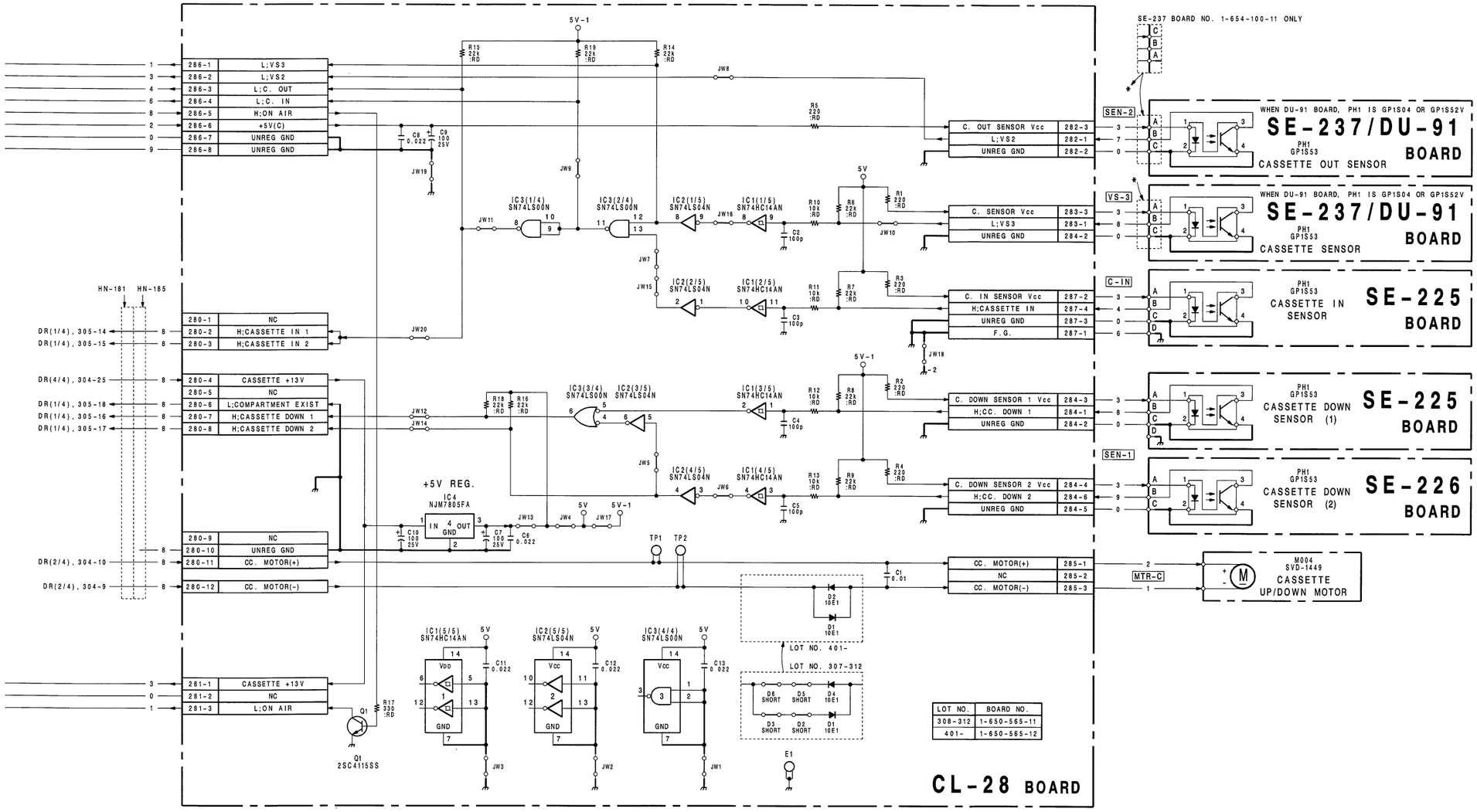


NOTE;
ALL RESISTORS ARE 1/4W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 25V UNLESS OTHERWISE NOTED.

1-160

IF-36, CL-28, DU-91, LED-200, SE-225, SE-226, SE-237

CASSETTE COMPARTMENT ASSEMBLY BLOCK



Cassette-up Compartment
CL-28 BOARD

BOARD NO. 1-650-565-11, 12
BOARD' S LOT NO. 308-
DVW-CA510(J, UC) :CL-28 MCB
DVW-CA510P(EK) :CL-28 MCB

Betacart Interface
IF-36 BOARD

BOARD NO. 1-613-048-12
BOARD' S LOT NO. 308-
DVW-CA510(J, UC) :IF-36 MCB
DVW-CA510P(EK) :IF-36 MCB

ON AIR Lamp
LED-200 BOARD

BOARD NO. 1-650-566-11
BOARD' S LOT NO. 308-
DVW-CA510(J, UC) :LED-200 MCB
DVW-CA510P(EK) :LED-200 MCB

Sensor Board
DU-91 BOARD

BOARD NO. 1-613-049-11
DVW-CA510 (UC)... S/N 10001-10009
DVW-CA510P(EK)... S/N 10001-10050

Sensor Board
SE-225 BOARD

BOARD NO. 1-650-567-11
DVW-CA510(J, UC)
DVW-CA510P(EK)

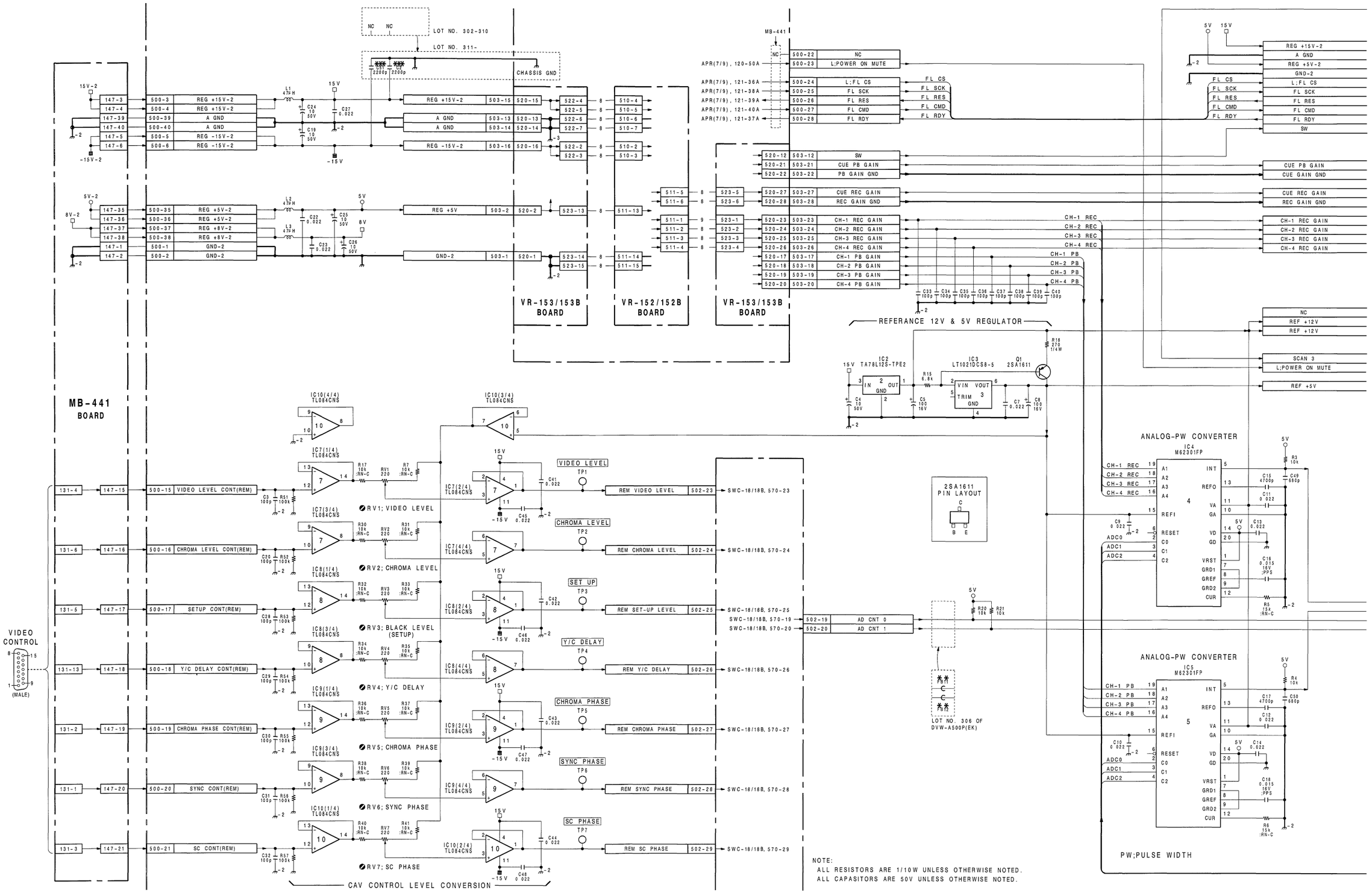
Sensor Board
SE-226 BOARD

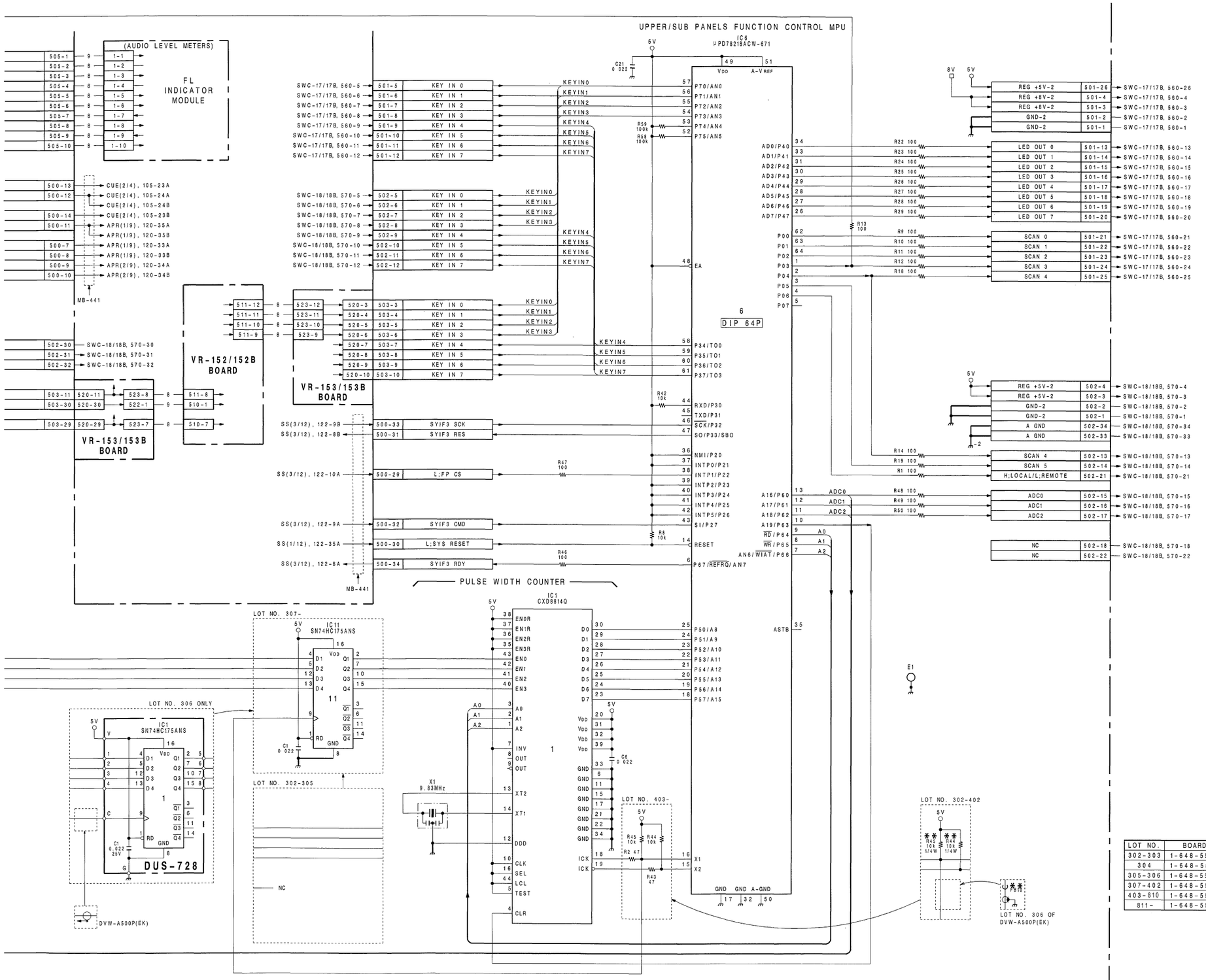
BOARD NO. 1-650-568-11
DVW-CA510(J, UC)
DVW-CA510P(EK)

Sensor Board
SE-237 BOARD

BOARD NO. 1-654-100-11, 12
DVW-CA510(J, UC)
DVW-CA510P(EK)

DVW-CL28-ALL-PLAY-S/M-01


MB-441 BOARD
VR-153/153B BOARD
VR-152/152B BOARD
VR-153/153B BOARD
LOT NO. 302-310
LOT NO. 311-
CHASSIS GND
REG +15V-2
REG -15V-2
REG +5V
GND-2
A GND
REG +8V-2
REF +12V
REF +5V
SCAN 3
L;POWER ON MUTE
CUE PB GAIN
CUE GAIN GND
CUE REC GAIN
REC GAIN GND
CH-1 REC GAIN
CH-2 REC GAIN
CH-3 REC GAIN
CH-4 REC GAIN
FL CS
FL SCK
FL RES
FL CMD
FL RDY
SW
REFERANCE 12V & 5V REGULATOR
IC2 15V TA78L12S-TPE2
IC3 LT1021DCS8-5
Q1 2SA1611
ANALOG-PW CONVERTER
IC4 M62301FP
IC5 M62301FP
PW;PULSE WIDTH
VIDEO CONTROL (MALE)
VIDEO LEVEL
CHROMA LEVEL
SET UP
Y/C DELAY
CHROMA PHASE
SYNC PHASE
SC PHASE
RV1; VIDEO LEVEL
RV2; CHROMA LEVEL
RV3; BLACK LEVEL (SETUP)
RV4; Y/C DELAY
RV5; CHROMA PHASE
RV6; SYNC PHASE
RV7; SC PHASE
CAV CONTROL LEVEL CONVERSION
REM VIDEO LEVEL
REM CHROMA LEVEL
REM SET-UP LEVEL
REM Y/C DELAY
REM CHROMA PHASE
REM SYNC PHASE
REM SC PHASE
AD CNT 0
AD CNT 1
2SA1611 PIN LAYOUT
LOT NO. 306 OF DVW-A500P(EK)
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPASITORS ARE 50V UNLESS OTHERWISE NOTED.



The Ref.Nos. marked with ** on the schematic diagram in this page are not printed on the printed circuit boards (of the following board No.) with silk screen.

FP-58 BOARD: 1-648-551-11
FP-58B BOARD: 1-648-551-21

The Ref.Nos. marked with *** are not printed on the printed circuit boards (of the following board No.) with silk screen.

FP-58 BOARD: 1-648-551-11, 12
FP-58B BOARD: 1-648-551-21, 22

LOT NO.	BOARD NO.
302-303	1-648-551-11
304	1-648-551-11/21
305-306	1-648-551-11
307-402	1-648-551-12/22
403-810	1-648-551-13/23
811-	1-648-551-14/24

DUS-728 BOARD

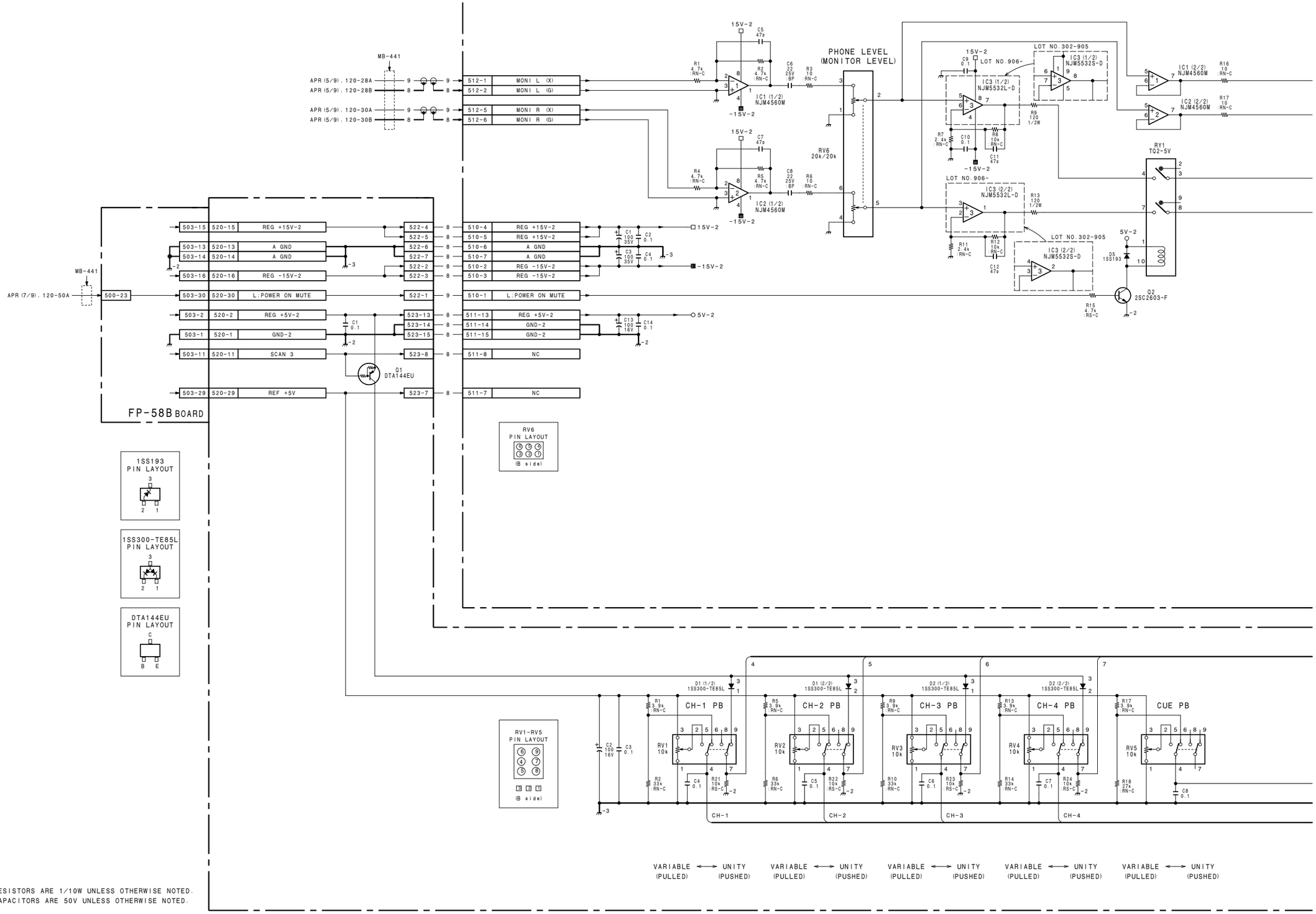
BOARD NO. 1-651-012-11
FOR FP-58 BOARD (LOT NO.306 ONLY)

Sub/Upper Control Panels Function(SWs,LEDs) Control, CAV Control Level Conversion

FP-58/58B BOARD

BOARD NO. 1-648-551-11, 12, 13, 14/22, 23, 24
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :FP-58 MCB
DVW-A500P (EK) :FP-58 MCB
DVW-A500P (UC) :FP-58 MCB
DVW-500 (J, UC) :FP-58 MCB
DVW-500P(EK, UC) :FP-58 MCB
DVW-A510 (J, UC) :FP-58B MCB
DVW-A510P (EK) :FP-58B MCB
DVW-510 (J, UC) :FP-58B MCB
DVW-510P (EK) :FP-58B MCB
DVW-CA510(J, UC) :FP-58B MCB
DVW-CA510P(EK) :FP-58B MCB
Repair for FP-58B MCB is FP-58 MCB

DVW-FP58-ALL-ALL-S/M-05

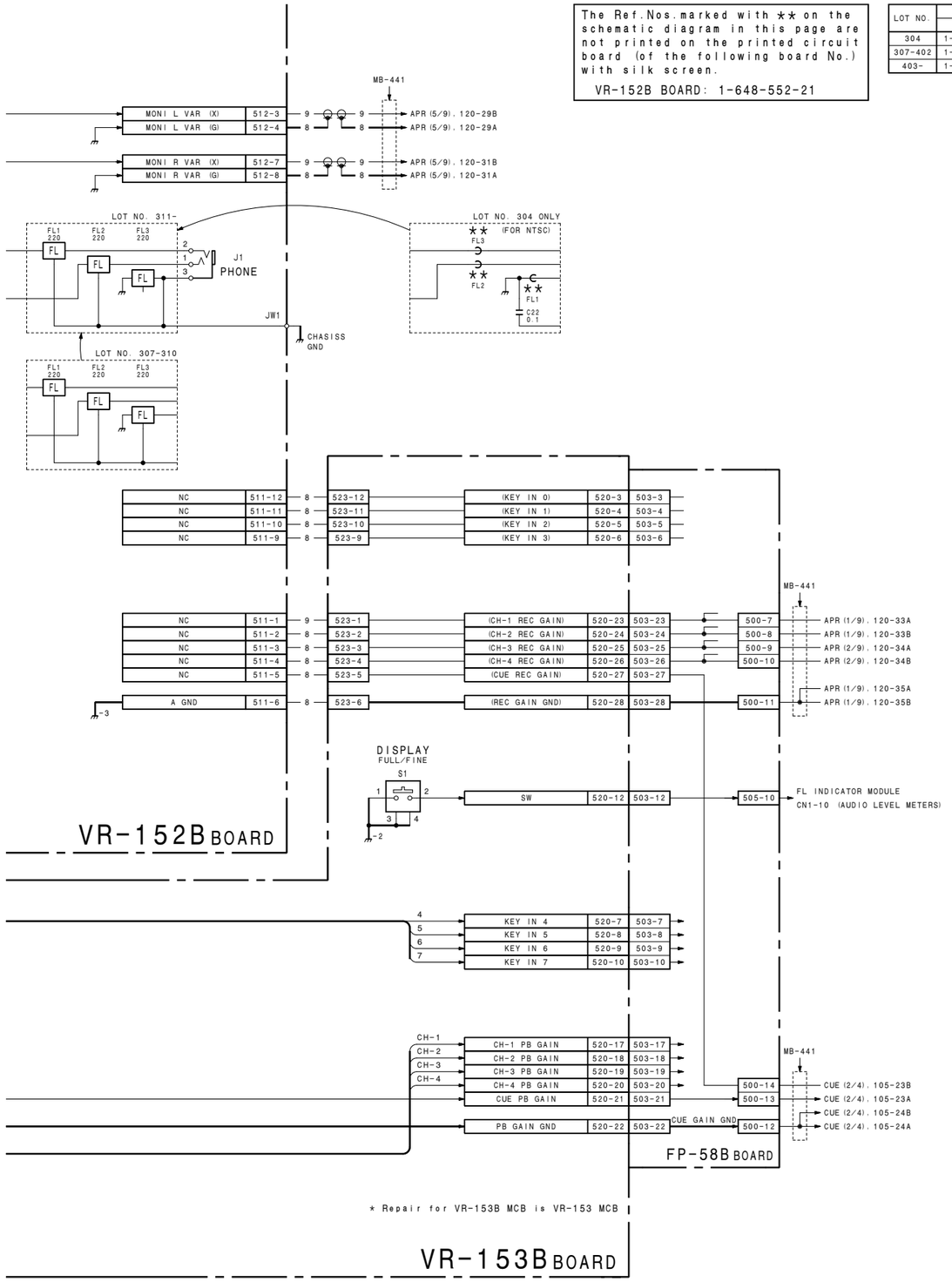


NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

The Ref.Nos.marked with ** on the schematic diagram in this page are not printed on the printed circuit board (of the following board No.) with silk screen.

VR-152B BOARD: 1-648-552-21

LOT NO.	BOARD NO.	
	VR-152B	
304	1-648-552-21	
307-402	1-648-552-22	
403-	1-648-552-23	



Phone Level VR, Phone Connector

VR-152B BOARD

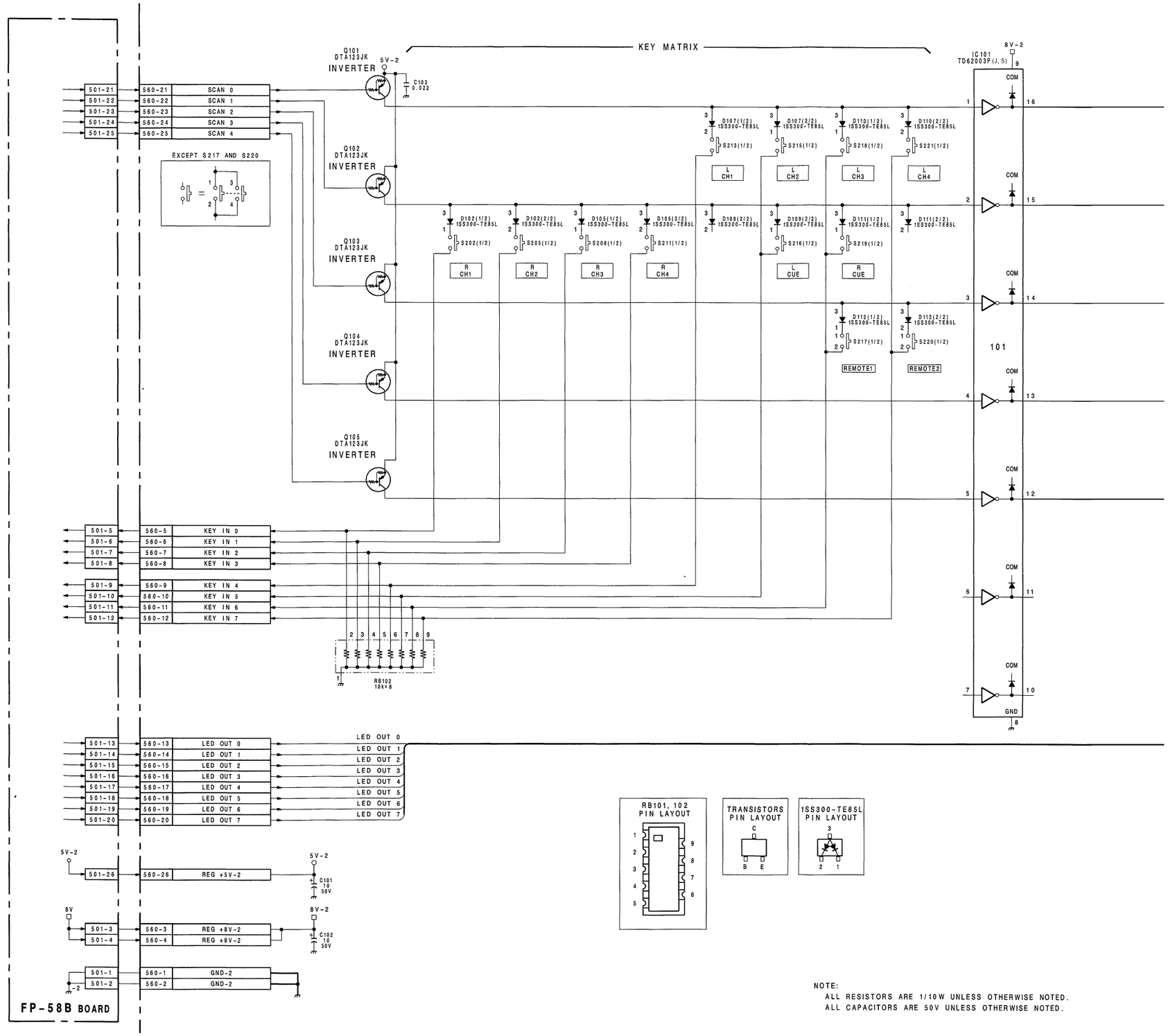
BOARD NO. 1-648-552-22, 23
BOARD'S LOT NO. 307-
DVW-A510 (J, UC) : VR-152B MCB
DVW-A510P (EK) : VR-152B MCB
DVW-510 (J, UC) : VR-152B MCB
DVW-510P (EK) : VR-152B MCB
DVW-CA510 (J, UC) : VR-152B MCB
DVW-CA510P (EK) : VR-152B MCB

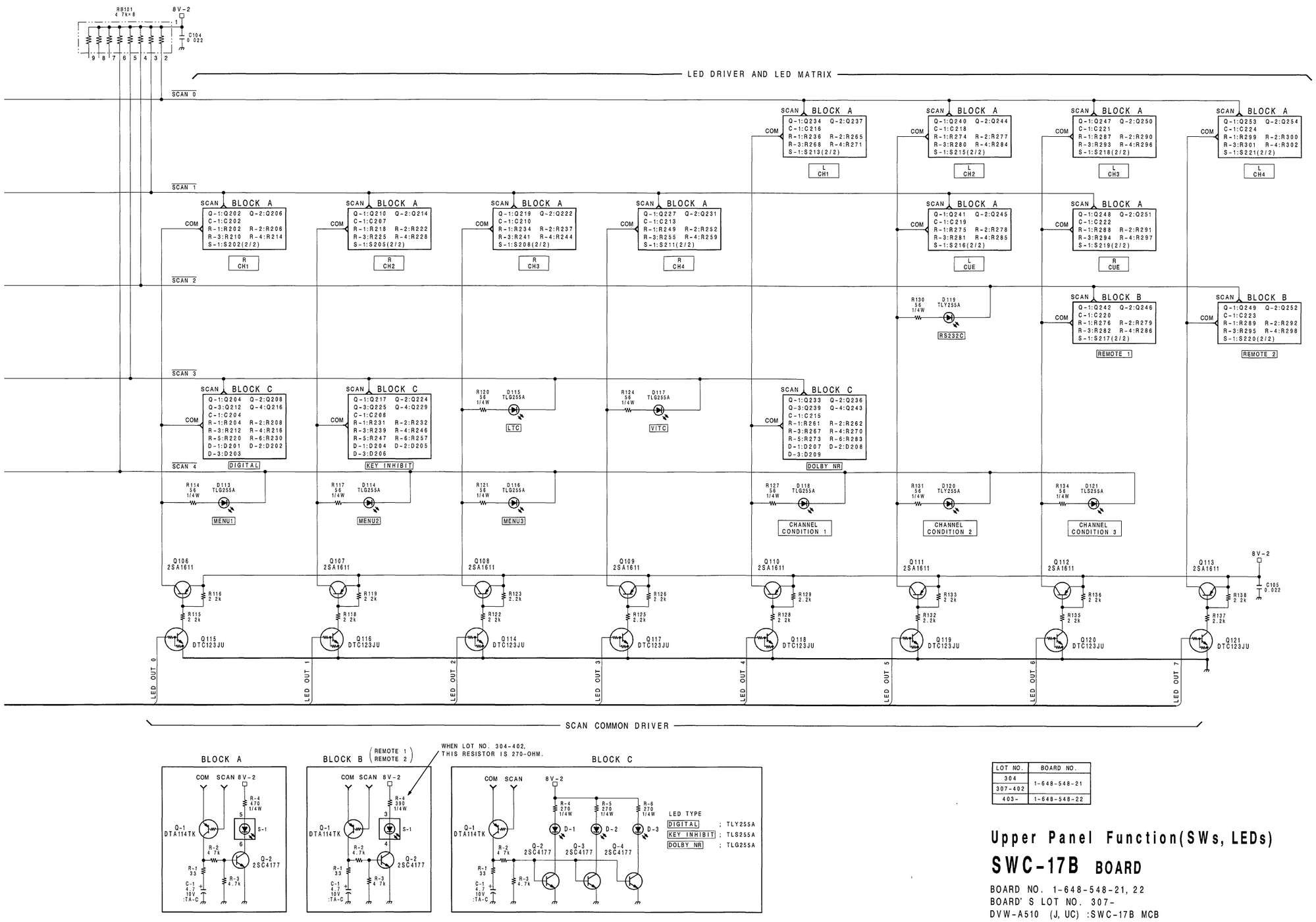
Audio PB Level VRs

VR-153B BOARD

BOARD NO. 1-648-553-22
BOARD'S LOT NO. 307-
DVW-A510 (J, UC) : VR-153B MCB
DVW-A510P (EK) : VR-153B MCB
DVW-510 (J, UC) : VR-153B MCB
DVW-510P (EK) : VR-153B MCB
DVW-CA510 (J, UC) : VR-153B MCB
DVW-CA510P (EK) : VR-153B MCB

DVW-VR152-ALL-PLAY-S/M-03


KEY MATRIX
Q101 DTA123JK INVERTER
Q102 DTA123JK INVERTER
Q103 DTA123JK INVERTER
Q104 DTA123JK INVERTER
Q105 DTA123JK INVERTER
5V-2
C103 0.022
IC101 TD62003P(J, S)
8V-2
COM
GND
501-21 560-21 SCAN 0
501-22 560-22 SCAN 1
501-23 560-23 SCAN 2
501-24 560-24 SCAN 3
501-25 560-25 SCAN 4
EXCEPT S217 AND S220
501-5 560-5 KEY IN 0
501-6 560-6 KEY IN 1
501-7 560-7 KEY IN 2
501-8 560-8 KEY IN 3
501-9 560-9 KEY IN 4
501-10 560-10 KEY IN 5
501-11 560-11 KEY IN 6
501-12 560-12 KEY IN 7
RB102 10K×8
501-13 560-13 LED OUT 0
501-14 560-14 LED OUT 1
501-15 560-15 LED OUT 2
501-16 560-16 LED OUT 3
501-17 560-17 LED OUT 4
501-18 560-18 LED OUT 5
501-19 560-19 LED OUT 6
501-20 560-20 LED OUT 7
501-26 560-26 REG +5V-2
C101 10 50V
501-3 560-3 REG +8V-2
501-4 560-4 REG +8V-2
C102 10 50V
501-1 560-1 GND-2
501-2 560-2 GND-2
FP-58B BOARD
D107(1/2) 1SS300-TE85L S213(1/2) L CH1
D107(2/2) 1SS300-TE85L S215(1/2) L CH2
D110(1/2) 1SS300-TE85L S218(1/2) L CH3
D110(2/2) 1SS300-TE85L S221(1/2) L CH4
D102(1/2) 1SS300-TE85L S202(1/2) R CH1
D102(2/2) 1SS300-TE85L S205(1/2) R CH2
D105(1/2) 1SS300-TE85L S208(1/2) R CH3
D105(2/2) 1SS300-TE85L S211(1/2) R CH4
D109(2/2) 1SS300-TE85L S216(1/2) L CUE
D111(1/2) 1SS300-TE85L S219(1/2) R CUE
D112(1/2) 1SS300-TE85L S217(1/2) REMOTE1
D112(2/2) 1SS300-TE85L S220(1/2) REMOTE2
RB101, 102 PIN LAYOUT
TRANSISTORS PIN LAYOUT
1SS300-TE85L PIN LAYOUT
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.



LOT NO.	BOARD NO.
304	1-648-548-21
307-402	1-648-548-21
403-	1-648-548-22

Upper Panel Function(SWs, LEDs)

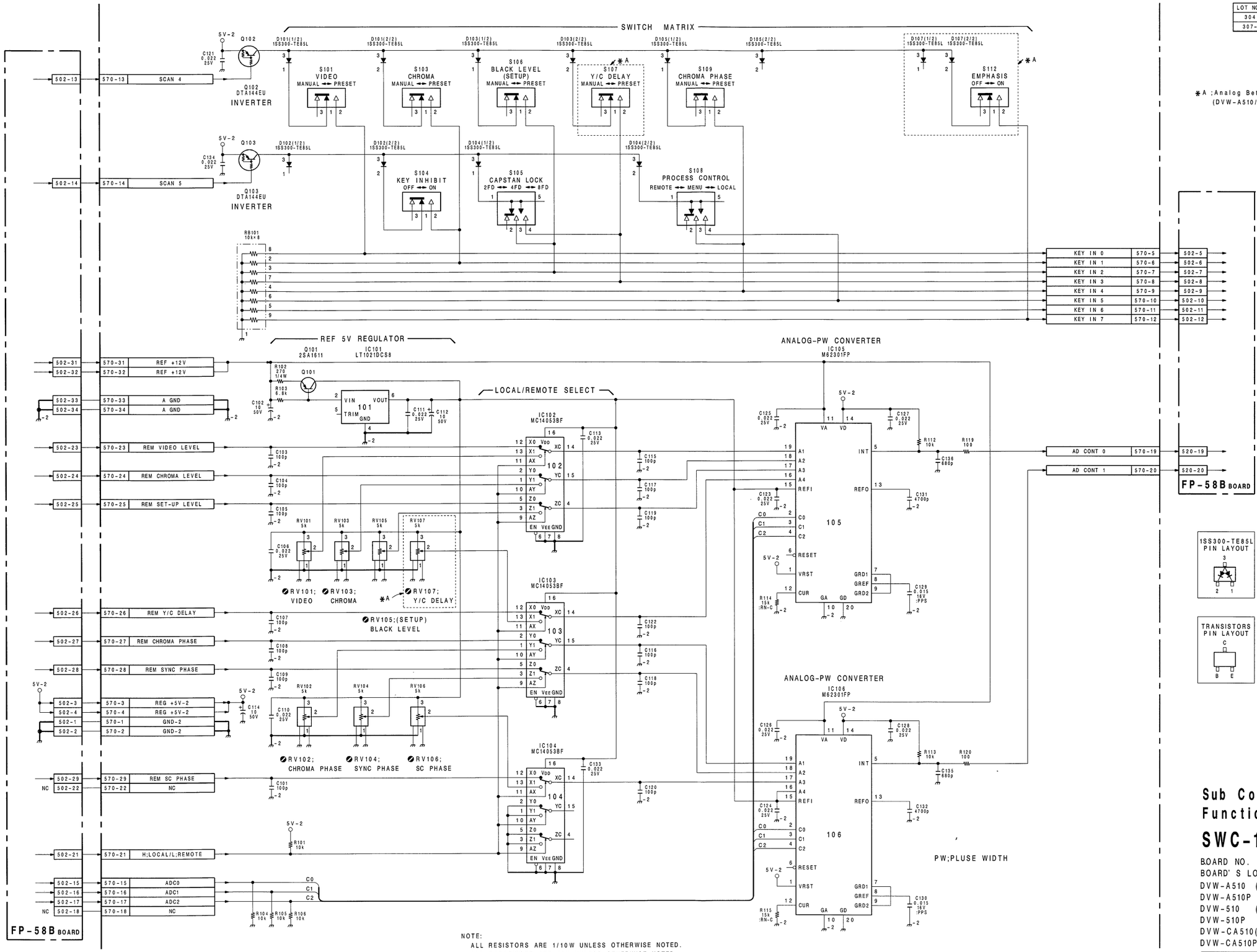
SWC-17B BOARD

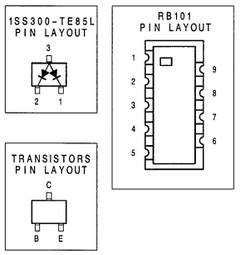
BOARD NO. 1-648-548-21, 22
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SWC-17B MCB
DVW-A510P (EK) :SWC-17B MCB
DVW-510 (J, UC) :SWC-17B MCB
DVW-510P (EK) :SWC-17B MCB
DVW-CA510(J, UC) :SWC-17B MCB
DVW-CA510P(EK) :SWC-17B MCB

DVW-SWC17-ALL-PLAY-S/M-03

LOT NO.	BOARD NO.
304	1-648-549-21
307-	1-648-549-22

✱A : Analog Betacam PB models only (DVW-A510/A510P/CA510/CA510P)





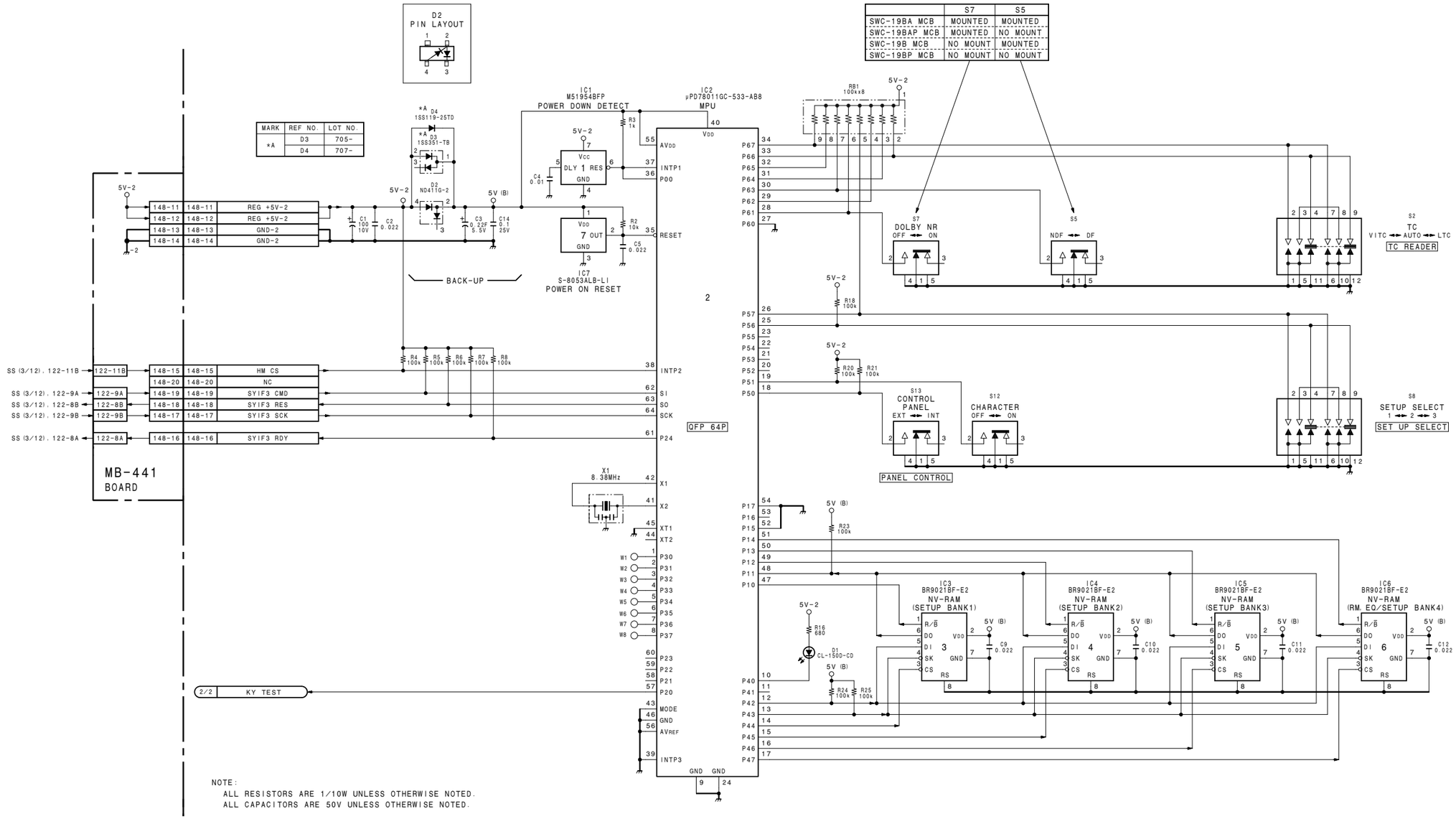
NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

Sub Control Panel Function

SWC-18B BOARD

BOARD NO. 1-648-549-22
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SWC-18BA MCB
DVW-A510P (EK) :SWC-18BA MCB
DVW-510 (J, UC) :SWC-18B MCB
DVW-510P (EK) :SWC-18B MCB
DVW-CA510(J, UC) :SWC-18BA MCB
DVW-CA510P(EK) :SWC-18BA MCB

DVW-SWC18-ALL-PLAY-S/M-02



	S7	S5
SWC-19BA MCB	MOUNTED	MOUNTED
SWC-19BAP MCB	MOUNTED	NO MOUNT
SWC-19B MCB	NO MOUNT	MOUNTED
SWC-19BP MCB	NO MOUNT	NO MOUNT

LOT NO.	BOARD NO.
304	1-648-550-21
307-402	1-648-550-22
403-704	1-648-550-23
705-	1-648-550-24

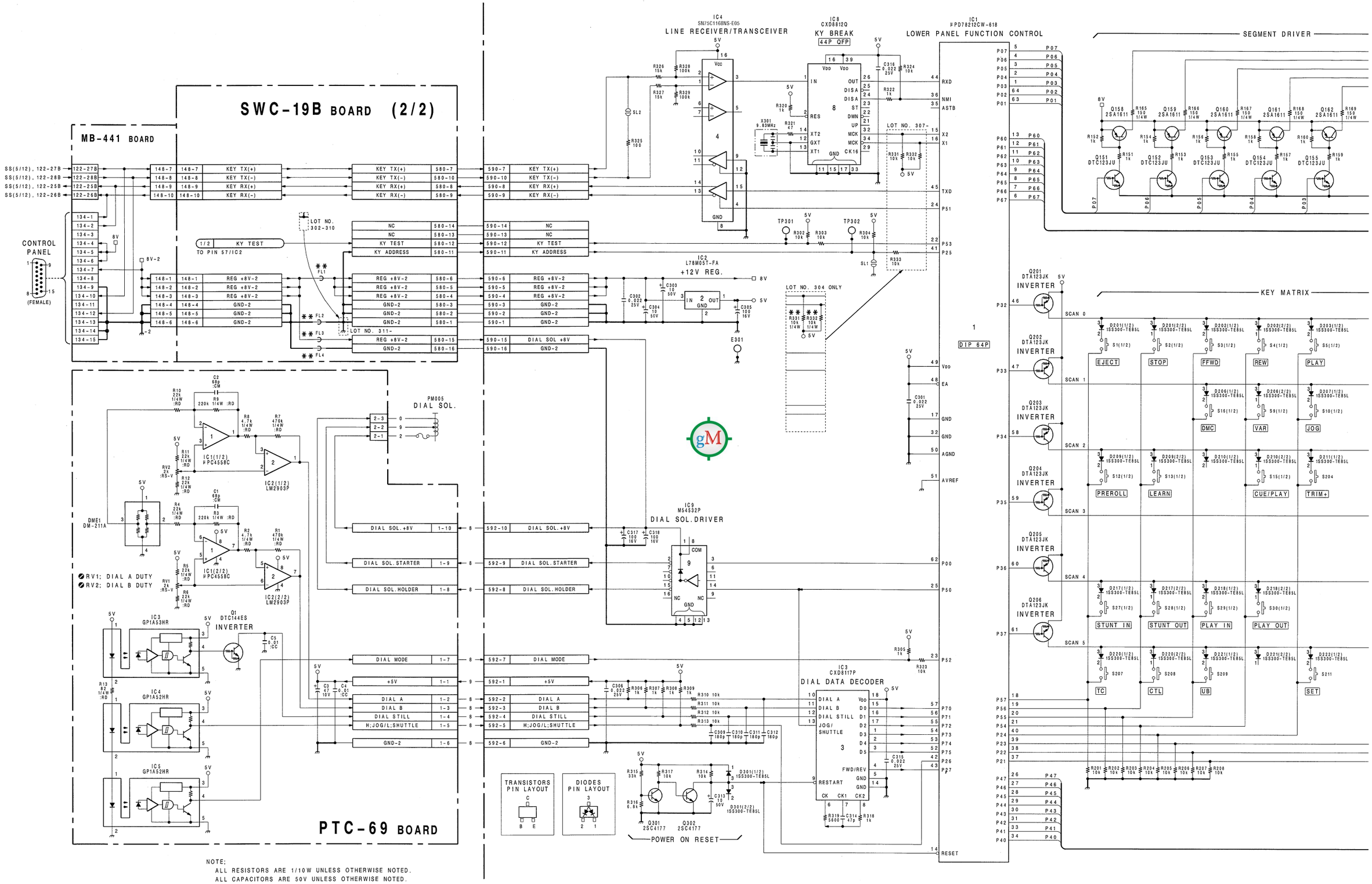
System Set-up Panel
Function Control

SWC-19B BOARD (1/2)

BOARD NO. 1-648-550-22, 23, 24
BOARD'S LOT NO. 307-
DVW-A510 (J, UC) :SWC-19BA MCB
DVW-A510P (EK) :SWC-19BAP MCB
DVW-510 (J, UC) :SWC-19B MCB
DVW-510P (EK) :SWC-19BP MCB
DVW-CA510 (J, UC) :SWC-19BA MCB
DVW-CA510P (EK) :SWC-19BAP MCB

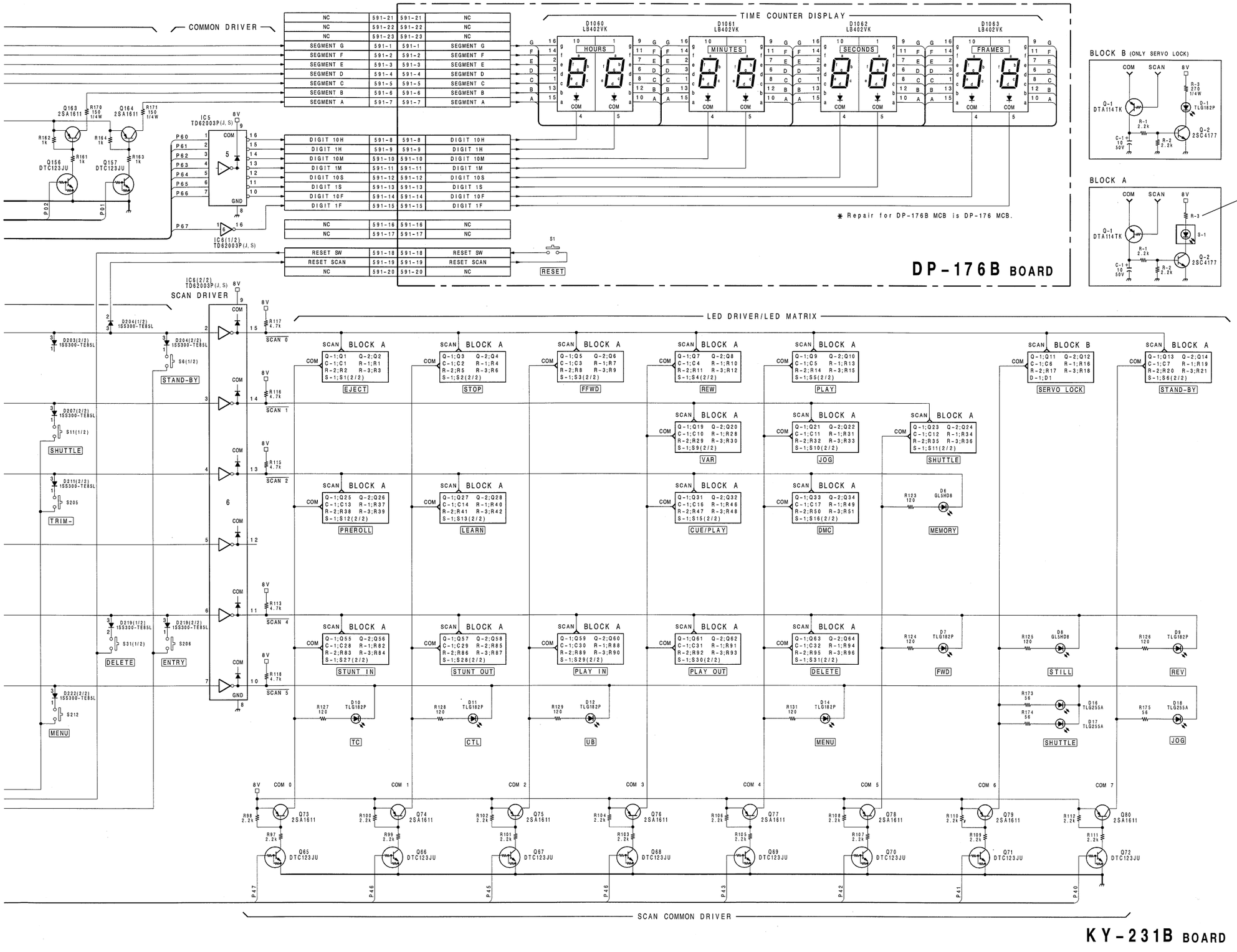
DVW-SWC19-ALL-PLAY-S/M-04

KY-231B, DP-176B, PTC-69, SWC-19B (2/2)



NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

KY-231B, DP-176B, PTC-69, SWC-19B (2/2)



The Ref.Nos. marked with ** on the schematic diagram in this page are not printed on the printed circuit boards (of the following board No.) with silk screen.

KY-231B BOARD: 1-648-546-21
SWC-19B BOARD: 1-648-550-21

LOT NO.	BOARD NO.		
	KY-231B	DP-176B	SWC-19B
304	1-648-546-21	1-648-547-21	1-648-550-21
307-402	1-648-546-22	1-648-547-22	1-648-550-22
403-510	1-648-546-23	1-648-547-22	1-648-550-23
511-704	1-648-546-24		1-648-550-24
705-			

REF NO.	LOT NO.	
	302-402	403-
R3, 6	120	270 1/4W
R9, 12, R15, 21	120	330 1/4W
R30, 33, R36	180 1/4W	390 1/4W
R39, 42 R48	120	330 1/4W
R51, 84, R87, 90, R93, 96	180 1/4W	390 1/4W

Time Counter Display
DP-176B BOARD

BOARD NO. 1-648-547-22
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :DP-176B MCB
DVW-A510P (EK) :DP-176B MCB
DVW-510 (J, UC) :DP-176B MCB
DVW-510P (EK) :DP-176B MCB
DVW-CA510(J, UC) :DP-176B MCB
DVW-CA510P(EK) :DP-176B MCB

Jog/Shuttle Dial Sensor
PTC-69 BOARD

BOARD NO. 1-648-568-12
ALL DVWs :PTC-69 MCB

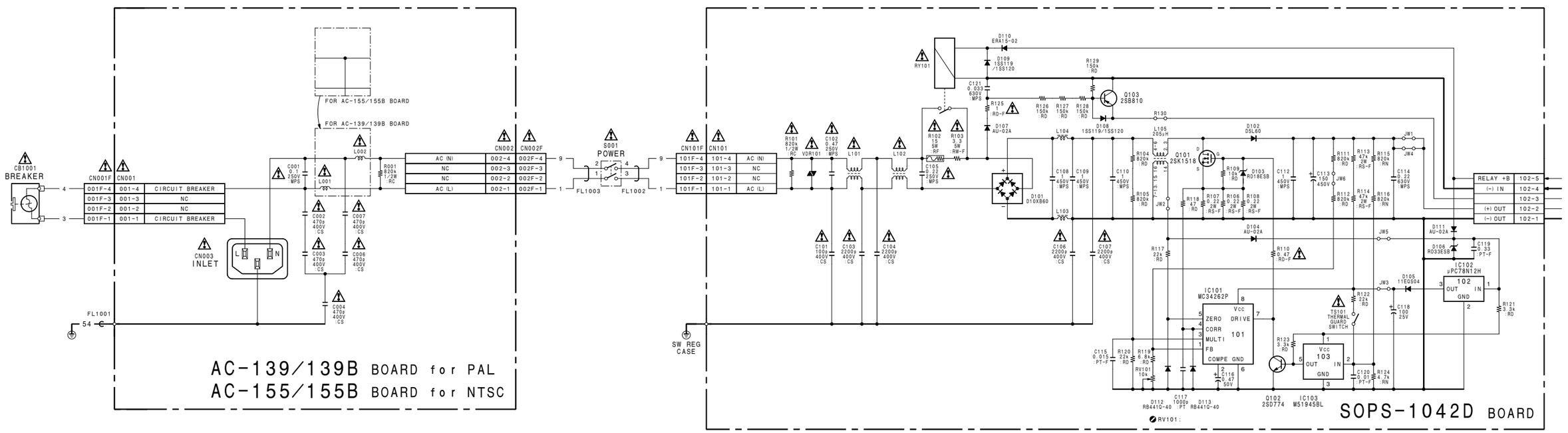
Connection
SWC-19B BOARD (2/2)

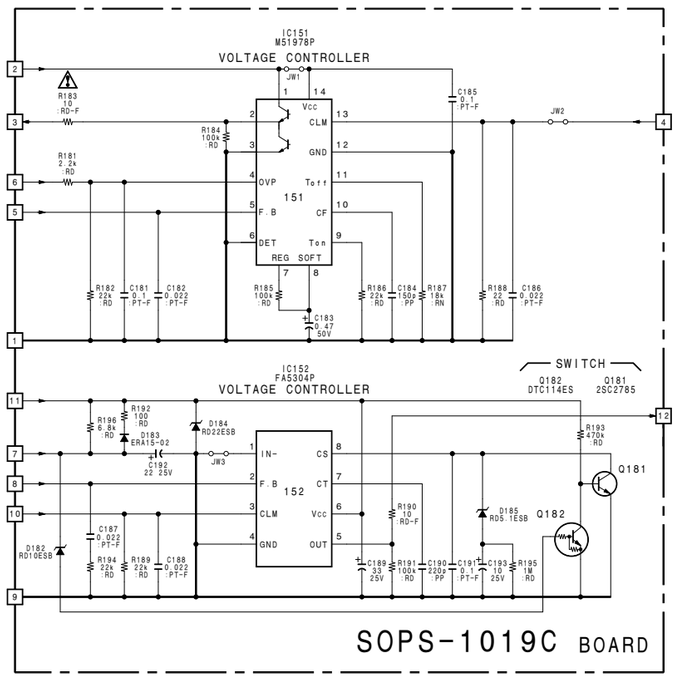
BOARD NO. 1-648-550-22, 23, 24
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :SWC-19BA MCB
DVW-A510P (EK) :SWC-19BAP MCB
DVW-510 (J, UC) :SWC-19B MCB
DVW-510P (EK) :SWC-19BP MCB
DVW-CA510(J, UC) :SWC-19BA MCB
DVW-CA510P(EK) :SWC-19BAP MCB

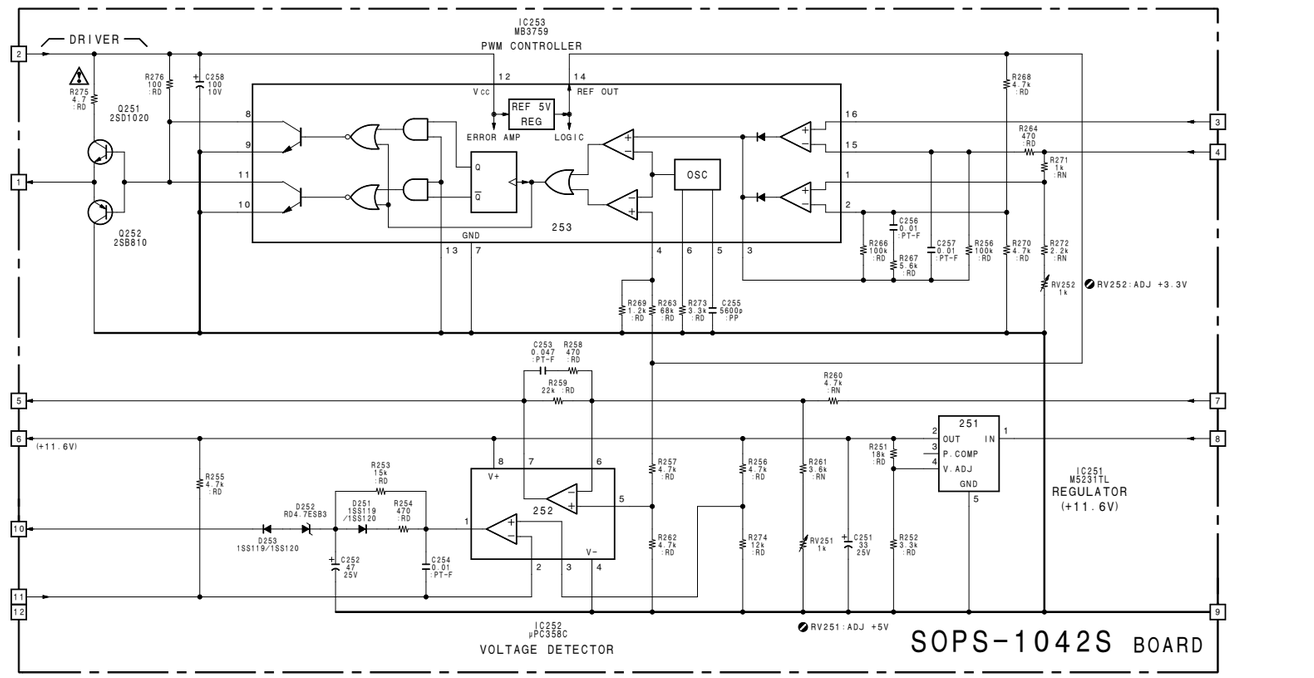
Lower Panel Control
KY-231B BOARD

BOARD NO. 1-648-546-22, 23, 24
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :KY-231B MCB
DVW-A510P (EK) :KY-231B MCB
DVW-510 (J, UC) :KY-231B MCB
DVW-510P (EK) :KY-231B MCB
DVW-CA510(J, UC) :KY-231B MCB
DVW-CA510P(EK) :KY-231B MCB

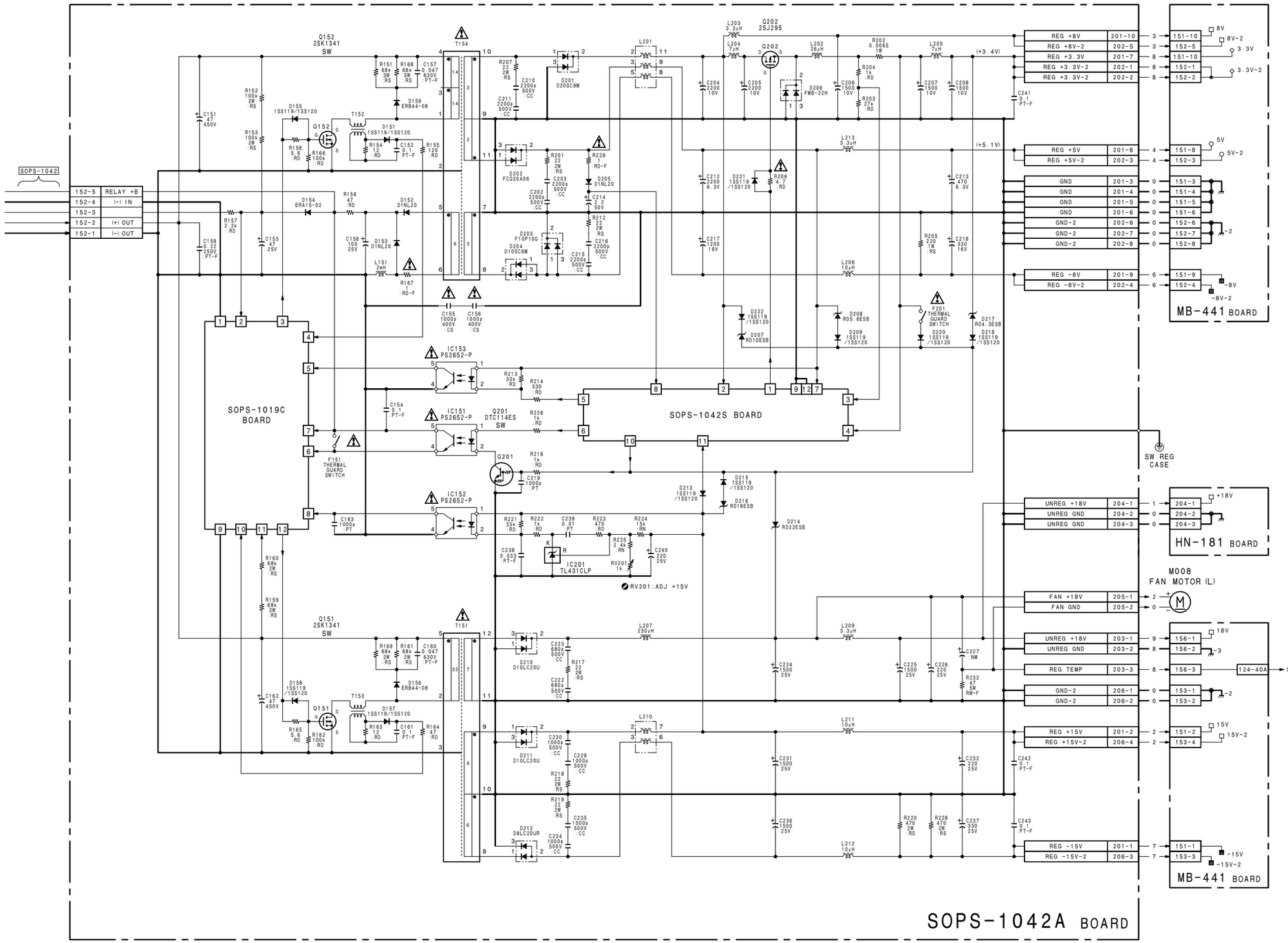
DVW-KY231-ALL-PLAY-S/M-04







NOTE:
ALL RESISTORS ARE 1/4W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.



Switching Regulater

SOPS-1042 (A)

DVW ALL MODELS

SOPS-1019C BOARD

BOARD NO. 1-640-835-11

SOPS-1042A BOARD

BOARD NO. 1-648-404-11

SOPS-1042D BOARD

BOARD NO. 1-656-244-11, 12

SOPS-1042S BOARD

BOARD NO. 1-648-406-11

AC Connector Board, With Breaker

AC-139/139B BOARD

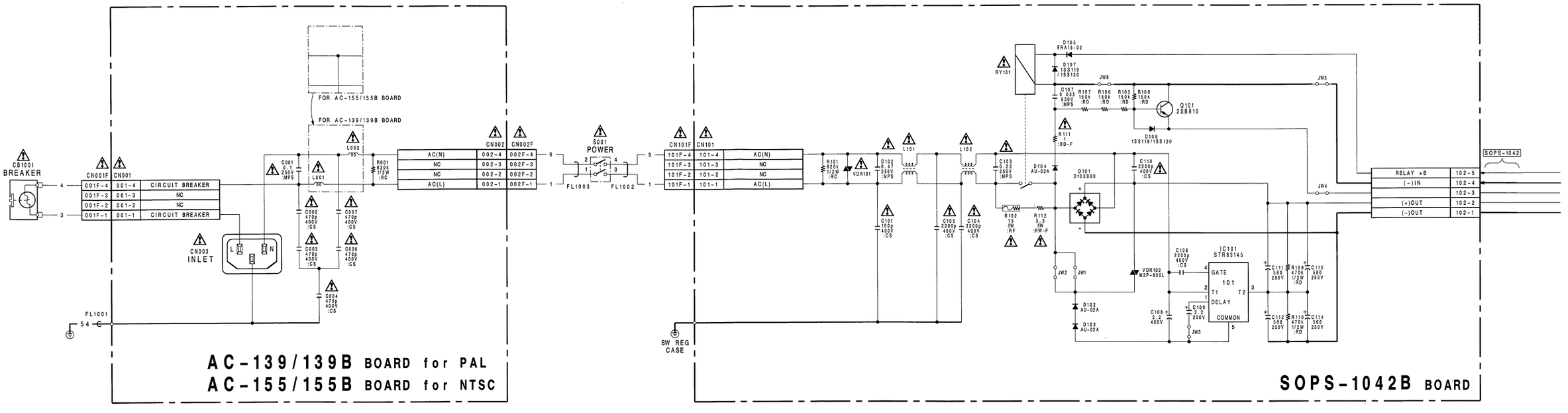
BOARD NO. 1-648-557-11/21
BOARD'S LOT NO. 302-
DVW-A500P (EK) : AC-139 MCB
DVW-A500P (UC) : AC-139 MCB
DVW-500P (EK) : AC-139 MCB
DVW-500P (UC) : AC-139 MCB
DVW-A510P (EK) : AC-139B MCB
DVW-510P (EK) : AC-139B MCB
DVW-CA510P (EK) : AC-139B MCB
Repair for AC-139B MCB is AC-139 MCB

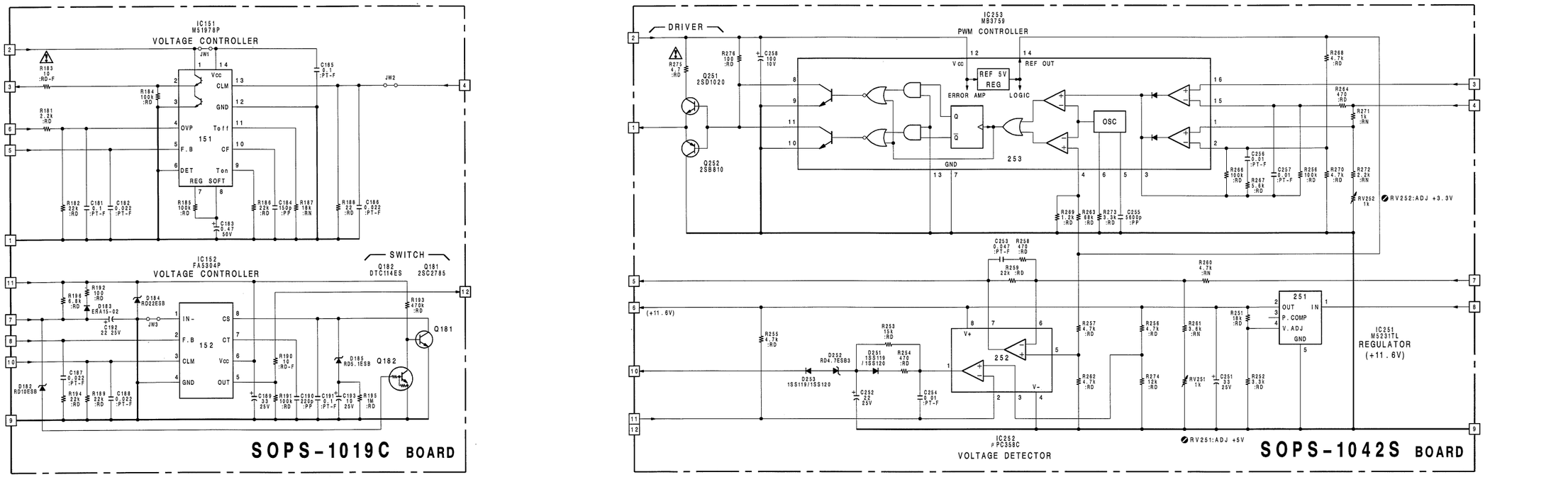
AC Connector Board, With Breaker

AC-155/155B BOARD

BOARD NO. 1-648-887-11/21
BOARD'S LOT NO. 302-
DVW-A500 (J, UC) : AC-155 MCB
DVW-500 (J, UC) : AC-155 MCB
DVW-A510 (J, UC) : AC-155B MCB
DVW-510 (J, UC) : AC-155B MCB
DVW-CA510 (J, UC) : AC-155B MCB
Repair for AC-155B MCB is AC-155 MCB

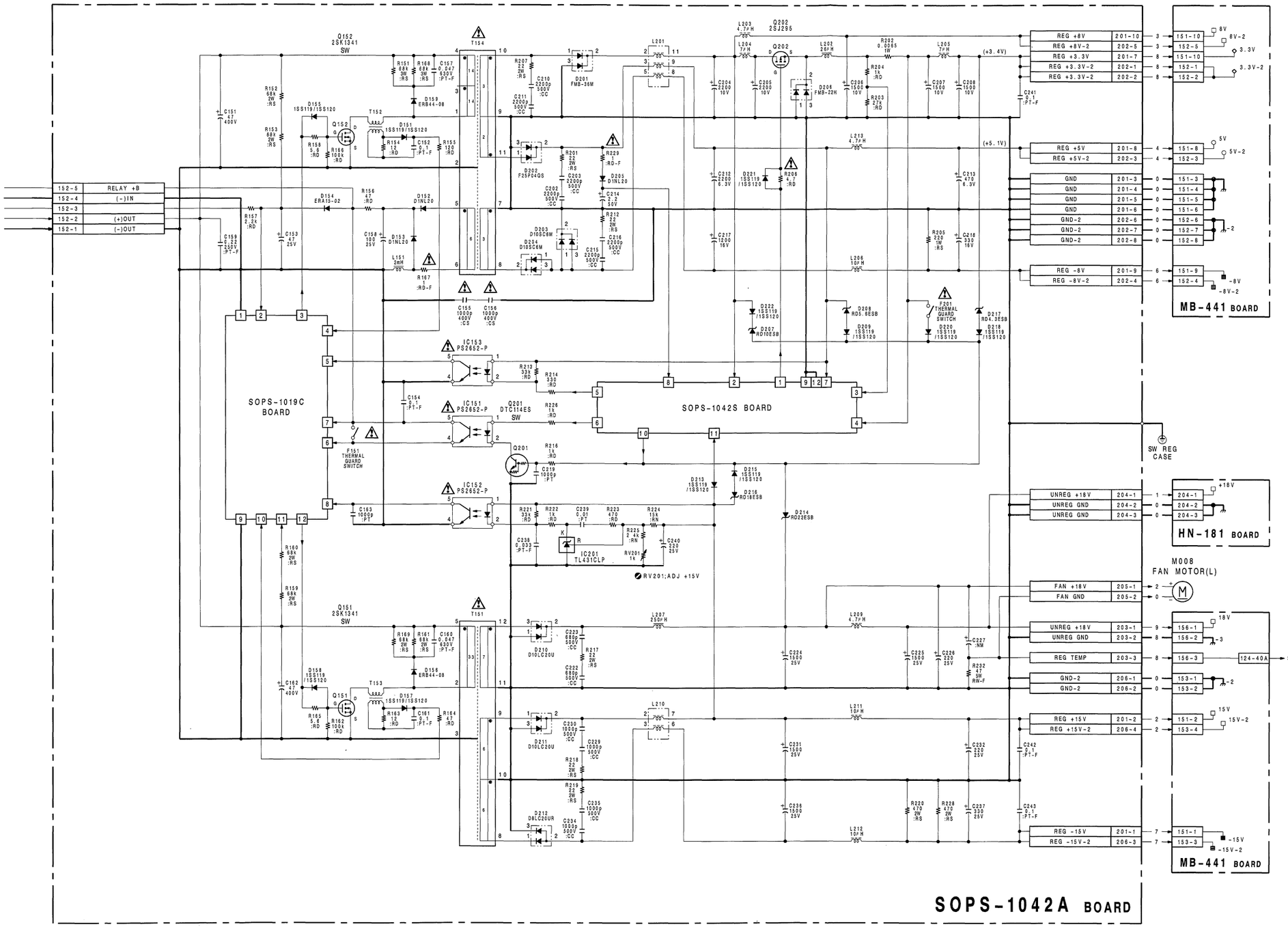
DVW-SOPS1042-ALL-ALL-S/M-04-B





NOTE:
ALL RESISTORS ARE 1/4W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

AC-139/139B/155/155B, SOPS-1042



Switching Regurater

SOPS-1042

DVW ALL MODELS

SOPS-1019C BOARD
BOARD NO. 1-640-835-11

SOPS-1042A BOARD
BOARD NO. 1-648-404-11

SOPS-1042B BOARD
BOARD NO. 1-648-405-11

SOPS-1042S BOARD
BOARD NO. 1-648-406-11

AC Connector Board with Breaker

AC-139/139B BOARD

BOARD NO. 1-648-557-11/21
BOARD' S LOT NO. 302-
DVW-A500P (EK) :AC-139 MCB
DVW-A500P (UC) :AC-139 MCB
DVW-500P (EK) :AC-139 MCB
DVW-500P (UC) :AC-139 MCB
DVW-A510P (EK) :AC-139B MCB
DVW-510P (EK) :AC-139B MCB
DVW-CA510P(EK) :AC-139B MCB
Repair for AC-139B MCB is AC-139 MCB

AC Connector Board with Breaker

AC-155/155B BOARD

BOARD NO. 1-648-887-11/21
BOARD' S LOT NO. 302-
DVW-A500 (J, UC) :AC-155 MCB
DVW-500 (J, UC) :AC-155 MCB
DVW-A510 (J, UC) :AC-155B MCB
DVW-510 (J, UC) :AC-155B MCB
DVW-CA510(J, UC) :AC-155B MCB
Repair for AC-155B MCB is AC-155 MCB

DVW-SOPS1042-ALL-ALL-S/M-04-A

MB-441 BOARD		CONNECTION	
SHEET No.	REF. No.		
(1/6)	CN101	TBC-23	BETACAM PB MODEL ONLY (MB-441BA MCB)
	CN102	TBC-24	
	CN103	DM-89	
	CN104	AP-28	
(2/6)	CN105	CUE-1BA/1B	
	CN106	EQ-45BA/45B	
	CN110 CN112	DIF-16B	
(3/6)	CN113 CN114 CN115	VPR-1B	
(4/6)	CN116 CN117 CN118	DPR-36H	
(5/6)	CN119 CN120 CN121	APR-1BA/1B	
(6/6)	CN122 CN123 CN124	SS-52B	
	CN130	RS232C CONNECTOR	
(5/6)	CN131	VIDEO CONTROL CONNECTOR	
(6/6)	CN132	REMOTE 1 IN(9P) CONNECTOR	
	CN133	REMOTE 1 OUT(9P) CONNECTOR	
	CN134	CONTROL PANEL CONNECTOR	
(3/6)	CN135 CN136	CP-218B	(CN412) (CN413)
(5/6)	CN137	CP-220B	(CN404)
(1/6)	CN138	CP-218B	(CN414)
(2/6)	CN140	CP-220B	(CN402)
(5/6)	CN143 CN144		(CN401) (CN403)
	CN145	VR-152B	(CN512)
	CN147	FP-58B	(CN500)
(6/6)	CN148	SWC-19B	(CN148)
	CN149	HN-181	(CN201)
	CN150	FAN MOTOR(R)	
	CN151 CN152 CN153	SWITCHING REGULATOR	(CN201) (CN202) (CN206)
	CN154	HN-181	(CN205)
	CN155	NO CONNECTION	
	CN156	SWITCHING REGULATOR	(CN203)
(1/6)	CN160	CN161 OF MB-441	
	CN161	CN160 OF MB-441	

CN100; NO MOUNTED

	DEC BOARD SHEET No.	CN100 :NM A		CN100 :NM B		DEC BOARD SHEET No.	
	(1/2)	GND	1	GND		(1/2)	
	(1/2)	GND	2	GND		(1/2)	
8V	(1/2)	REG +8V	3	REG +8V		(1/2)	8V
-8V	(1/2)	REG -8V	4	REG -8V		(1/2)	-8V
5V	(1/2)	REG +5V	5	REG +5V		(1/2)	5V
3.3V	(1/2)	REG +3.3V	6	REG +3.3V		(1/2)	3.3V
	(1/2)	NC	7	NC		(1/2)	
	(1/2)	NC	8	NC		(1/2)	
	(1/2)	NC	9	NC		(1/2)	
138-1	(1/2)	INPUT VIDEO(G)	10	INPUT VIDEO(X)		(1/2)	138-2
	(1/2)	NC	11	NC		(1/2)	
	(1/2)	GND	12	GND		(1/2)	
139-1	(1/2)	EVB CONT 1	13	NC		(1/2)	
139-2	(1/2)	EVB CONT 2	14	DEC PLL LOCK		(2/2)	114-23B
139-3	(1/2)	Y DEC(X)	15	NC		(1/2)	
139-4	(1/2)	Y DEC(G)	16	NC		(1/2)	
139-5	(1/2)	R-Y DEC(X)	17	NC		(1/2)	
139-6	(1/2)	R-Y DEC(G)	18	NC		(1/2)	
139-7	(1/2)	B-Y DEC(X)	19	NC		(1/2)	
139-8	(1/2)	B-Y DEC(G)	20	NC		(1/2)	
	(1/2)	GND	21	GND		(1/2)	
114-18B	(1/2)	L;POWER ON RESET	22	NC		(1/2)	
	(1/2)	NC	23	NC		(1/2)	
110-11A	(1/2)	DIF DEC JP0	24	DIF DEC JP1		(1/2)	110-11B
110-12A	(1/2)	DIF DEC JP2	25	NC		(1/2)	
110-1A	(2/2)	D2 DATA 0	26	D2 DATA 1		(2/2)	110-1B
110-2A	(2/2)	D2 DATA 2	27	D2 DATA 3		(2/2)	110-2B
110-3A	(2/2)	D2 DATA 4	28	D2 DATA 5		(2/2)	110-3B
110-4A	(2/2)	D2 DATA 6	29	D2 DATA 7		(2/2)	110-4B
110-5A	(2/2)	D2 DATA 8	30	D2 DATA 9		(2/2)	110-5B
110-7A	(2/2)	D2 CF0	31	D2 CF1		(2/2)	110-7B
110-8A	(2/2)	D2 CF2	32	D2 PARITY		(2/2)	110-8B
100-33B, 110-9A/9B	(2/2)	D2 GND	33	D2 GND		(2/2)	100-33A, 110-9A/9B
110-10B	(2/2)	D2 CK(G)	34	D2 CK(X)		(2/2)	110-10A
	(1/2)	NC	35	NC		(1/2)	
114-17A	(1/2)	DEC EVR DATA	36	DEC EVR CK		(1/2)	114-17B
114-18A	(1/2)	C 100/75	37	NC		(1/2)	
	(1/2)	NC	38	NC		(1/2)	
114-19A	(1/2)	MODE DATA	39	STATUS DATA		(2/2)	114-19B
114-20A	(1/2)	DD START	40	DD SCK		(1/2)	114-20B
114-21B	(1/2)	DEC LOAD	41	DEC DO		(1/2)	114-22B
	(1/2)	NC	42	NC		(1/2)	
114-14A	(2/2)	FR RST	43	CF RST		(2/2)	114-14B
114-15A	(2/2)	EXT 4FSC(G)	44	EXT 4FSC(X)		(2/2)	114-15B
	(1/2)	NC	45	NC		(1/2)	
100-46B, 114-5A/5B	(2/2)	DEC GND	46	DEC GND		(2/2)	100-46A, 114-5A/5B
114-6A	(2/2)	DEC DATA 0	47	DEC DATA 1		(2/2)	114-6B
114-7A	(2/2)	DEC DATA 2	48	DEC DATA 3		(2/2)	114-7B
114-8A	(2/2)	DEC DATA 4	49	DEC DATA 5		(2/2)	114-8B
114-9A	(2/2)	DEC DATA 6	50	DEC DATA 7		(2/2)	114-9B
114-10A	(2/2)	DEC DATA 8	51	DEC DATA 9		(2/2)	114-10B
114-11A	(2/2)	DEC HD	52	DEC VD		(2/2)	114-11B
114-12A	(2/2)	DEC CF INFO	53	DEC PARITY		(2/2)	114-12B
114-13A	(2/2)	DEC CK(G)	54	DEC CK(X)		(2/2)	114-13B
	(1/2)	NC	55	NC		(1/2)	
	(1/2)	NC	56	NC		(1/2)	
15V	(1/2)	REG +15V	57	REG +15V		(1/2)	15V
-15V	(1/2)	REG -15V	58	REG -15V		(1/2)	-15V
	(1/2)	GND	59	GND		(1/2)	
	(1/2)	GND	60	GND		(1/2)	

CN138

100-10A	INPUT VIDEO(G)	1	8
100-10B	INPUT VIDEO(X)	2	9 — CP-218B, 414-2
	GND	3	8 — CP-218B, 414-3
8V	REG -8V	4	8 — CP-218B, 414-4
-8V	REG +8V	5	8 — CP-218B, 414-5

CN139 :NM

100-13A	EVB CONT 1	1
100-14A	EVB CONT 2	2
100-15A	Y DEC(X)	3
100-16A	Y DEC(G)	4
100-17A	R-Y DEC(X)	5
100-18A	R-Y DEC(G)	6
100-19A	B-Y DEC(X)	7
100-20A	B-Y DEC(G)	8

FOR TBC-23 BOARD

	TBC BOARD SHEET No.	CN101 A		CN101 B		TBC BOARD SHEET No.	
	(5/5)	GND	1	GND		(5/5)	
	(5/5)	GND	2	GND		(5/5)	
8V	(5/5)	REG +8V	3	REG +8V		(5/5)	8V
-8V	(5/5)	REG -8V	4	REG -8V		(5/5)	-8V
5V	(5/5)	REG +5V	5	REG +5V		(5/5)	5V
3.3V	(5/5)	REG +3.3V	6	REG +3.3V		(5/5)	3.3V
102-7B	(1/5)	Y DATA 0	7	Y DATA 1		(1/5)	102-7A
102-8B	(1/5)	Y DATA 2	8	Y DATA 3		(1/5)	102-8A
102-9B	(1/5)	Y DATA 4	9	Y DATA 5		(1/5)	102-9A
102-10B	(1/5)	Y DATA 6	10	Y DATA 7		(1/5)	102-10A
102-11B	(1/5)	Y DATA 8	11	Y DATA 9		(1/5)	102211A
102-12B	(1/5)	Y WZ	12	Y GATED WCK		(1/5)	102-12A
102-13B	(1/5)	Y ADV WZ	13	Y WCLP		(1/5)	102-13A
102-14B	(1/5)	L;Y GUARD BAND	14	Y TBC PB SYNC		(1/5)	102-14A
102-15B	(1/5)	Y PDS CONT	15	Y SHW		(5/5)	102-15A
102-16B	(1/5)	Y SPD PWM	16	Y SDO		(1/5)	102-16A
102-44B	(1/5)	L;Y SDO PLS	17	VISC DET		(1/5)	102-17A
114-35B	(5/5)	H;H SHIFT	18	H;Y REF INS		(1/5)	103-18A
102-19A	(1/5)	L;F-BID	19	H;Y PEDESTAL INS		(1/5)	103-17A
123-10B	(1/5)	SERVO V	20	JUMP ID0		(5/5)	124-42A
123-11A	(1/5)	DT V	21	SCH TRACKING		(4/5)	102-21A
123-11B	(1/5)	PB O/E	22	PB V		(1/5)	102-22A
123-12A	(1/5)	L;REV/H;FWD	23	Y WRITE V		(1/5)	102-23A
123-12B	(1/5)	L;NOISELESS PB	24	TBC DIAG 1		(3/5)	102-24A
123-13A	(1/5)	L;DT	25	TBC DIAG 2		(3/5)	102-25A
123-13B	(5/5)	JUMP ID1	26	TBC DIAG 3		(3/5)	102-26A
124-42B	(5/5)	JUMP ID2	27	TBC DIAG 4		(3/5)	102-27A
102-46B	(1/5)	L;C SDO PLS	28	Y/C DL CONT		(3/5)	102-28A
114-34A	(5/5)	B-CAM CF INFO	29	C WRITE V		(1/5)	102-29A
123-14A	(1/5)	PB FP1	30	H;C PEDESTAL INS		(1/5)	103-17B
123-14B	(1/5)	PB FP2	31	H;C REF INS		(1/5)	103-18B
114-35A	(5/5)	H;V SHIFT	32	C SDO		(1/5)	102-32A
102-33B	(1/5)	C PDS CONT	33	C SHW		(1/5)	102-33A
102-34B	(1/5)	L;C GUARD BAND	34	C PB SYNC		(1/5)	102-34A
102-35B	(1/5)	C ADV WZ	35	C WCLP		(1/5)	102-35A
102-36B	(1/5)	C WZ	36	C GATED WCK		(1/5)	102-36A
102-37B	(1/5)	C DATA 0	37	C DATA 1		(1/5)	102-37A
102-38B	(1/5)	C DATA 2	38	C DATA 3		(1/5)	102-38A
102-39B	(1/5)	C DATA 4	39	C DATA 5		(1/5)	102-39A
102-40B	(1/5)	C DATA 6	40	C DATA 7		(1/5)	102-40A
102-41B	(1/5)	C DATA 8	41	C DATA 9		(1/5)	102-41A
122-13A	(3/5)	SYIF2 CMD	42	L;TBC CS		(3/5)	122-14B
122-13B	(3/5)	SYIF2 SCK	43	SYIF2 RDY		(3/5)	122-12A
122-12B	(3/5)	SYIF2 RES	44	L;SYS RESET		(3/5)	122-35A
115-46B	(3/5)	TBC VD	45	VISC Y(X)		(4/5)	113-11B
115-47A	(3/5)	TBC HD	46	VISC Y(G)		(4/5)	113-11A
113-22B	(3/5)	TBC 4FSC(X)	47	ANA O/E		(1/5)	115-47B
113-22A	(3/5)	TBC 4FSC(G)	48	B-CAM CF		(3/5)	113-21B
114-27A/27B	(5/5)	TBC GND	49	B-CAM DATA 0		(5/5)	114-28A
114-28B	(5/5)	B-CAM DATA 1	50	B-CAM DATA 2		(5/5)	114-29A
114-29B	(5/5)	B-CAM DATA 3	51	B-CAM DATA 4		(5/5)	114-30A
114-30B	(5/5)	B-CAM DATA 5	52	B-CAM DATA 6		(5/5)	114-31A
114-31B	(5/5)	B-CAM DATA 7	53	B-CAM DATA 8		(5/5)	114-32A
114-32B	(5/5)	B-CAM DATA 9	54	B-CAM PARITY		(5/5)	114-34B
114-33B	(5/5)	B-CAM VD	55	B-CAM HD		(5/5)	114-33A
114-36B	(3/5)	TBC CK 27(X)	56	TBC CK 27(G)		(3/5)	114-36A
15V	(5/5)	REG +15V	57	REG +15V		(5/5)	15V
-15V	(5/5)	REG -15V	58	REG -15V		(5/5)	-15V
	(5/5)	GND	59	GND		(5/5)	
	(5/5)	GND	60	GND		(5/5)	

FOR TBC-24 BOARD

TBC BOARD SHEET No.	A		B	TBC BOARD SHEET No.
(1/3)	GND	1	GND	(1/3)
(1/3)	GND	2	GND	(1/3)
(1/3)	REG +8V	3	REG +8V	(1/3)
(1/3)	REG -8V	4	REG -8V	(1/3)
(1/3)	REG +5V	5	REG +5V	(1/3)
(1/3)	REG +3.3V	6	REG +3.3V	(1/3)
(1/3)	Y DATA 1	7	Y DATA 0	(1/3)
(1/3)	Y DATA 3	8	Y DATA 2	(1/3)
(1/3)	Y DATA 5	9	Y DATA 4	(1/3)
(1/3)	Y DATA 7	10	Y DATA 6	(1/3)
(1/3)	Y DATA 9	11	Y DATA 8	(1/3)
(2/3)	Y GATED WCK	12	Y WZ	(2/3)
(1/3)	Y WCLP	13	Y ADV WZ	(2/3)
(2/3)	Y TBC PB SYNC	14	L;Y GUARD BAND	(2/3)
(2/3)	Y SHW	15	Y PDS CONT	(1/3)
(2/3)	Y SDO	16	Y SPD PWM	(2/3)
(1/3)	VISC DET	17	DM TBC SS JP0	(2/3)
(2/3)	ADV Y SW PLS	18	L;PB NO SIG	(2/3)
(1/3)	L;F-BID	19	Y W CLAMP PLS	(1/3)
(1/3)	SERVO V	20	TBC SPEED	(2/3)
(2/3)	SCH TRACKING	21	GND	(1/3)
(2/3)	PB V	22	GND	(1/3)
(2/3)	Y WRITE V	23	GND	(1/3)
(1/3)	TBC DIAG 1	24	GND	(1/3)
(1/3)	TBC DIAG 2	25	Y DEMOD(X)	(1/3)
(1/3)	TBC DIAG 3	26	Y DEMOD(G)	(1/3)
(1/3)	TBC DIAG 4	27	NC	(2/3)
(3/3)	Y/C DL CONT	28	C DEMOD(X)	(1/3)
(3/3)	C WRITE V	29	C DEMOD(G)	(1/3)
(3/3)	ADV C SW PLS	30	NC	(2/3)
(3/3)	DM TBC SS JP1	31	C SH	(3/3)
(3/3)	C SDO	32	C W CLAMP PLS	(1/3)
(3/3)	C SHW	33	C PDS CONT	(1/3)
(3/3)	C PB SYNC	34	L;C GUARD BAND	(3/3)
(1/3)	C WCLP	35	C ADV WZ	(3/3)
(3/3)	C GATED WCK	36	C WZ	(3/3)
(1/3)	C DATA 1	37	C DATA 0	(1/3)
(1/3)	C DATA 3	38	C DATA 2	(1/3)
(1/3)	C DATA 5	39	C DATA 4	(1/3)
(1/3)	C DATA 7	40	C DATA 6	(1/3)
(1/3)	C DATA 9	41	C DATA 8	(1/3)
(2/3)	Y PB SYNC	42	C GBD	(3/3)
(3/3)	TBC VPR JP5	43	L;Y DO PLS	(1/3)
(2/3)	TBC VD 2	44	L;Y SDO PLS	(1/3)
(3/3)	TBC VPR JP7	45	L;C DO PLS	(1/3)
(3/3)	TBC VPR JP1	46	L;C SDO PLS	(1/3)
(3/3)	TBC VPR JP2	47	CNF AC FREQ	(2/3)
(1/3)	L;Y PCM MUTE	48	NC	(2/3)
(1/3)	L;C PCM MUTE	49	H;SV LOCK	(2/3)
(1/3)	H;OSC ON	50	L;METAL/H;OXIDE	(3/3)
(1/3)	DM TBC JP1	51	H;NTSC/L;PAL	(3/3)
(2/3)	NC	52	NC	(2/3)
(2/3)	NC	53	NC	(2/3)
(1/3)	AP TBC JP0	54	NC	(2/3)
(1/3)	AP TBC JP1	55	NC	(2/3)
(2/3)	NC	56	NC	(2/3)
(1/3)	REG +15V	57	REG +15V	(1/3)
(1/3)	REG -15V	58	REG -15V	(1/3)
(1/3)	GND	59	GND	(1/3)
(1/3)	GND	60	GND	(1/3)

FOR DM-89 BOARD

DM BOARD SHEET No.	A		B	DM BOARD SHEET No.
(4/4)	GND	1	GND	(4/4)
(4/4)	GND	2	GND	(4/4)
(4/4)	REG +8V	3	REG +8V	(4/4)
(4/4)	REG -8V	4	REG -8V	(4/4)
(4/4)	REG +5V	5	REG +5V	(4/4)
(4/4)	REG +3.3V	6	REG +3.3V	(4/4)
(4/4)	NC	7	NC	(4/4)
(4/4)	NC	8	NC	(4/4)
(4/4)	NC	9	NC	(4/4)
(4/4)	ADV C SW PLS	10	L;NOISELESS PB AP DM JP1	(4/4)
(4/4)	NC	11	NC	(4/4)
(4/4)	NC	12	NC	(4/4)
(4/4)	NC	13	NC	(4/4)
(2/4)	L;Y DO	14	L;C DO	(2/4)
(4/4)	L;METAL/H;OXIDE	15	NC	(4/4)
(1/4)	L;Y DO PLS	16	L;C DO PLS	(2/4)
(4/4)	H;Y PEDESTAL INS	17	H;C PEDESTAL INS	(4/4)
(4/4)	H;Y REF INS	18	H;C REF INS	(4/4)
(3/4)	Y W CLAMP PLS	19	L;PB NO SIG	(3/4)
(3/4)	C W CLAMP PLS	20	TBC SPEED	(3/4)
(4/4)	NC	21	NC	(4/4)
(4/4)	H;AFM MUTE	22	H;LAU MUTE	(4/4)
(4/4)	H;NR ON	23	NC	(4/4)
(4/4)	NC	24	NC	(4/4)
(4/4)	GND	25	GND	(4/4)
(3/4)	Y DEMOD(X)	26	GND	(4/4)
(3/4)	Y DEMOD(G)	27	GND	(4/4)
(3/4)	C DEMOD(X)	28	GND	(4/4)
(3/4)	C DEMOD(G)	29	GND	(4/4)
(4/4)	NC	30	NC	(4/4)
(1/4)	Y RF ENVELOPE(X)	31	NC	(4/4)
(1/4)	Y RF ENVELOPE(G)	32	NC	(4/4)
(2/4)	C RF ENVELOPE(X)	33	NC	(4/4)
(2/4)	C RF ENVELOPE(G)	34	NC	(4/4)
(4/4)	NC	35	NC	(4/4)
(1/4)	DM SS JP2	36	NC	(4/4)
(1/4)	DM SS JP3	37	NC	(4/4)
(1/4)	GND	38	DM PB Y(X)	(1/4)
(1/4)	GND	39	DM PB Y(G)	(1/4)
(2/4)	GND	40	DM PB C(X)	(2/4)
(2/4)	GND	41	DM PB C(G)	(2/4)
(2/4)	C RF(X)	42	DM SS JP0	(4/4)
(2/4)	C RF(G)	43	DM SS JP1	(4/4)
(1/4)	L;RF Y VBLK	44	H;FAST SEARCH	(4/4)
(2/4)	L;RF C VBLK	45	L;SLOW BID	(4/4)
(4/4)	NC	46	L;Y PCM MUTE	(3/4)
(3/4)	CNF AC FREQ	47	L;C PCM MUTE	(3/4)
(3/4)	DM TBC SS JP0	48	ADV Y SW PLS	(3/4)
(3/4)	DM TBC SS JP1	49	ADV C SW PLS	(3/4)
(2/4)	H;OSC ON	50	DM TBC JP1	(2/4)
(4/4)	SYIF2 SCK	51	SYIF2 CMD	(4/4)
(4/4)	SYIF2 RES	52	SYIF2 RDY	(4/4)
(4/4)	L;DM CS	53	L;SYS RESET	(4/4)
(4/4)	L;REF CK ERROR	54	L;PLL ERROR	(4/4)
(4/4)	L;W/R TIM ERROR	55	L;SQL ON	(4/4)
(4/4)	NC	56	NC	(4/4)
(4/4)	REG +15V	57	REG +15V	(4/4)
(4/4)	REG -15V	58	REG -15V	(4/4)
(4/4)	GND	59	GND	(4/4)
(4/4)	GND	60	GND	(4/4)

FOR AP-28 BOARD

DM BOARD SHEET No.	A		B	DM BOARD SHEET No.
(1/3)	GND	1	GND	(1/3)
(1/3)	GND	2	GND	(1/3)
(1/3)	REG +8V	3	REG +8V	(1/3)
(1/3)	REG -8V	4	REG -8V	(1/3)
(1/3)	REG +5V	5	REG +5V	(1/3)
(1/3)	REG +3.3V	6	REG +3.3V	(1/3)
(3/3)	NC	7	NC	(3/3)
(3/3)	NC	8	NC	(3/3)
(2/3)	AP TBC JP0	9	AP TBC JP1	(2/3)
(2/3)	ADV C SW PLS	10	AP DM JP1	(2/3)
(3/3)	NC	11	NC	(3/3)
(2/3)	REF CK 27(X)	12	NC	(3/3)
(2/3)	REF CK 27(G)	13	NC	(3/3)
(2/3)	Y PB SYNC	14	NC	(3/3)
(2/3)	C GBD	15	NC	(3/3)
(2/3)	C SH	16	NC	(3/3)
(3/3)	NC	17	DT V	(2/3)
(2/3)	L;REF CK ERROR	18	ANA Ö/E	(2/3)
(2/3)	L;PLL ERROR	19	NC	(3/3)
(2/3)	L;W/R TIM ERROR	20	NC	(3/3)
(3/3)	L;SQL ON	21	H;SV LOCK	(3/3)
(2/3)	L;Y DO PLS	22	L;NOISELESS PB	(2/3)
(2/3)	H;AFM MUTE	23	H;DIGITAL/L;ANALOG	(2/3)
(1/3)	H;LAU MUTE	24	H;METAL/L;OXIDE	(2/3)
(1/3)	H;NR ON	25	H;NTSC/L;PAL	(2/3)
(2/3)	GND	26	GND	(2/3)
(2/3)	GND	27	GND	(2/3)
(2/3)	GND	28	GND	(2/3)
(2/3)	C RF(X)	29	C RF(G)	(2/3)
(2/3)	GND	30	GND	(2/3)
(3/3)	NC	31	NC	(3/3)
(3/3)	NC	32	NC	(3/3)
(3/3)	NC	33	NC	(3/3)
(3/3)	NC	34	NC	(3/3)
(3/3)	NC	35	NC	(3/3)
(3/3)	NC	36	NC	(3/3)
(3/3)	NC	37	NC	(3/3)
(1/3)	GND	38	GND	(1/3)
(1/3)	PB CH-2 SIG(X)	39	PB CH-2 SIG(G)	(1/3)
(1/3)	GND	40	GND	(1/3)
(1/3)	PB CH-1 SIG(X)	41	PB CH-1 SIG(G)	(1/3)
(1/3)	GND	42	GND	(1/3)
(3/3)	NC	43	NC	(3/3)
(3/3)	NC	44	NC	(3/3)
(3/3)	NC	45	NC	(3/3)
(1/3)	GND	46	GND	(1/3)
(1/3)	B PB CH-1(X)	47	B PB CH-1(G)	(1/3)
(1/3)	GND	48	GND	(1/3)
(1/3)	B PB CH-2(X)	49	B PB CH-2(G)	(1/3)
(3/3)	GND	50	GND	(3/3)
(3/3)	B PB CH-3(X)	51	B PB CH-3(G)	(3/3)
(3/3)	GND	52	GND	(3/3)
(3/3)	B PB CH-4(X)	53	B PB CH-4(G)	(3/3)
(3/3)	GND	54	GND	(3/3)
(3/3)	NC	55	NC	(3/3)
(3/3)	NC	56	NC	(3/3)
(1/3)	REG +15V	57	REG +15V	(1/3)
(1/3)	REG -15V	58	REG -15V	(1/3)
(1/3)	GND	59	GND	(1/3)
(1/3)	GND	60	GND	(1/3)

LOT NO. 307-402 ONLY

CN161			CN160	
EQ PB Y(X)	1	9 — 9	1	DM PB Y(X)
EQ PB Y(G)	2	8 — 8	2	DM PB Y(G)
EQ PB C(X)	3	9 — 9	3	DM PB C(X)
EQ PB C(G)	4	8 — 8	4	DM PB C(G)

CN101, 102, 103, 104, 160, 161

MB-441BA MCB: MOUNTED AS DESIGN
MB-441B MCB : NO MOUNTED

LOT NO.	BOARD NO.
307-402	1-648-560-12
403-	1-648-560-13

Mother board

MB-441 BOARD (1/6)

BOARD NO. 1-648-560-12, 13
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :MB-441BA MCB
DVW-A510P (EK) :MB-441BA MCB
DVW-510 (J, UC) :MB-441B MCB
DVW-510P (EK) :MB-441B MCB
DVW-CA510(J, UC) :MB-441BA MCB
DVW-CA510P(EK) :MB-441BA MCB

DVW-MB441-ALL-PLAY-S/M-03

CN100 CN101 CN102 CN103 CN104 CN138 CN139 CN160 CN161

MB-441 (2/6)

MB-441 BOARD		CONNECTION	
SHEET No.	REF. No.		
(1/6)	CN101	TBC-23	BETACAM PB MODEL ONLY (MB-441BA MCB)
	CN102	TBC-24	
	CN103	DM-89	
	CN104	AP-28	
(2/6)	CN105	CUE-1BA/1B	
	CN106	EQ-45BA/45B	
	CN110	DIF-16B	
	CN112		
(3/6)	CN113	VPR-1B	
	CN114		
	CN115		
(4/6)	CN116	DPR-36H	
	CN117		
	CN118		
(5/6)	CN119	APR-1BA/1B	
	CN120		
	CN121		
(6/6)	CN122	SS-52B	
	CN123		
	CN124		
	CN130	RS232C CONNECTOR	
(5/6)	CN131	VIDEO CONTROL CONNECTOR	
(6/6)	CN132	REMOTE 1 IN(9P) CONNECTOR	
	CN133	REMOTE 1 OUT(9P) CONNECTOR	
	CN134	CONTROL PANEL CONNECTOR	
(3/6)	CN135	CP-218B	(CN412)
	CN136		(CN413)
(5/6)	CN137	CP-220B	(CN404)
(1/6)	CN138	CP-218B	(CN414)
(2/6)	CN140		(CN402)
(5/6)	CN143	CP-220B	(CN401)
	CN144		(CN403)
	CN145	VR-152B	(CN512)
	CN147	FP-58B	(CN500)
(6/6)	CN148	SWC-19B	(CN148)
	CN149	HN-181	(CN201)
	CN150	FAN MOTOR(R)	
	CN151	SWITCHING REGULATOR	(CN201)
	CN152		(CN202)
	CN153		(CN206)
	CN154	HN-181	(CN205)
	CN155	NO CONNECTION	
	CN156	SWITCHING REGULATOR	(CN203)
(1/6)	CN160	CN161 OF MB-441	
	CN161	CN160 OF MB-441	

FOR CUE-1BA/1B BOARD

CUE BOARD	CN105			CUE BOARD	
SHEET No.	A		B	SHEET No.	
(3/4)	GND	1	GND	(3/4)	
(3/4)	GND	2	GND	(3/4)	
(3/4)	REG +8V	3	REG +8V	(3/4)	8V
(3/4)	REG -8V	4	REG -8V	(3/4)	-8V
(1/4)	REG +5V	5	REG +5V	(1/4)	5V
(3/4)	REG +3.3V	6	REG +3.3V	(3/4)	3.3V
(3/4)	NC	7	NC	(3/4)	
(3/4)	NC	8	NC	(3/4)	
(3/4)	NC	9	NC	(3/4)	
(3/4)	REC LTC	10	PB LTC	(3/4)	123-5A
(1/4)	LTC SOURCE	11	NC	(3/4)	
(1/4)	EXT LTC IN(X)	12	EXT LTC IN(Y)	(1/4)	137-7
(1/4)	EXT LTC IN(G)	13	EXT LTC IN(G)	(1/4)	137-8
(3/4)	NC	14	NC	(3/4)	
(1/4)	EXT LTC OUT(X)	15	EXT LTC OUT(Y)	(1/4)	137-10
(1/4)	EXT LTC OUT(G)	16	EXT LTC OUT(G)	(1/4)	137-11
(1/4)	LTC OUT	17	NC	(3/4)	
(3/4)	NC	18	NC	(3/4)	
(2/4)	CUE JP0	19	CUE JP1	(2/4)	120-26B
(3/4)	NC	20	NC	(3/4)	
(3/4)	NC	21	NC	(3/4)	
(3/4)	NC	22	NC	(3/4)	
(2/4)	CUE PB GAIN	23	CUE REC GAIN	(2/4)	147-14
(2/4)	CUE GAIN GND	24	CUE GAIN GND	(2/4)	147-12
(3/4)	NC	25	NC	(3/4)	
(1/4)	CUE IN(X)	26	CUE IN(Y)	(1/4)	140-2
(1/4)	CUE IN(G)	27	CUE IN(G)	(1/4)	140-3
(1/4)	NC	28	NC	(1/4)	
(1/4)	NC	29	NC	(1/4)	
(1/4)	CUE OUT(X)	30	CUE OUT(Y)	(1/4)	140-5
(1/4)	CUE OUT(G)	31	CUE OUT(G)	(1/4)	140-6
(1/4)	NC	32	NC	(1/4)	
(2/4)	CUE PEAK SIGNAL	33	NC	(1/4)	
(1/4)	NC	34	NC	(1/4)	
(2/4)	CUE MONITOR(X)	35	CUE MONITOR(G)	(2/4)	119-41A/41B
(1/4)	NC	36	NC	(1/4)	
(2/4)	CUE TEST SIG(X)	37	NC	(1/4)	
(1/4)	NC	38	NC	(1/4)	
(2/4)	PB CH-2 SIG(X)	39	PB CH-2 SIG(G)	(2/4)	104-39B
(1/4)	NC	40	NC	(1/4)	
(2/4)	PB CH-1 SIG(X)	41	PB CH-1 SIG(G)	(2/4)	104-41B
(1/4)	NC	42	NC	(1/4)	
(4/4)	L;POWER ON MUTE	43	CUE TEST	(3/4)	120-37A
(4/4)	LTC ERASE DET	44	CUE MIC ON/OFF	(1/4)	137-5
(4/4)	FULL ERASE DET	45	CUE ERASE DET	(4/4)	120-39B
(2/4)	CUE EE DET	46	CUE BIAS DET	(4/4)	120-40B
(1/4)	L;LTC EQ ON	47	CUE OUT DET	(2/4)	120-41B
(4/4)	H;CUE ERASE ON	48	H;LTC ERASE ON	(4/4)	120-42B
(4/4)	OSC H;OFF/L;ON	49	H;FULL ERASE ON	(4/4)	120-43B
(3/4)	LTC H;PB/L;REC	50	H;CUE BIAS ON	(4/4)	120-44B
(3/4)	H;LTC HPF ON	51	L;LTC EQ NORM	(3/4)	120-45B
(3/4)	H;CUE REC MUTE	52	H;LTC LPF ON	(3/4)	120-46B
(2/4)	H;CUE PB MUTE	53	CUE H;PB/L;EE	(3/4)	120-47B
(3/4)	CUE H;PB/L;REC	54	H;DIGITAL/L;ANALOG	(3/4)	120-48B
(2/4)	H;SLOW EQ ON	55	H;METAL/L;OXIDE	(3/4)	120-49B
(2/4)	H;LAU MUTE	56	H;AUDIO ATT ON	(2/4)	120-50B
(1/4)	REG +15V	57	REG +15V	(1/4)	15V
(1/4)	REG -15V	58	REG -15V	(1/4)	-15V
(1/4)	GND	59	GND	(1/4)	
(1/4)	GND	60	GND	(1/4)	

FOR EQ-45BA/45B BOARD

EQ BOARD	CN106			EQ BOARD	
SHEET No.	A		B	SHEET No.	
(1/6)	GND	1	GND	(1/6)	
(1/6)	GND	2	GND	(1/6)	
(1/6)	REG +8V	3	REG +8V	(1/6)	8V
(1/6)	REG -8V	4	REG -8V	(1/6)	-8V
(1/6)	REG +5V	5	REG +5V	(1/6)	5V
(1/6)	REG +3.3V	6	REG +3.3V	(1/6)	3.3V
(1/6)	L;SYSTEM EE1	7	(A)GND	(1/6)	106-8A/10A
(1/6)	(A)GND	8	EQ PB Y(X)	(3/6)	161-1
(1/6)	L;SYSTEM EE2	9	EQ PB Y(G)	(3/6)	161-2
(1/6)	(A)GND	10	EQ PB C(X)	(3/6)	161-3
(1/6)	L;SYS RESET 3.3V	11	EQ PB C(G)	(3/6)	161-4
(1/6)	L;FE B EN	12	L;FE A EN	(1/6)	123-35A
(1/6)	REC BD SEL	13	REC AC SEL	(1/6)	123-47A
(1/6)	EQ SS JP1	14	REC SAT AC	(1/6)	123-32A
(1/6)	EQ SS JP2	15	L;SAT AC EN	(1/6)	123-34A
(1/6)	H;REV/L;FWD	16	L;FAST SEARCH	(1/6)	123-33B
(2/6)	EQ STB1	17	SYIF1 SCK	(2/6)	122-17B
(3/6)	EQ STB2	18	SYIF1 CMD	(2/6)	122-17A
(4/6)	EQ STB3	19	L;B-CAM SEL	(1/6)	122-36B
(1/6)	ADV AC SEL	20	H;REC LOCK OUT	(1/6)	122-39B
(1/6)	ADV BD SEL	21	PB SAT.REC AC	(2/6)	123-25B, 117-19A
(1/6)	CNF AC SEL	22	SVCNT ERR	(1/6)	122-36A
(1/6)	CNF BD SEL	23	PB SAT REC BD	(2/6)	123-27B, 117-20A
(5/6)	ADV AC FREQ	24	PRTY CLR	(1/6)	122-38A
(5/6)	ADV BD FREQ	25	PB SAT ADV AC	(3/6)	123-29B
(6/6)	CNF AC FREQ	26	PRTY ERR	(1/6)	122-37A
(6/6)	CNF BD FREQ	27	PB SAT ADV BD	(3/6)	123-31B
(1/6)	EQ DPR JP0	28	ADV AC ENV	(3/6)	123-22A, 117-17A
(1/6)	EQ DPR JP1	29	ADV BD ENV	(3/6)	123-22B, 117-17B
(1/6)	NC	30	CNF AC ENV	(4/6)	117-16A
(1/6)	NC	31	CNF BD ENV	(4/6)	117-16B
(5/6)	METRIC ADV BD	32	METRIC ADV AC	(5/6)	122-4B, 117-7A
(6/6)	METRIC CNF BD	33	METRIC CNF AC	(6/6)	122-6B, 117-8A
(1/6)	SAT CK(G)	34	SAT CK(X)	(1/6)	123-23B
(1/6)	REC CK(G)	35	REC CK(X)	(1/6)	116-15B
(1/6)	L;PRCD OFF	36	REC PRTY	(1/6)	116-16B
(1/6)	REC AC D1	37	REC AC D0	(1/6)	116-17A
(1/6)	REC AC D3	38	REC AC D2	(1/6)	116-18A
(1/6)	REC BD D1	39	REC BD D0	(1/6)	116-19A
(1/6)	REC BD D3	40	REC BD D2	(1/6)	116-20A
(1/6)	L;REC C EN	41	L;REC A EN	(1/6)	116-21B
(1/6)	L;REC D EN	42	L;REC B EN	(1/6)	116-22B
(1/6)	ADV AC D1	43	ADV AC D0	(1/6)	116-23A
(1/6)	ADV AC D3	44	ADV AC D2	(1/6)	116-24A
(1/6)	ADV AC CK(G)	45	ADV AC CK(X)	(1/6)	116-25B
(1/6)	ADV BD PRTY	46	ADV AC PRTY	(1/6)	116-26B
(1/6)	ADV BD D1	47	ADV BD D0	(1/6)	116-27A
(1/6)	ADV BD D3	48	ADV BD D2	(1/6)	116-28A
(1/6)	ADV BD CK(G)	49	ADV BD CK(X)	(1/6)	116-29B
(1/6)	CNF AC D1	50	CNF AC D0	(1/6)	116-30A
(1/6)	CNF AC D3	51	CNF AC D2	(1/6)	116-31A
(1/6)	CNF AC CK(G)	52	CNF AC CK(X)	(1/6)	116-32B
(1/6)	CNF BD PRTY	53	CNF AC PRTY	(1/6)	116-33B
(1/6)	CNF BD D1	54	CNF BD D0	(1/6)	116-34A
(1/6)	CNF BD D3	55	CNF BD D2	(1/6)	116-35A
(1/6)	CNF BD CK(G)	56	CNF BD CK(X)	(1/6)	116-36B
(1/6)	REG +15V	57	REG +15V	(1/6)	15V
(1/6)	REG -15V	58	REG -15V	(1/6)	-15V
(1/6)	GND	59	GND	(1/6)	
(1/6)	GND	60	GND	(1/6)	

	CN140		
105-26A	CUE IN(X)	1	9 — CP-220, 402-1
105-26B	CUE IN(Y)	2	2 — CP-220, 402-2
105-27A/27B	CUE IN(G)	3	8
105-30A	CUE OUT(X)	4	9 — CP-220, 402-4
105-30B	CUE OUT(Y)	5	2 — CP-220, 402-5
105-31A/31B	CUE OUT(G)	6	8

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FOR DIF-16B BOARD

	DIF BOARD SHEET No.	CN110 A		CN110 B	DIF BOARD SHEET No.	
100-26A	(4/5)	D2 DATA 0	1	D2 DATA 1	(4/5)	100-26B
100-27A	(4/5)	D2 DATA 2	2	D2 DATA 3	(4/5)	100-27B
100-28A	(4/5)	D2 DATA 4	3	D2 DATA 5	(4/5)	100-28B
100-29A	(4/5)	D2 DATA 6	4	D2 DATA 7	(4/5)	100-29B
100-30A	(4/5)	D2 DATA 8	5	D2 DATA 9	(4/5)	100-30B
	(3/5)	NC	6	NC	(3/5)	
100-31A	(4/5)	D2 CF0	7	D2 CF1	(4/5)	100-31B
100-32A	(4/5)	D2 CF2	8	D2 PARITY	(4/5)	100-32B
100-33A/33B, 110-9B	(4/5)	D2 GND	9	D2 GND	(4/5)	100-33A/33B, 110-9A
100-34B	(4/5)	D2 CK(X)	10	D2 CK(G)	(4/5)	100-34A
100-24A	(4/5)	DIF DEC JP0	11	DIF DEC JP1	(4/5)	100-24B
100-25A	(4/5)	DIF DEC JP2	12	DIF SS 4FSC(X)	(1/5)	122-34A
	(3/5)	NC	13	DIF SS 4FSC(G)	(1/5)	122-33B
113-24A	(4/5)	D1 DATA 1	14	D1 DATA 1	(4/5)	113-24B
113-25A	(4/5)	D1 DATA 2	15	D1 DATA 3	(4/5)	113-25B
113-26A	(4/5)	D1 DATA 4	16	D1 DATA 5	(4/5)	113-26B
113-27A	(4/5)	D1 DATA 6	17	D1 DATA 7	(4/5)	113-27B
113-28A	(4/5)	D1 DATA 8	18	D1 DATA 9	(4/5)	113-28B
113-29A	(4/5)	D1 HD	19	D1 VD	(4/5)	113-29B
113-30A	(4/5)	D1 CF0	20	D1 CF1	(4/5)	113-30B
113-31A	(4/5)	D1 CF2	21	D1 PARITY	(4/5)	113-31B
114-24A	(4/5)	CRCC	22	CSIT/COMP	(4/5)	114-25B
113-32B	(4/5)	D1 CK(X)	23	D1 CK(G)	(4/5)	113-32A
110-24B, 113-42A/42B	(4/5)	DIF GND 2	24	DIF GND 2	(4/5)	110-24A, 113-42A/42B
113-34A	(1/5)	D1/D2 DATA 0	25	D1/D2 DATA 1	(1/5)	113-34B
113-35A	(1/5)	D1/D2 DATA 2	26	D1/D2 DATA 3	(1/5)	113-35B
113-36A	(1/5)	D1/D2 DATA 4	27	D1/D2 DATA 5	(1/5)	113-36B
113-37A	(1/5)	D1/D2 DATA 6	28	D1/D2 DATA 7	(1/5)	113-37B
113-38A	(1/5)	D1/D2 DATA 8	29	D1/D2 DATA 9	(1/5)	113-38B
113-39A	(1/5)	D1/D2 HD	30	NC	(3/5)	
113-39B	(1/5)	D1/D2 CF0	31	D1 CF INFO/D2 CF1	(1/5)	113-40A
113-40B	(1/5)	D1/D2 CF2	32	D1/D2 PARITY	(1/5)	113-41B
113-41A	(1/5)	D1 DLY P/D2 SYNC	33	NC	(3/5)	
110-34B, 113-33A/33B	(1/5)	DIF GND 1	34	DIF GND 1	(1/5)	110-34A, 113-33A/33B
113-43B	(1/5)	DIF 4FSC(X)	35	DIF 4FSC(G)	(1/5)	113-43A
NC	(1/5)	ENC1 VCO OUT	36	DEC CK CONT	(4/5)	NC
114-2B	(1/5)	DIF CK 27(X)	37	DIF CK 27(G)	(1/5)	114-2A
NC	(2/5)	ENC2 VCO OUT	38	NC	(3/5)	
114-23A	(4/5)	DIF SIG FLAG	39	DIF VPR JP2	(3/5)	114-24B
117-5A	(3/5)	DPR DIF JP0	40	DPR DIF JP1	(3/5)	117-5B
117-6A	(3/5)	DPR DIF JP2	41	NC	(3/5)	
114-25A	(3/5)	DIF EVR DATA	42	DIF EVR CK	(3/5)	114-26B
114-26A	(3/5)	L;DIF EVR RESET	43	NC	(3/5)	
15V-2	(3/5)	REG +15V-2	44	REG +15V-2	(3/5)	15V-2
	(3/5)	REG +15V-2	45	REG +15V-2	(3/5)	
-15V-2	(3/5)	REG -15V-2	46	REG -15V-2	(3/5)	-15V-2
	(3/5)	REG -15V-2	47	REG -15V-2	(3/5)	
	(3/5)	GND-2	48	GND-2	(3/5)	
	(3/5)	GND-2	49	GND-2	(3/5)	
	(3/5)	GND-2	50	GND-2	(3/5)	

FOR DIF-16B BOARD

	DIF BOARD SHEET No.	CN112 A		CN112 B	DIF BOARD SHEET No.	
	(3/5)	GND-2	1	GND-2	(3/5)	
	(3/5)	GND-2	2	GND-2	(3/5)	
	(3/5)	GND-2	3	GND-2	(3/5)	
8V-2	(3/5)	REG +8V-2	4	REG +8V-2	(3/5)	8V-2
	(3/5)	REG +8V-2	5	REG +8V-2	(3/5)	
-8V-2	(3/5)	REG -8V-2	6	REG -8V-2	(3/5)	-8V-2
	(3/5)	REG -8V-2	7	REG -8V-2	(3/5)	
5V-2	(3/5)	REG +5V-2	8	REG +5V-2	(3/5)	5V-2
	(3/5)	REG +5V-2	9	REG +5V-2	(3/5)	
3.3V-2	(3/5)	REG +3.3V-2	10	REG +3.3V-2	(3/5)	3.3V-2
	(3/5)	REG +3.3V-2	11	REG +3.3V-2	(3/5)	
	(3/5)	REG +3.3V-2	12	REG +3.3V-2	(3/5)	
	(3/5)	REG +3.3V-2	13	REG +3.3V-2	(3/5)	
114-20B	(3/5)	DD SCK	14	DD START	(3/5)	114-20A
114-19A	(3/5)	MODE DATA	15	STATUS DATA	(3/5)	114-19B
114-21A	(3/5)	DIF LOAD	16	DIF DO	(3/5)	114-22A
122-41A	(2/5)	L;DIF CHA CS	17	DIF CHA CK	(2/5)	122-41B
122-42A	(2/5)	DIF CHA DT	18	S CHARA SIG(X)	(2/5)	122-42B
122-43A	(2/5)	S CHARA FRAME	19	S CHARA SIG(G)	(2/5)	122-43B
	(3/5)	NC	20	CHARA FRAME	(3/5)	123-2A
122-33A	(4/5)	DIF SS CSIT/COMP	21	NC	(3/5)	
	(3/5)	NC	22	NC	(3/5)	
	(3/5)	NC	23	NC	(3/5)	
	(3/5)	NC	24	NC	(3/5)	
115-28A	(1/5)	DIF AU 128FSO(G)	25	DIF AU 128FSO(X)	(1/5)	115-28B
	(3/5)	GND-2	26	GND-2	(3/5)	
	(3/5)	NC	27	DIF AU 64FSO	(1/5)	115-30A
	(3/5)	GND-2	28	GND-2	(3/5)	
	(3/5)	NC	29	DIF AU FSO	(1/5)	115-31A
	(3/5)	NC	30	NC	(3/5)	
	(3/5)	NC	31	NC	(3/5)	
	(3/5)	NC	32	NC	(3/5)	
	(3/5)	NC	33	NC	(3/5)	
117-46A	(1/5)	SIF T 5/6	34	SIF T 7/8	(1/5)	117-46B
117-47A	(5/5)	SIF R 5/6	35	SIF R 7/8	(5/5)	117-47B
117-48A	(5/5)	SIF MUTE 5	36	SIF MUTE 6	(5/5)	117-48B
117-49A	(5/5)	SIF MUTE 7	37	SIF MUTE 8	(5/5)	117-49B
	(3/5)	NC	38	NC	(3/5)	
118-46A	(1/5)	SIF T 1/2	39	SIF T 3/4	(1/5)	118-46B
118-47A	(5/5)	SIF R 1/2	40	SIF R 3/4	(5/5)	118-47B
118-48A	(5/5)	SIF MUTE 1	41	SIF MUTE 2	(5/5)	118-48B
118-49A	(5/5)	SIF MUTE 3	42	SIF MUTE 4	(5/5)	118-49B
	(3/5)	NC	43	NC	(3/5)	
121-45B	(3/5)	SIF DATA 0	44	SIF DATA 1	(3/5)	121-46A
121-46B	(3/5)	SIF DATA 2	45	SIF DATA 3	(3/5)	121-47A
121-47B	(3/5)	SIF DATA 4	46	SIF DATA 5	(3/5)	121-48A
121-48B	(3/5)	SIF DATA 6	47	SIF DATA 7	(3/5)	121-49A
	(3/5)	NC	48	NC	(3/5)	
121-49B	(3/5)	SIF ALE	49	SIF WR	(3/5)	121-50A
	(3/5)	NC	50	SIF RD	(3/5)	121-50B

LOT NO.	BOARD NO.
307-402	1-648-560-12
403-	1-648-560-13

Mother board

MB-441 BOARD (2/6)

BOARD NO. 1-648-560-12, 13
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :MB-441BA MCB
DVW-A510P (EK) :MB-441BA MCB
DVW-510 (J, UC) :MB-441B MCB
DVW-510P (EK) :MB-441B MCB
DVW-CA510(J, UC) :MB-441BA MCB
DVW-CA510P(EK) :MB-441BA MCB

DVW-MB441-ALL-PLAY-S/M-03

CN105
CN106
CN110
CN112
CN140

MB-441 (3/6)

MB-441 BOARD		CONNECTION	
SHEET No.	REF. No.		
(1/6)	CN101	TBC-23	BETACAM PB MODEL ONLY (MB-441BA MCB)
	CN102	TBC-24	
	CN103	DM-89	
	CN104	AP-28	
(2/6)	CN105	CUE-1BA/1B	
	CN106	EQ-45BA/45B	
	CN110	DIF-16B	
	CN112		
(3/6)	CN113	VPR-1B	
	CN114		
	CN115		
(4/6)	CN116	DPR-36H	
	CN117		
	CN118		
(5/6)	CN119	APR-1BA/1B	
	CN120		
	CN121		
(6/6)	CN122	SS-52B	
	CN123		
	CN124		
	CN130	RS232C CONNECTOR	
(5/6)	CN131	VIDEO CONTROL CONNECTOR	
(6/6)	CN132	REMOTE 1 IN(9P) CONNECTOR	
	CN133	REMOTE 1 OUT(9P) CONNECTOR	
	CN134	CONTROL PANEL CONNECTOR	
(3/6)	CN135	CP-218B (CN412)	
	CN136	(CN413)	
(5/6)	CN137	CP-220B (CN404)	
(1/6)	CN138	CP-218B (CN414)	
(2/6)	CN140	(CN402)	
(5/6)	CN143	CP-220B (CN401)	
	CN144	(CN403)	
	CN145	VR-152B (CN512)	
	CN147	FP-58B (CN500)	
(6/6)	CN148	SWC-19B (CN148)	
	CN149	HN-181 (CN201)	
	CN150	FAN MOTOR(R)	
	CN151	(CN201)	
	CN152	SWITCHING REGULATOR (CN202)	
	CN153	(CN206)	
	CN154	HN-181 (CN205)	
	CN155	NO CONNECTION	
	CN156	SWITCHING REGULATOR (CN203)	
(1/6)	CN160	CN161 OF MB-441	
	CN161	CN160 OF MB-441	

FOR VPR-1B BOARD

CN113

VPR BOARD SHEET No.	A		B	VPR BOARD SHEET No.
-2	(5/7) GND-2	1	GND-2	(5/7) -2
123-2B	(4/7) CHARA SIG(X)	2	CHARA FRAME	(4/7) 123-2A
-2	(5/7) GND-2	3	CHARA SIG(G)	(4/7) 123-3B
135-14	(4/7) OUTPUT B-Y(G)	4	OUTPUT B-Y(X)	(4/7) 135-13
135-12	(4/7) OUTPUT R-Y(G)	5	OUTPUT R-Y(X)	(4/7) 135-11
135-10	(4/7) OUTPUT Y(G)	6	OUTPUT Y(X)	(4/7) 135-9
-2	(5/7) GND-2	7	GND-2	(5/7) -2
135-8	(4/7) OUTPUT VIDEO 3(G)	8	OUTPUT VIDEO 3(X)	(4/7) 135-7
135-6	(4/7) OUTPUT VIDEO 1/2(G)	9	OUTPUT VIDEO 1/2(X)	(4/7) 135-5
-2	(5/7) GND-2	10	GND-2	(5/7) -2
101-46B	(4/7) VISC Y(G)	11	VISC Y(X)	(4/7) 101-45B
-2	(5/7) GND-2	12	GND-2	(5/7) -2
136-8	(1/7) INPUT B-Y(G)	13	INPUT B-Y(X)	(1/7) 136-7
136-6	(1/7) INPUT R-Y(G)	14	INPUT R-Y(X)	(1/7) 136-5
136-4	(1/7) INPUT Y(G)	15	INPUT Y(X)	(1/7) 136-3
-2	(5/7) GND-2	16	GND-2	(5/7) -2
136-2	(6/7) INPUT REF VIDEO(G)	17	INPUT REF VIDEO(X)	(6/7) 136-1
135-4	(6/7) CF SET(G)	18	CF SET(X)	(6/7) 135-3
135-2	(5/7) REF CONT 0	19	REF CONT 1	(5/7) 135-1
102-46A	(5/7) TBC VPR JP1	20	NC	(4/7)
102-47A	(5/7) TBC VPR JP2	21	B-CAM CF	(3/7) 101-48B
101-48A	(3/7) TBC 4FSC(G)	22	TBC 4FSC(X)	(3/7) 101-47A
-2	(5/7) GND-2	23	GND-2	(5/7) -2
110-14A	(2/7) D1 DATA 0	24	D1 DATA 1	(2/7) 110-14B
110-15A	(2/7) D1 DATA 2	25	D1 DATA 3	(2/7) 110-15B
110-16A	(2/7) D1 DATA 4	26	D1 DATA 5	(2/7) 110-16B
110-17A	(2/7) D1 DATA 6	27	D1 DATA 7	(2/7) 110-17B
110-18A	(2/7) D1 DATA 8	28	D1 DATA 9	(2/7) 110-18B
110-19A	(2/7) D1 HD	29	D1 VD	(2/7) 110-19B
110-20A	(2/7) D1 CF0	30	D1 CF1	(2/7) 110-20B
110-21A	(2/7) D1 CF2	31	D1 PARITY	(2/7) 110-21B
110-23B	(3/7) D1 CK(G)	32	D1 CK(X)	(3/7) 110-23A
110-34A/34B, 113-32B	(2/7) DIF GND 1	33	DIF GND 1	(2/7) 110-34A/34B, 113-33A
110-25A	(3/7) D1/D2 DATA 0	34	D1/D2 DATA 1	(3/7) 110-25B
110-26A	(3/7) D1/D2 DATA 2	35	D1/D2 DATA 3	(3/7) 110-26B
110-27A	(3/7) D1/D2 DATA 4	36	D1/D2 DATA 5	(3/7) 110-27B
110-28A	(3/7) D1/D2 DATA 6	37	D1/D2 DATA 7	(3/7) 110-28B
110-29A	(3/7) D1/D2 DATA 8	38	D1/D2 DATA 9	(3/7) 110-29B
110-30A	(3/7) D1/D2 HD	39	D1/D2 CF0	(3/7) 110-31A
110-31B	(3/7) D1 CF INFO/D2 CF1	40	D1/D2 CF2	(3/7) 110-32A
110-33A	(3/7) D1 DLY P/D2 SYNC	41	D1/D2 PARITY	(3/7) 110-32B
110-24A/24B, 113-42B	(3/7) DIF GND 2	42	DIF GND 2	(3/7) 110-24A/24B, 113-42A
110-35B	(3/7) DIF 4FSC(G)	43	DIF 4FSC(X)	(3/7) 110-35A
15V-2	(5/7) REG +15V-2	44	REG +15V-2	(5/7) 15V-2
	(5/7) REG +15V-2	45	REG +15V-2	(5/7)
-15V-2	(5/7) REG -15V-2	46	REG -15V-2	(5/7) -15V-2
	(5/7) REG -15V-2	47	REG -15V-2	(5/7)
JW-2	(5/7) GND-2	48	GND-2	(5/7) JW-2
	(5/7) GND-2	49	GND-2	(5/7)
	(5/7) GND-2	50	GND-2	(5/7)

FOR VPR-1B BOARD

CN114

VPR BOARD SHEET No.	A		B	VPR BOARD SHEET No.
117-2A	(7/7) DPR CK 18(G)	1	DPR CK 18(X)	(7/7) 117-2B
110-37B	(7/7) DIF CK 27(X)	2	DIF CK 27(X)	(7/7) 110-37A
104-13A	(7/7) REF CK 27(G)	3	REF CK 27(X)	(7/7) 104-12A
-2	(5/7) GND-2	4	GND-2	(5/7) -2
100-46A/46B, 114-5B	(2/7) DEC GND	5	DEC GND	(2/7) 100-46A/46B, 114-5A
100-47A	(2/7) DEC DATA 0	6	DEC DATA 1	(2/7) 100-47B
100-48A	(2/7) DEC DATA 2	7	DEC DATA 3	(2/7) 100-48B
100-49A	(2/7) DEC DATA 4	8	DEC DATA 5	(2/7) 100-49B
100-50A	(2/7) DEC DATA 6	9	DEC DATA 7	(2/7) 100-50B
100-51A	(2/7) DEC DATA 8	10	DEC DATA 9	(2/7) 100-51B
100-52A	(2/7) DEC HD	11	DEC VD	(2/7) 100-52B
100-53A	(2/7) DEC CF INFO	12	DEC PARITY	(2/7) 100-53B
100-54A	(2/7) DEC CK(G)	13	DEC CK(X)	(2/7) 100-54B
100-43A	(2/7) FR RST	14	CF RST	(2/7) 100-43B
100-44A	(2/7) EXT 4FSC(G)	15	EXT 4FSC(X)	(2/7) 100-44B
-2	(5/7) GND-2	16	GND-2	(5/7) -2
100-36A	(5/7) DEC EVR DATA	17	DEC EVR CK	(5/7) 100-36B
100-37A	(5/7) C 100/75	18	L;POWER ON RESET	(5/7) 100-22A
100-39A, 112-15A	(5/7) MODE DATA	19	STATUS DATA	(5/7) 100-39B, 112-15B
100-40A, 112-14B	(5/7) DD START	20	DD SCK	(5/7) 100-40B, 112-14A
112-16A	(5/7) DIF LOAD	21	DEC LOAD	(5/7) 100-41A
112-16B	(5/7) DIF DO	22	DEC DO	(5/7) 100-41B
110-39A	(7/7) DIF SIG FLAG	23	DEC PLL LOCK	(5/7) 100-14B
110-22A	(3/7) CRCC	24	DIF VPR JP2	(5/7) 110-39B
110-42A	(5/7) DIF EVR DATA	25	CSIT/COMP	(3/7) 110-22B
110-43A	(5/7) L;DIF EVR RESET	26	DIF EVR CK	(5/7) 110-42B
101-49A, 114-27B	(3/7) TBC GND	27	TBC GND	(3/7) 101-49A, 114-27A
101-49B	(3/7) B-CAM DATA 0	28	B-CAM DATA 1	(3/7) 101-50A
101-50B	(3/7) B-CAM DATA 2	29	B-CAM DATA 3	(3/7) 101-51A
101-51B	(3/7) B-CAM DATA 4	30	B-CAM DATA 5	(3/7) 101-52A
101-52B	(3/7) B-CAM DATA 6	31	B-CAM DATA 7	(3/7) 101-53A
101-53B	(3/7) B-CAM DATA 8	32	B-CAM DATA 9	(3/7) 101-54A
101-55B	(3/7) B-CAM HD	33	B-CAM VD	(3/7) 101-55A
101-29A	(3/7) B-CAM CF INFO	34	B-CAM PARITY	(3/7) 101-54B
101-32A	(3/7) H;V SHIFT	35	H;H SHIFT	(3/7) 101-18A
101-56B	(2/7) TBC CK 27(G)	36	TBC CK 27(X)	(2/7) 101-56A
-2	(5/7) GND-2	37	GND-2	(5/7) -2
117-36A	(2/7) DPR CK 27(G)	38	DPR CK 27(X)	(2/7) 117-36B
117-37A	(2/7) REC DATA 0	39	REC DATA 1	(2/7) 117-37B
117-38A	(2/7) REC DATA 2	40	REC DATA 3	(2/7) 117-38B
117-39A	(2/7) REC DATA 4	41	REC DATA 5	(2/7) 117-39B
117-40A	(2/7) REC DATA 6	42	REC DATA 7	(2/7) 117-40B
117-41A	(2/7) REC DATA 8	43	REC DATA 9	(2/7) 117-41B
117-42A	(2/7) REC HD	44	REC VD	(2/7) 117-42B
117-43A	(2/7) REC CF INFO	45	REC PARITY	(2/7) 117-43B
114-46B, 117-44A/44B	(2/7) REC GND	46	REC GND	(2/7) 114-46A, 117-44A/44B
122-12A	(5/7) SYIF2 RDY	47	SYIF2 RES	(5/7) 122-12B
122-13A	(5/7) SYIF2 CMD	48	SYIF2 SCK	(5/7) 122-13B
122-14A	(5/7) L;VPR CS	49	REC AU ID0	(2/7) 117-21A
117-21B	(2/7) REC AU ID1	50	REC AU ID2	(2/7) 117-22A

FOR VPR-1B BOARD

CN115

VPR BOARD SHEET No.	A		B	VPR BOARD SHEET No.
JW-2	(5/7) GND-2	1	GND-2	(5/7) JW-2
	(5/7) GND-2	2	GND-2	(5/7)
	(5/7) GND-2	3	GND-2	(5/7)
8V-2	(5/7) REG +8V-2	4	REG +8V-2	(5/7) 8V-2
	(5/7) REG +8V-2	5	REG +8V-2	(5/7)
-8V-2	(5/7) REG -8V-2	6	REG -8V-2	(5/7) -8V-2
	(5/7) REG -8V-2	7	REG -8V-2	(5/7)
5V-2	(5/7) REG +5V-2	8	REG +5V-2	(5/7) 5V-2
	(5/7) REG +5V-2	9	REG +5V-2	(5/7)
3.3V-2	(5/7) REG +3.3V-2	10	REG +3.3V-2	(5/7) 3.3V-2
	(5/7) REG +3.3V-2	11	REG +3.3V-2	(5/7)
	(5/7) REG +3.3V-2	12	REG +3.3V-2	(5/7)
	(5/7) REG +3.3V-2	13	REG +3.3V-2	(5/7)
118-14A	(3/7) PB DATA 0	14	PB DATA 1	(3/7) 118-14B
118-15A	(3/7) PB DATA 2	15	PB DATA 3	(3/7) 118-15B
118-16A	(3/7) PB DATA 4	16	PB DATA 5	(3/7) 118-16B
118-17A	(3/7) PB DATA 6	17	PB DATA 7	(3/7) 118-17B
118-18A	(3/7) PB DATA 8	18	PB DATA 9	(3/7) 118-18B
118-19A	(3/7) PB HD	19	PB VD	(3/7) 118-19B
118-20A	(3/7) PB CF INFO	20	PB PARITY	(3/7) 118-20B
115-21B, 118-21A/21B	(3/7) PB GND	21	PB GND	(3/7) 115-21A, 118-21A/21B
123-4A	(7/7) SS CK 13.5(G)	22	SS CK 13.5(X)	(7/7) 123-3A
118-23A	(7/7) DPR CK 13.5(G)	23	DPR CK 13.5(X)	(7/7) 118-23B
118-25A	(7/7) AUDIO VD	24	H PITCH COR	(7/7) 118-25B
118-26A	(5/7) DPR VPR JP2	25	DPR CF0	(7/7) 118-35A
121-23A	(7/7) AU 512FSO(G)	26	AU 512FSO(X)	(7/7) 121-24A
118-27A	(7/7) DPR AU 256FSO(G)	27	DPR AU 256FSO(X)	(7/7) 118-27B
112-25A	(7/7) DIF AU 128FSO(G)	28	DIF AU 128FSO(X)	(7/7) 112-25B
121-25A	(7/7) AU 128FSO(G)	29	AU 128FSO(X)	(7/7) 121-26A
112-27B	(7/7) DIF AU 64FSO	30	AU 64FSO	(7/7) 121-24B
112-29B	(7/7) DIF AU FSO	31	DPR AU 64FSO	(7/7) 118-26B
118-31A	(7/7) DPR AU FSO	32	AU FSO	(7/7) 121-27A
118-28A	(7/7) DPR 256FSOP(G)	33	DPR 256FSOP(X)	(7/7) 118-28B
121-25B	(7/7) 256FSOP(G)	34	256FSOP(X)	(7/7) 121-26B
121-28B	(7/7) 128FSOP(G)	35	128FSOP(X)	(7/7) 121-28A
121-27B	(7/7) 64FSOP	36	32FSOP	(7/7) 121-29A
118-31B	(7/7) DPR FSOP	37	FSOP	(7/7) 121-29B
121-22A	(7/7) APR PLL LOCK	38	APR VPR JP4	(5/7) 121-23B
118-29A	(7/7) DPR AU 256FSP(G)	39	DPR AU 256FSP(X)	(7/7) 118-29B
118-30A	(7/7) DE 256FS(G)	40	DPR AU FSP	(5/7) 121-21B
118-24A	(7/7) DE 128FS(G)	41	DE 256FS(X)	(7/7) 118-30B
118-32B	(7/7) DE FS	42	DE 128FS(X)	(7/7) 118-24B
118-33B	(7/7) REF VD	43	SS VD	(7/7) 123-1A
118-33A	(7/7) REF HD	44	ADV VD	(7/7) 118-34B
123-1B	(7/7) SS HD	45	AU PLL LOCK	(7/7) 118-35B
118-34A	(7/7) ADV HD	46	TBC VD	(7/7) 101-45A
101-46A	(7/7) TBC HD	47	ANA Ō/E	(7/7) 101-47B, 104-18B
102-43A	(5/7) TBC VPR JP5	48	TBC VD 2	(7/7) 102-44A
102-45A	(5/7) TBC VPR JP7	49	SS CF	(2/7) 123-38A
123-4B	(5/7) L;SS RESET	50	VPR SS JP1	(5/7) 123-38B

CN136

113-17B	INPUT REF VIDEO(X)	1	9 — CP-218B, 413-1
113-17A	INPUT REF VIDEO(G)	2	8
113-15B	INPUT Y(X)	3	9 — CP-218B, 413-3
113-15A	INPUT Y(G)	4	8
113-14B	INPUT R-Y(X)	5	9 — CP-218B, 413-5
113-14A	INPUT R-Y(G)	6	8
113-13B	INPUT B-Y(X)	7	9 — CP-218B, 413-7
113-13A	INPUT B-Y(G)	8	8

CN135

113-19B	REF CONT 1	1	9 — CP-218B, 412-1
113-19A	REF CONT 0	2	8 — CP-218B, 412-2
113-18B	CF SET(X)	3	9 — CP-218B, 412-3
113-18A	CF SET(G)	4	8
113-9B	OUTPUT VIDEO 1/2(X)	5	9 — CP-218B, 412-5
113-9A	OUTPUT VIDEO 1/2(G)	6	8
113-8B	OUTPUT VIDEO 3(X)	7	9 — CP-218B, 412-7
113-8A	OUTPUT VIDEO 3(G)	8	8
113-6B	OUTPUT Y(X)	9	9 — CP-218B, 412-9
113-6A	OUTPUT Y(G)	10	8
113-5B	OUTPUT R-Y(X)	11	9 — CP-218B, 412-11
113-5A	OUTPUT R-Y(G)	12	8
113-4B	OUTPUT B-Y(X)	13	9 — CP-218B, 412-13
113-4A	OUTPUT B-Y(G)	14	8

LOT NO.	BOARD NO.
307-402	1-648-560-12
403-	1-648-560-13

Mother board

MB-441 BOARD (3/6)

BOARD NO. 1-648-560-12, 13
BOARD' S LOT NO. -307-
DVW-A510 (J, UC) :MB-441BA MCB
DVW-A510P (EK) :MB-441BA MCB
DVW-510 (J, UC) :MB-441B MCB
DVW-510P (EK) :MB-441B MCB
DVW-CA510(J, UC) :MB-441BA MCB
DVW-CA510P(EK) :MB-441BA MCB

DVW-MB441-ALL-PLAY-S/M-03

CN113
CN114
CN115
CN135
CN136

1-178

MB-441 BOARD		CONNECTION	
SHEET No.	REF. No.		
(1/6)	CN101	TBC-23	BETACAM PB MODEL ONLY (MB-441BA MCB)
	CN102	TBC-24	
	CN103	DM-89	
	CN104	AP-28	
(2/6)	CN105	CUE-1BA/1B	
	CN106	EQ-45BA/45B	
	CN110 CN112	DIF-16B	
(3/6)	CN113 CN114 CN115	VPR-1B	
(4/6)	CN116 CN117 CN118	DPR-36H	
(5/6)	CN119 CN120 CN121	APR-1BA/1B	
(6/6)	CN122 CN123 CN124	SS-52B	
	CN130	RS232C CONNECTOR	
(5/6)	CN131	VIDEO CONTROL CONNECTOR	
(6/6)	CN132	REMOTE 1 IN(9P) CONNECTOR	
	CN133	REMOTE 1 OUT(9P) CONNECTOR	
	CN134	CONTROL PANEL CONNECTOR	
(3/6)	CN135	CP-218B (CN412)	
	CN136	(CN413)	
(5/6)	CN137	CP-220B (CN404)	
(1/6)	CN138	CP-218B (CN414)	
(2/6)	CN140	(CN402)	
(5/6)	CN143	CP-220B (CN401)	
	CN144	(CN403)	
	CN145	VR-152B (CN512)	
	CN147	FP-58B (CN500)	
(6/6)	CN148	SWC-19B (CN148)	
	CN149	HN-181 (CN201)	
	CN150	FAN MOTOR(R)	
	CN151	(CN201)	
	CN152	SWITCHING REGULATOR (CN202)	
	CN153	(CN206)	
	CN154	HN-181 (CN205)	
	CN155	NO CONNECTION	
	CN156	SWITCHING REGULATOR (CN203)	
(1/6)	CN160	CN161 OF MB-441	
	CN161	CN160 OF MB-441	

FOR DPR-36H BOARD

DPR BOARD SHEET No.	CN116 A		CN116 B		DPR BOARD SHEET No.
-2	(6/7)	GND-2	1	GND-2	(6/7) -2
-2	(6/7)	GND-2	2	GND-2	(6/7) -2
	(7/7)	NC	3	NC	(7/7)
122-19B	(3/7)	VIDEO INDEX RDY	4	DT TR JMP	(2/7) 124-44A
124-44B	(7/7)	SV 1/2 VD	5	MODE TEST	(3/7) 122-7A
122-20A	(1/7)	PAD 0	6	PAD 1	(1/7) 122-20B
122-21A	(1/7)	PAD 2	7	PAD 3	(1/7) 122-21B
122-22A	(1/7)	PAD 4	8	PAD 5	(1/7) 122-22B
122-23A	(1/7)	PAD 6	9	PAD 7	(1/7) 122-23B
122-24A	(1/7)	PS 0	10	PS 1	(1/7) 122-24B
122-25A	(2/7)	PSTB	11	PCS 0	(1/7) 122-26A
122-34B	(1/7)	L;SYS RESET 3.3V	12	ERROR FLAG	(7/7) 122-35B
122-32B	(7/7)	SEG SW	13	WNOVR OFF	(2/7) 122-7B
	(7/7)	NC	14	NC	(7/7)
106-35A	(1/7)	REC CK(G)	15	REC CK(X)	(1/7) 106-35B
106-36A	(1/7)	L;PRCD OFF	16	REC PRTY	(1/7) 106-36B
106-37B	(1/7)	REC AC D0	17	REC AC D1	(1/7) 106-37A
106-38B	(1/7)	REC AC D2	18	REC AC D3	(1/7) 106-38A
106-39B	(1/7)	REC BD D0	19	REC BD D1	(1/7) 106-39A
106-40B	(1/7)	REC BD D2	20	REC BD D3	(1/7) 106-40A
106-41A	(1/7)	L;REC C EN	21	L;REC A EN	(1/7) 106-41B
106-42A	(1/7)	L;REC D EN	22	L;REC B EN	(1/7) 106-42B
106-43B	(5/7)	ADV AC D0	23	ADV AC D1	(5/7) 106-43A
106-44B	(5/7)	ADV AC D2	24	ADV AC D3	(5/7) 106-44A
106-45A	(5/7)	ADV AC CK(G)	25	ADV AC CK(X)	(5/7) 106-45B
106-46A	(5/7)	ADV BD PRTY	26	ADV AC PRTY	(5/7) 106-46B
106-47B	(5/7)	ADV BD D0	27	ADV BD D1	(5/7) 106-47A
106-48B	(5/7)	ADV BD D2	28	ADV BD D3	(5/7) 106-48A
106-49A	(5/7)	ADV BD CK(G)	29	ADV BD CK(X)	(5/7) 106-49B
106-50B	(5/7)	CNF AC D0	30	CNF AC D1	(5/7) 106-50A
106-51B	(5/7)	CNF AC D2	31	CNF AC D3	(5/7) 106-51A
106-52A	(5/7)	CNF AC CK(G)	32	CNF AC CK(X)	(5/7) 106-52B
106-53A	(5/7)	CNF BD PRTY	33	CNF AC PRTY	(5/7) 106-53B
106-54B	(5/7)	CNF BD D0	34	CNF BD D1	(5/7) 106-54A
106-55B	(5/7)	CNF BD D2	35	CNF BD D3	(5/7) 106-55A
106-56A	(5/7)	CNF BD CK(G)	36	CNF BD CK(X)	(5/7) 106-56B
NC	(1/7)	CRC OUT	37	EQ DPR JP0	(1/7) 106-28A
124-14A	(6/7)	DE4NP	38	EQ DPR JP1	(1/7) 106-29A
	(7/7)	NC	39	NC	(7/7)
	(7/7)	NC	40	NC	(7/7)
123-39A	(1/7)	SEG 0	41	SEG 1	(1/7) 123-39B
123-40A	(1/7)	SEG 2(FIELD)	42	START PLS	(1/7) 123-50B
	(7/7)	NC	43	NC	(7/7)
15V-2	(6/7)	REG +15V-2	44	REG +15V-2	(6/7) 15V-2
	(6/7)	REG +15V-2	45	REG +15V-2	(6/7)
-15V-2	(6/7)	REG -15V-2	46	REG -15V-2	(6/7) -15V-2
	(6/7)	REG -15V-2	47	REG -15V-2	(6/7)
	(6/7)	GND-2	48	GND-2	(6/7) -2
-2	(6/7)	GND-2	49	GND-2	(6/7) -2
	(6/7)	GND-2	50	GND-2	(6/7)

FOR DPR-36H BOARD

DPR BOARD SHEET No.	CN117 A		CN117 B		DPR BOARD SHEET No.
-2	(6/7)	GND-2	1	GND-2	(6/7) -2
114-1A	(3/7)	DPR CK 18(G)	2	DPR CK 18(X)	(3/7) 114-1B
-2	(6/7)	GND-2	3	GND-2	(6/7) -2
	(7/7)	NC	4	DT TR JUMP	(7/7) NC
110-40A	(7/7)	DPR DIF JP0	5	DPR DIF JP1	(7/7) 110-40B
110-41A	(7/7)	DPR DIF JP2	6	NC	(7/7)
106-32B	(5/7)	METRIC ADV AC	7	METRIC ADV BD	(5/7) 106-32A
106-33B	(5/7)	METRIC CNF AC	8	METRIC CNF BD	(5/7) 106-33A
	(7/7)	NC	9	MODE PR	(5/7) 122-40A
	(7/7)	NC	10	NC	(7/7)
103-31A	(6/7)	Y RF ENVELOPE(X)	11	Y RF ENVELOPE(G)	(6/7) 103-32A
103-33A	(6/7)	C RF ENVELOPE(X)	12	C RF ENVELOPE(G)	(6/7) 103-34A
-2	(6/7)	GND-2	13	GND-2	(6/7) -2
	(7/7)	NC	14	NC	(7/7)
	(7/7)	NC	15	GND-2	(6/7) -2
106-30B	(6/7)	CNF AC ENV	16	CNF BD ENV	(6/7) 106-31B
106-28B	(6/7)	ADV AC ENV	17	ADV BD ENV	(6/7) 106-29B
	(7/7)	NC	18	GND-2	(6/7) -2
106-21B	(6/7)	PB SAT REC AC	19	EQ GND1	(6/7) 123-26B
106-23B	(6/7)	PB SAT REC BD	20	EQ GND2	(6/7) 123-28B
114-49B	(1/7)	REC AU ID0	21	REC AU ID1	(1/7) 114-50A
114-50B	(1/7)	REC AU ID2	22	NC	(7/7)
-2	(6/7)	GND-2	23	NC	(7/7)
123-41A	(7/7)	DT SEG 0	24	DT SEG 1	(7/7) 123-41B
123-40B	(7/7)	DT 2F	25	SYNC PLS	(7/7) 123-42A
123-42B	(3/7)	PP SV-REF	26	NC	(7/7)
123-43A	(6/7)	H;SV LOCK	27	DIRECTION	(2/7) 123-43B
123-44A	(7/7)	PB 2F	28	PB 4F	(7/7) 123-44B
123-45A	(7/7)	PB 8F	29	CAP 8FG	(2/7) 123-45B
123-46A	(5/7)	5F INERTIA	30	DT JUMP	(2/7) 123-46B
123-47A	(5/7)	REC AC SEL	31	REC BD SEL	(5/7) 123-47B
123-48A	(5/7)	CNF AC SEL	32	CNF BD SEL	(5/7) 123-48B
123-49A	(5/7)	ADV AC SEL	33	ADV BD SEL	(5/7) 123-49B
123-50A	(1/7)	L;B-CAM 3.3V	34	NC	(7/7)
	(7/7)	NC	35	NC	(7/7)
114-38A	(3/7)	DPR CK 27(G)	36	DPR CK 27(X)	(3/7) 114-38B
114-39A	(1/7)	REC DATA 0	37	REC DATA 1	(1/7) 114-39B
114-40A	(1/7)	REC DATA 2	38	REC DATA 3	(1/7) 114-40B
114-41A	(1/7)	REC DATA 4	39	REC DATA 5	(1/7) 114-41B
114-42A	(1/7)	REC DATA 6	40	REC DATA 7	(1/7) 114-42B
114-43A	(1/7)	REC DATA 8	41	REC DATA 9	(1/7) 114-43B
114-44A	(1/7)	REC HD	42	REC VD	(1/7) 114-44B
114-45A	(1/7)	REC CF INFO	43	REC PARITY	(1/7) 114-45B
114-46A/46B, 117-44B	(1/7)	REC GND	44	REC GND	(1/7) 114-46A/46B, 117-44A
	(7/7)	NC	45	NC	(7/7)
112-34A	(7/7)	SIF T 5/6	46	SIF T 7/8	(7/7) 112-34B
112-35A	(7/7)	SIF R 5/6	47	SIF R 7/8	(7/7) 112-35B
112-36A	(7/7)	SIF MUTE 5	48	SIF MUTE 6	(7/7) 112-36B
122-37A	(7/7)	SIF MUTE 7	49	SIF MUTE 8	(7/7) 112-37B
-2	(6/7)	GND-2	50	GND-2	(6/7) -2

FOR DPR-36H BOARD

DPR BOARD SHEET No.	CN118 A		CN118 B		DPR BOARD SHEET No.
	(6/7)	GND-2	1	GND-2	(6/7) -2
-2	(6/7)	GND-2	2	GND-2	(6/7) -2
	(6/7)	GND-2	3	GND-2	(6/7)
8V-2	(6/7)	REG +8V-2	4	REG +8V-2	(6/7) 8V-2
	(6/7)	REG +8V-2	5	REG +8V-2	(6/7)
-8V-2	(6/7)	REG -8V-2	6	REG -8V-2	(6/7) -8V-2
	(6/7)	REG -8V-2	7	REG -8V-2	(6/7)
5V-2	(6/7)	REG +5V-2	8	REG +5V-2	(6/7) 5V-2
	(6/7)	REG +5V-2	9	REG +5V-2	(6/7)
3.3V-2	(6/7)	REG +3.3V-2	10	REG +3.3V-2	(6/7) 3.3V-2
	(6/7)	REG +3.3V-2	11	REG +3.3V-2	(6/7)
	(6/7)	REG +3.3V-2	12	REG +3.3V-2	(6/7)
	(6/7)	REG +3.3V-2	13	REG +3.3V-2	(6/7)
115-14A	(3/7)	PB DATA 0	14	PB DATA 1	(3/7) 115-14B
115-15A	(3/7)	PB DATA 2	15	PB DATA 3	(3/7) 115-15B
115-16A	(3/7)	PB DATA 4	16	PB DATA 5	(3/7) 115-16B
115-17A	(3/7)	PB DATA 6	17	PB DATA 7	(3/7) 115-17B
115-18A	(3/7)	PB DATA 8	18	PB DATA 9	(3/7) 115-18B
115-19A	(3/7)	PB HD	19	PB VD	(3/7) 115-19B
115-20A	(3/7)	PB CF INFO	20	PB PARITY	(3/7) 115-20B
115-21A/21B, 118-21B	(3/7)	PB GND	21	PB GND	(3/7) 115-21A/21B, 118-21A
-2	(6/7)	GND-2	22	GND-2	(6/7) -2
115-23A	(1/7)	DPR CK 13.5(G)	23	DPR CK 13.5(X)	(1/7) 115-23B
115-41A	(1/7)	DE 128FS(G)	24	DE 128FS(X)	(1/7) 115-42B
115-24A	(3/7)	AUDIO VD	25	H PITCH COR	(3/7) 115-24B
115-25A	(3/7)	DPR VPR JP2	26	DPR AU 64FSO	(1/7) 115-31B
115-27A	(1/7)	DPR AU 256FSO(G)	27	DPR AU 256FSO(X)	(1/7) 115-27B
115-33A	(1/7)	DPR 256FSOP(G)	28	DPR 256FSOP(X)	(1/7) 115-33B
115-39A	(3/7)	DPR AU 256FSP(G)	29	DPR AU 256FSP(X)	(3/7) 115-39B
115-40A	(1/7)	DE 256FS(G)	30	DE 256FS(X)	(1/7) 115-41B
115-32A	(1/7)	DPR AU FSO	31	DPR FSOP	(1/7) 115-37A
NC	(3/7)	DPR AU FSP	32	DE FS	(1/7) 115-42A
115-44A	(3/7)	REF HD	33	REF VD	(3/7) 115-43A
115-46A	(3/7)	ADV HD	34	ADV VD	(3/7) 115-44B
115-25B	(3/7)	DPR CF0	35	AU PLL LOCK	(2/7) 115-45B
121-30A	(2/7)	AD R 1/2	36	DA T 1/2	(2/7) 121-30B
121-31A	(2/7)	AD R 3/4	37	DA T 3/4	(2/7) 121-31B
121-32A	(2/7)	AES R 1/2	38	AES T 1/2	(2/7) 121-32B
121-33A	(2/7)	AES R 3/4	39	AES T 3/4	(2/7) 121-33B
121-34A	(2/7)	AES MUTE 1/2	40	MON L/R	(2/7) 121-34B
121-35A	(2/7)	AES MUTE 3/4	41	AU SR CS	(3/7) 121-35B
121-36B	(2/7)	AU SR START	42	AU SR CLOCK	(2/7) 121-37B
121-38B	(2/7)	AU SR OUT	43	AU SR IN	(2/7) 121-39B
121-40B	(2/7)	L;POWER ON PULSE	44	APR JP0	(3/7) 121-41B
121-42B	(3/7)	APR JP1	45	APR JP2	(3/7) 121-43B
112-39A	(2/7)	SIF T 1/2	46	SIF T 3/4	(2/7) 112-39B
112-40A	(2/7)	SIF R 1/2	47	SIF R 3/4	(2/7) 112-40B
112-41A	(2/7)	SIF MUTE 1	48	SIF MUTE 2	(2/7) 112-41B
112-42A	(2/7)	SIF MUTE 3	49	SIF MUTE 4	(2/7) 112-42B
-2	(6/7)	GND-2	50	GND-2	(6/7) -2

LOT NO.	BOARD NO.
307-402	1-648-560-12
403-	1-648-560-13

Mother board

MB-441 BOARD (4/6)

BOARD NO. 1-648-560-12, 13
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :MB-441BA MCB
DVW-A510P (EK) :MB-441BA MCB
DVW-510 (J, UC) :MB-441B MCB
DVW-510P (EK) :MB-441B MCB
DVW-CA510(J, UC) :MB-441BA MCB
DVW-CA510P(EK) :MB-441BA MCB

DVW-MB441-ALL-PLAY-S/M-03

CN116
CN117
CN118

MB-441 (5/6)

MB-441 BOARD		CONNECTION	
SHEET No.	REF. No.		
(1/6)	CN101	TBC-23	BETACAM PB MODEL ONLY (MB-441BA MCB)
	CN102	TBC-24	
	CN103	DM-89	
	CN104	AP-28	
(2/6)	CN105	CUE-1BA/1B	
	CN106	EQ-45BA/45B	
	CN110	DIF-16B	
	CN112		
(3/6)	CN113	VPR-1B	
	CN114		
	CN115		
(4/6)	CN116	DPR-36H	
	CN117		
	CN118		
(5/6)	CN119	APR-1BA/1B	
	CN120		
	CN121		
(6/6)	CN122	SS-52B	
	CN123		
	CN124		
	CN130	RS232C CONNECTOR	
(5/6)	CN131	VIDEO CONTROL CONNECTOR	
(6/6)	CN132	REMOTE 1 IN(9P) CONNECTOR	
	CN133	REMOTE 1 OUT(9P) CONNECTOR	
	CN134	CONTROL PANEL CONNECTOR	
(3/6)	CN135	CP-218B (CN412)	
	CN136	(CN413)	
(5/6)	CN137	CP-220B (CN404)	
(1/6)	CN138	CP-218B (CN414)	
(2/6)	CN140	CP-220B (CN402)	
(5/6)	CN143	(CN401)	
	CN144	(CN403)	
	CN145	VR-152B (CN512)	
	CN147	FP-58B (CN500)	
(6/6)	CN148	SWC-19B (CN148)	
	CN149	HN-181 (CN201)	
	CN150	FAN MOTOR(R)	
	CN151	SWITCHING REGULATOR (CN201)	
	CN152	(CN202)	
	CN153	(CN206)	
	CN154	HN-181 (CN205)	
	CN155	NO CONNECTION	
	CN156	SWITCHING REGULATOR (CN203)	
(1/6)	CN160	CN161 OF MB-441	
	CN161	CN160 OF MB-441	

FOR APR-1BA/1B BOARD

APR BOARD SHEET No.	CN119 A		CN119 B		APR BOARD SHEET No.	
142-2	(1/9)	CH-1 IN(X)	1	CH-1 IN(Y)	(1/9)	142-3
142-4	(1/9)	CH-1 IN(G)	2	CH-1 IN(G)	(1/9)	142-4
142-5	(1/9)	CH-2 IN(X)	3	CH-2 IN(Y)	(1/9)	142-6
142-7	(1/9)	CH-2 IN(G)	4	CH-2 IN(G)	(1/9)	142-7
142-8	(2/9)	CH-3 IN(X)	5	CH-3 IN(Y)	(2/9)	142-9
142-10	(2/9)	CH-3 IN(G)	6	CH-3 IN(G)	(2/9)	142-10
142-11	(2/9)	CH-4 IN(X)	7	CH-4 IN(Y)	(2/9)	142-12
142-13	(2/9)	CH-4 IN(G)	8	CH-4 IN(G)	(2/9)	142-13
	(9/9)	NC	9	NC	(9/9)	
	(9/9)	NC	10	NC	(9/9)	
	(9/9)	NC	11	NC	(9/9)	
	(9/9)	NC	12	NC	(9/9)	
	(9/9)	NC	13	NC	(9/9)	
	(9/9)	NC	14	NC	(9/9)	
	(9/9)	NC	15	NC	(9/9)	
	(9/9)	NC	16	NC	(9/9)	
104-47A	(1/9)	B PB CH-1(X)	17	B PB CH-1(X)	(1/9)	104-47A
104-47B	(1/9)	B PB CH-1(G)	18	B PB CH-1(G)	(1/9)	104-47B
104-49A	(1/9)	B PB CH-2(X)	19	B PB CH-2(X)	(1/9)	104-49A
104-49B	(1/9)	B PB CH-2(G)	20	B PB CH-2(G)	(1/9)	104-49B
104-51A	(2/9)	B PB CH-3(X)	21	B PB CH-3(X)	(2/9)	104-51A
104-51B	(2/9)	B PB CH-3(G)	22	B PB CH-3(G)	(2/9)	104-51B
104-53A	(2/9)	B PB CH-4(X)	23	B PB CH-4(X)	(2/9)	104-53A
104-53B	(2/9)	B PB CH-4(G)	24	B PB CH-4(G)	(2/9)	104-53B
	(9/9)	NC	25	NC	(9/9)	
143-1	(3/9)	CH-1 OUT(X)	26	CH-1 OUT(Y)	(3/9)	143-2
143-3	(3/9)	CH-1 OUT(G)	27	CH-1 OUT(G)	(3/9)	143-3
143-4	(3/9)	CH-2 OUT(X)	28	CH-2 OUT(Y)	(3/9)	143-5
143-6	(3/9)	CH-2 OUT(G)	29	CH-2 OUT(G)	(3/9)	143-6
143-7	(4/9)	CH-3 OUT(X)	30	CH-3 OUT(Y)	(4/9)	143-8
143-9	(4/9)	CH-3 OUT(G)	31	CH-3 OUT(G)	(4/9)	143-9
143-10	(4/9)	CH-4 OUT(X)	32	CH-4 OUT(Y)	(4/9)	143-11
143-12	(4/9)	CH-4 OUT(G)	33	CH-4 OUT(G)	(4/9)	143-12
144-1	(5/9)	MONITOR L OUT(X)	34	MONITOR L OUT(Y)	(5/9)	144-2
144-3	(5/9)	MONITOR L OUT(G)	35	MONITOR L OUT(G)	(5/9)	144-3
144-4	(5/9)	MONITOR R OUT(X)	36	MONITOR R OUT(Y)	(5/9)	144-5
144-6	(5/9)	MONITOR R OUT(G)	37	MONITOR R OUT(G)	(5/9)	144-6
137-1	(1/9)	CH-1 MIC ON/OFF	38	CH-2 MIC ON/OFF	(1/9)	137-2
137-3	(2/9)	CH-3 MIC ON/OFF	39	CH-4 MIC ON/OFF	(2/9)	137-4
105-35A	(5/9)	CUE MONITOR(X)	40	CUE MONITOR(X)	(5/9)	105-35A
105-35B	(5/9)	CUE MONITOR(G)	41	CUE MONITOR(G)	(5/9)	105-35B
	(9/9)	NC	42	NC	(9/9)	
	(9/9)	NC	43	NC	(9/9)	
15V-2	(8/9)	REG +15V-2	44	REG +15V-2	(8/9)	15V-2
	(8/9)	REG +15V-2	45	REG +15V-2	(8/9)	
-15V-2	(8/9)	REG -15V-2	46	REG -15V-2	(8/9)	-15V-2
	(8/9)	REG -15V-2	47	REG -15V-2	(8/9)	
3 1 2	(8/9)	GND-2	48	GND-2	(8/9)	2 3
	(8/9)	GND-2	49	GND-2	(8/9)	
	(8/9)	GND-2	50	GND-2	(8/9)	

FOR APR-1BA/1B BOARD

APR BOARD SHEET No.	CN120 A		CN120 B		APR BOARD SHEET No.	
	(9/9)	NC	1	NC	(9/9)	
	(9/9)	NC	2	NC	(9/9)	
	(9/9)	NC	3	NC	(9/9)	
	(9/9)	NC	4	NC	(9/9)	
	(9/9)	NC	5	NC	(9/9)	
	(9/9)	NC	6	NC	(9/9)	
	(9/9)	NC	7	NC	(9/9)	
	(9/9)	NC	8	NC	(9/9)	
	(9/9)	NC	9	NC	(9/9)	
	(9/9)	NC	10	NC	(9/9)	
	(9/9)	NC	11	NC	(9/9)	
	(9/9)	NC	12	NC	(9/9)	
	(9/9)	NC	13	NC	(9/9)	
	(9/9)	NC	14	NC	(9/9)	
	(9/9)	NC	15	NC	(9/9)	
	(9/9)	NC	16	NC	(9/9)	
	(9/9)	NC	17	NC	(9/9)	
	(9/9)	NC	18	NC	(9/9)	
	(9/9)	NC	19	NC	(9/9)	
	(9/9)	NC	20	NC	(9/9)	
	(9/9)	NC	21	NC	(9/9)	
	(9/9)	NC	22	NC	(9/9)	
	(9/9)	NC	23	NC	(9/9)	
	(9/9)	NC	24	NC	(9/9)	
NC	(7/9)	SW0	25	SW1	(7/9)	NC
105-19A	(9/9)	CUE JP0	26	CUE JP1	(9/9)	105-19B
	(9/9)	NC	27	NC	(9/9)	
145-1	(5/9)	MONI L(X)	28	MONI L(G)	(5/9)	145-2
145-4	(5/9)	MONI L VAR(G)	29	MONI L VAR(X)	(5/9)	145-3
145-5	(5/9)	MONI R(X)	30	MONI R(G)	(5/9)	145-6
145-8	(5/9)	MONI R VAR(G)	31	MONI R VAR(X)	(5/9)	145-7
	(9/9)	NC	32	NC	(9/9)	
147-7	(1/9)	CH-1 REC GAIN	33	CH-2 REC GAIN	(1/9)	147-8
147-9	(2/9)	CH-3 REC GAIN	34	CH-4 REC GAIN	(2/9)	147-10
147-11	(1/9)	REC GAIN GND	35	REC GAIN GND	(1/9)	147-11
105-33A	(7/9)	CUE PEAK SIGNAL	36	H;SV LOCK	(9/9)	123-43A
105-43B	(7/9)	CUE TEST	37	L;DT LOCK	(7/9)	123-8B
105-44A	(7/9)	LTC ERASE DET	38	CUE TEST SIG(X)	(8/9)	105-37A
105-45A	(7/9)	FULL ERASE DET	39	CUE ERASE DET	(7/9)	105-45B
105-46A	(7/9)	CUE EE DET	40	CUE BIAS DET	(7/9)	105-46B
105-47A	(7/9)	L;LTC EQ ON	41	CUE OUT DET	(7/9)	105-47B
105-48A	(7/9)	H;CUE ERASE ON	42	H;LTC ERASE ON	(7/9)	105-48B
105-49A	(7/9)	OSC H;OFF/L;ON	43	H;FULL ERASE ON	(7/9)	105-49B
105-50A	(7/9)	LTC H;PB/L;REC	44	H;CUE BIAS ON	(7/9)	105-50B
105-51A	(7/9)	H;LTC HPF ON	45	L;LTC EQ NORM	(7/9)	105-51B
105-52A	(7/9)	H;CUE REC MUTE	46	H;LTC LPF ON	(7/9)	105-52B
105-53A	(7/9)	H;CUE PB MUTE	47	CUE H;PB/L;EE	(7/9)	105-53B
105-54A	(7/9)	CUE H;PB/L;REC	48	H;DIGITAL/L;ANALOG	(7/9)	105-54B, 104-23B
105-55A	(7/9)	H;SLOW EQ ON	49	H;METAL/L;OXIDE	(7/9)	105-55B, 104-24B
105-43A, 147-23	(7/9)	L;POWER ON MUTE	50	H;AUDIO ATT ON	(7/9)	105-56B

CN142 :NM

	NC	1
119-1A	CH-1 IN(X)	2
119-1B	CH-1 IN(Y)	3
119-2A/2B	CH-1 IN(G)	4
119-3A	CH-2 IN(X)	5
119-3B	CH-2 IN(Y)	6
119-4A/4B	CH-2 IN(G)	7
119-5A	CH-3 IN(X)	8
119-5B	CH-3 IN(Y)	9
119-6A/6B	CH-3 IN(G)	10
119-7A	CH-4 IN(X)	11
119-7B	CH-4 IN(Y)	12
119-8A/8B	CH-4 IN(G)	13

CN143

119-25A	CH-1 OUT(X)	1	9 CP-220B, 401-1
119-26B	CH-1 OUT(Y)	2	2 CP-220B, 401-2
119-27A/27B	CH-1 OUT(G)	3	8
119-28A	CH-2 OUT(X)	4	9 CP-220B, 401-4
119-28B	CH-2 OUT(Y)	5	2 CP-220B, 401-5
119-29A/29B	CH-2 OUT(G)	6	8
119-30A	CH-3 OUT(X)	7	9 CP-220B, 401-7
119-30B	CH-3 OUT(Y)	8	2 CP-220B, 401-8
119-31A/31B	CH-3 OUT(G)	9	8
119-32A	CH-4 OUT(X)	10	9 CP-220B, 401-10
119-32B	CH-4 OUT(Y)	11	2 CP-220B, 401-11
119-33A/33B	CH-4 OUT(G)	12	8

CN144

119-34A	MONITOR L OUT(X)	1	9 CP-220B, 403-1
119-34B	MONITOR L OUT(Y)	2	2 CP-220B, 403-2
119-35A/35B	MONITOR L OUT(G)	3	8
119-36A	MONITOR R OUT(X)	4	9 CP-220B, 403-4
119-36B	MONITOR R OUT(Y)	5	2 CP-220B, 403-5
119-37A/37B	MONITOR R OUT(G)	6	8
	NC	7	

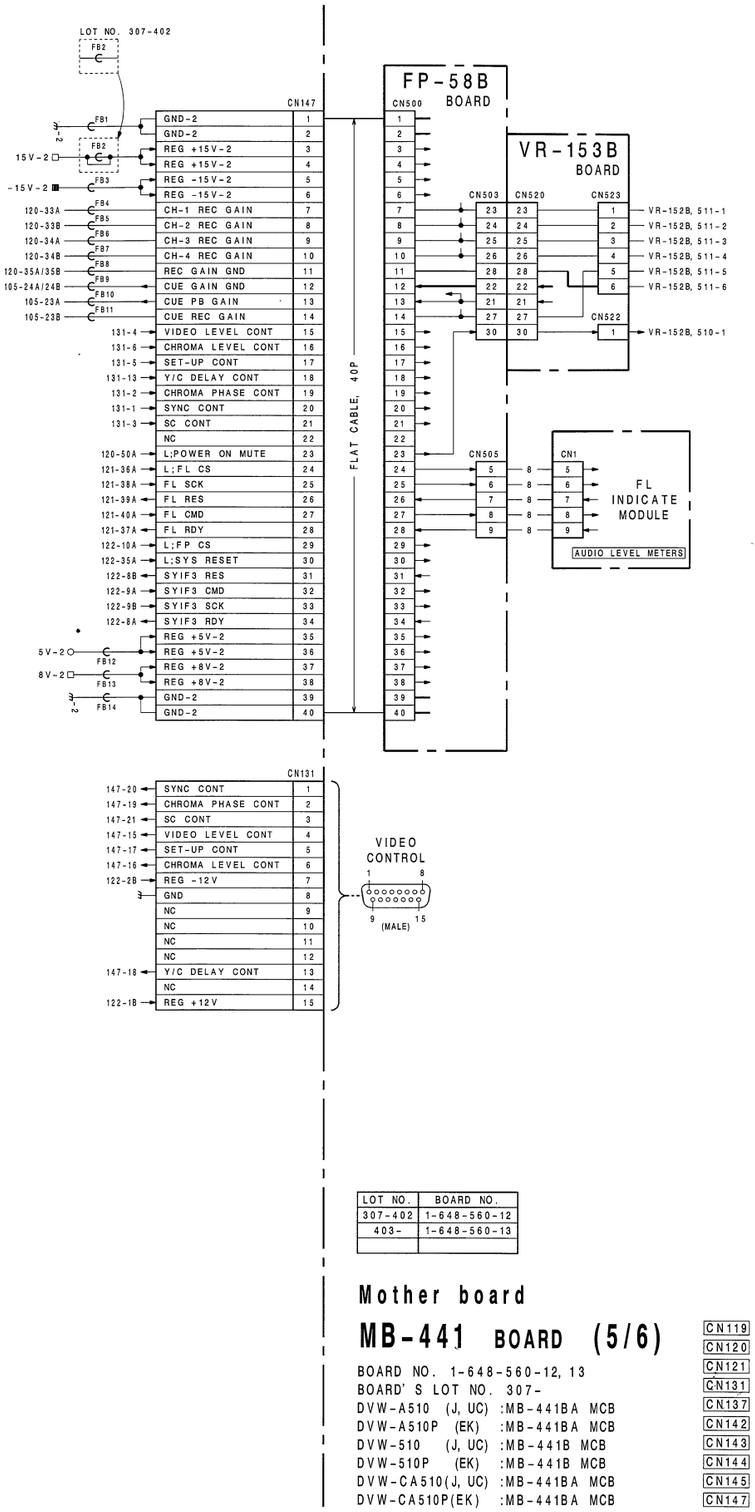
CN145

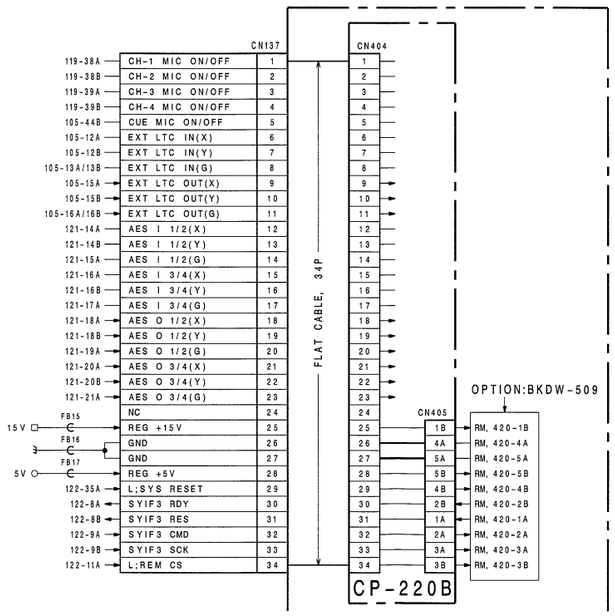
120-28A	MONI L(X)	1	9 VR-152B, 512-1
120-28B	MONI L(G)	2	8
120-29B	MONI L VAR(X)	3	9 VR-152B, 512-3
120-29A	MONI L VAR(G)	4	8
120-30A	MONI R(X)	5	9 VR-152B, 512-5
120-30B	MONI R(G)	6	8
120-31B	MONI R VAR(X)	7	9 VR-152B, 512-7
120-31A	MONI R VAR(G)	8	8

1-180

FOR APR-1BA/1B BOARD

APR BOARD SHEET No.	CN121 A		CN121 B	APR BOARD SHEET No.
(8/9)	GND-2	1	GND-2	(8/9)
(8/9)	GND-2	2	GND-2	(8/9)
(8/9)	GND-2	3	GND-2	(8/9)
(8/9)	REG +8V-2	4	REG +8V-2	(8/9)
(8/9)	REG +8V-2	5	REG +8V-2	(8/9)
(8/9)	REG -8V-2	6	REG -8V-2	(8/9)
(8/9)	REG -8V-2	7	REG -8V-2	(8/9)
(8/9)	REG +5V-2	8	REG +5V-2	(8/9)
(8/9)	REG +5V-2	9	REG +5V-2	(8/9)
(8/9)	REG +3.3V-2	10	REG +3.3V-2	(8/9)
(8/9)	REG +3.3V-2	11	REG +3.3V-2	(8/9)
(8/9)	REG +3.3V-2	12	REG +3.3V-2	(8/9)
(8/9)	REG +3.3V-2	13	REG +3.3V-2	(8/9)
(6/9)	AES I 1/2(X)	14	AES I 1/2(Y)	(6/9)
(6/9)	AES I 1/2(G)	15	NC	(9/9)
(6/9)	AES I 3/4(X)	16	AES I 3/4(Y)	(6/9)
(6/9)	AES I 3/4(G)	17	DRUM LOCK	(7/9)
(6/9)	AES O 1/2(X)	18	AES O 1/2(Y)	(6/9)
(6/9)	AES O 1/2(G)	19	CAPSTAN LOCK	(7/9)
(6/9)	AES O 3/4(X)	20	AES O 3/4(Y)	(6/9)
(6/9)	AES O 3/4(G)	21	DPR AU FSP	(9/9)
(7/9)	APR PLL LOCK	22	L;SYS RESET	(7/9)
(9/9)	AU 512FSO(G)	23	APR VPR JP4	(9/9)
(9/9)	AU 512FSO(X)	24	AU 64FSO	(9/9)
(9/9)	AU 128FSO(G)	25	256FSOP(G)	(9/9)
(9/9)	AU 128FSO(X)	26	256FSOP(X)	(9/9)
(9/9)	AU FSO	27	64FSOP	(9/9)
(9/9)	128FSOP(X)	28	128FSOP(G)	(9/9)
(9/9)	32FSOP	29	FSOP	(9/9)
(9/9)	AD R 1/2	30	DA T 1/2	(9/9)
(9/9)	AD R 3/4	31	DA T 3/4	(9/9)
(9/9)	AES R 1/2	32	AES T 1/2	(9/9)
(9/9)	AES R 3/4	33	AES T 3/4	(9/9)
(9/9)	AES MUTE 1/2	34	MON L/R	(9/9)
(9/9)	AES MUTE 3/4	35	AU SR CS	(7/9)
(7/9)	L;FL CS	36	AU SR START	(7/9)
(7/9)	FL RDY	37	AU SR CLOCK	(7/9)
(7/9)	FL SCK	38	AU SR OUT	(7/9)
(7/9)	FL RES	39	AU SR IN	(7/9)
(7/9)	FL CMD	40	L;POWER ON PULSE	(7/9)
(7/9)	L;APR CS	41	APR JP0	(9/9)
(7/9)	SYIF3 SCK	42	APR JP1	(7/9)
(7/9)	SYIF3 CMD	43	APR JP2	(9/9)
(7/9)	SYIF3 RES	44	SY 1/2 VD	(7/9)
(7/9)	SYIF3 RDY	45	SIF DATA 0	(9/9)
(9/9)	SIF DATA 1	46	SIF DATA 2	(9/9)
(9/9)	SIF DATA 3	47	SIF DATA 4	(9/9)
(9/9)	SIF DATA 5	48	SIF DATA 6	(9/9)
(9/9)	SIF DATA 7	49	SIF ALE	(9/9)
(9/9)	SIF WR	50	SIF RD	(9/9)





LOT NO.	BOARD NO.
307-402	1-648-560-12
403-	1-648-560-13

Mother board

MB-441 BOARD (5/6)

BOARD NO. 1-648-560-12, 13
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :MB-441BA MCB
DVW-A510P (EK) :MB-441BA MCB
DVW-510 (J, UC) :MB-441B MCB
DVW-510P (EK) :MB-441B MCB
DVW-CA510(J, UC) :MB-441BA MCB
DVW-CA510P(EK) :MB-441BA MCB

CN119
CN120
CN121
CN131
CN137
CN142
CN143
CN144
CN145
CN147

DVW-MB441-ALL-PLAY-S/M-02

MB-441 (6/6)

MB-441 BOARD		CONNECTION	
SHEET No.	REF. No.		
(1/6)	CN101	TBC-23	BETACAM PB MODEL ONLY (MB-441BA MCB)
	CN102	TBC-24	
	CN103	DM-89	
	CN104	AP-28	
(2/6)	CN105	CUE-1BA/1B	
	CN106	EQ-45BA/45B	
	CN110	DIF-16B	
	CN112		
(3/6)	CN113	VPR-1B	
	CN114		
	CN115		
(4/6)	CN116	DPR-36H	
	CN117		
	CN118		
(5/6)	CN119	APR-1BA/1B	
	CN120		
	CN121		
(6/6)	CN122	SS-52B	
	CN123		
	CN124		
	CN130	RS232C CONNECTOR	
(5/6)	CN131	VIDEO CONTROL CONNECTOR	
(6/6)	CN132	REMOTE 1 IN(9P) CONNECTOR	
	CN133	REMOTE 1 OUT(9P) CONNECTOR	
	CN134	CONTROL PANEL CONNECTOR	
(3/6)	CN135	CP-218B (CN412)	
	CN136		(CN413)
(5/6)	CN137	CP-220B (CN404)	
(1/6)	CN138	CP-218B (CN414)	
(2/6)	CN140		(CN402)
(5/6)	CN143	CP-220B (CN401)	
	CN144		(CN403)
	CN145	VR-152B (CN512)	
	CN147	FP-58B (CN500)	
(6/6)	CN148	SWC-19B (CN148)	
	CN149	HN-181 (CN201)	
	CN150	FAN MOTOR(R)	
	CN151	SWITCHING REGULATOR (CN201)	
	CN152		(CN202)
	CN153		(CN206)
	CN154	HN-181 (CN205)	
	CN155	NO CONNECTION	
	CN156	SWITCHING REGULATOR (CN203)	
(1/6)	CN160	CN161 OF MB-441	
	CN161	CN160 OF MB-441	

FOR SS-52B BOARD

CN122

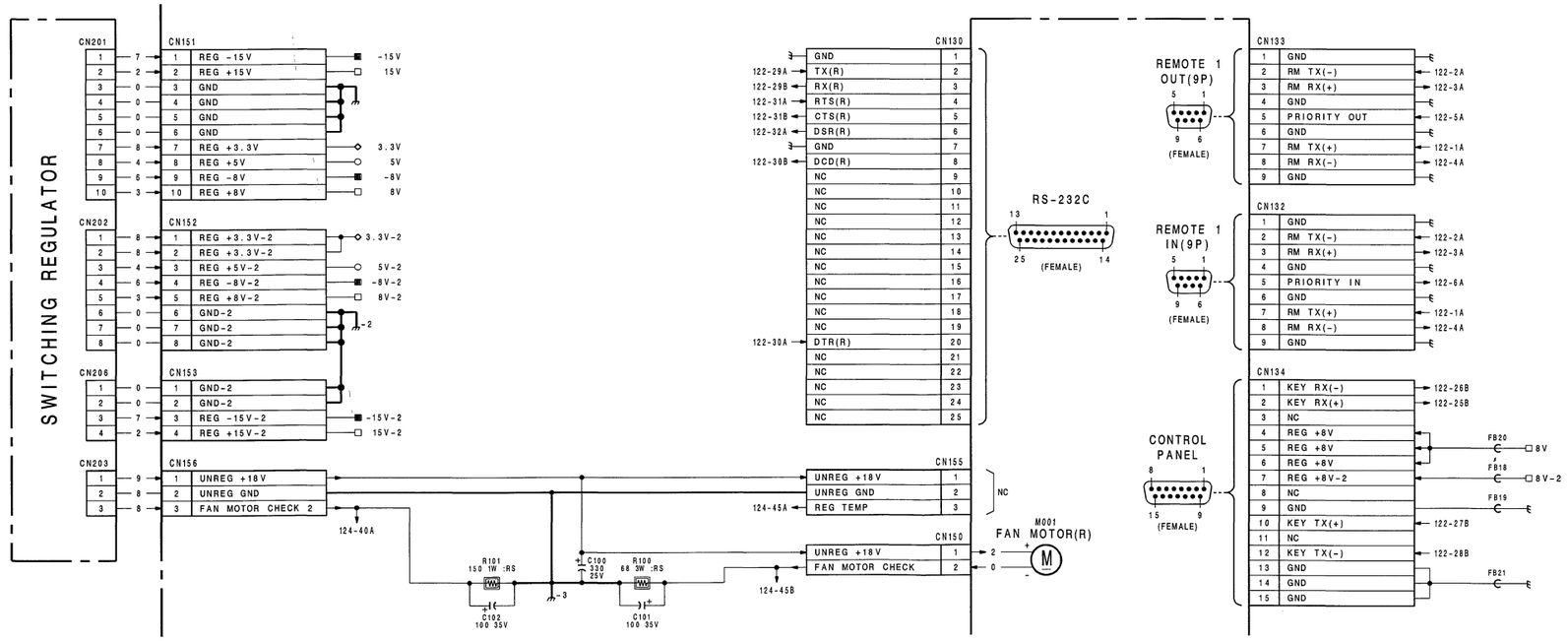
SS BOARD SHEET No.	A		B	SS BOARD SHEET No.
(5/12)	RM TX(+)	1	REG +12V	(2/12)
(5/12)	RM TX(-)	2	REG -12V	(2/12)
(5/12)	RM RX(+)	3	METRIC ADV BD	(1/12)
(5/12)	RM RX(-)	4	METRIC ADV AC	(1/12)
(5/12)	PRIORITY OUT	5	METRIC CNF BD	(1/12)
(5/12)	PRIORITY IN	6	METRIC CNF AC	(1/12)
(3/12)	MODE TEST	7	WNOVR OFF	(3/12)
(3/12)	SYIF3 RDY	8	SYIF3 RES	(3/12)
(3/12)	SYIF3 CMD	9	SYIF3 SCK	(3/12)
(3/12)	L;FP CS	10	L;APR CS	(3/12)
(3/12)	L;REM CS	11	L;HM CS	(3/12)
(3/12)	SYIF2 RDY	12	SYIF2 RES	(3/12)
(3/12)	SYIF2 CMD	13	SYIF2 SCK	(3/12)
(3/12)	L;VPR CS	14	L;TBC CS	(3/12)
(1/12)	PP CS	15	L;DM CS	(3/12)
(1/12)	SCS 0	16	SCS 1	(1/12)
(1/12)	SYIF1 CMD	17	SYIF1 SCK	(1/12)
(1/12)	EQ STB1	18	EQ STB2	(1/12)
(1/12)	EQ STB3	19	VIDEO INDEX RDY	(3/12)
(3/12)	PAD 0	20	PAD 1	(3/12)
(3/12)	PAD 2	21	PAD 3	(3/12)
(3/12)	PAD 4	22	PAD 5	(3/12)
(3/12)	PAD 6	23	PAD 7	(3/12)
(3/12)	PS 0	24	PS 1	(3/12)
(3/12)	PSTB	25	KEY RX(+)	(5/12)
(3/12)	PCS 0	26	KEY RX(-)	(5/12)
(1/12)	NC	27	KEY TX(+)	(5/12)
(1/12)	NC	28	KEY TX(-)	(5/12)
(2/12)	TX(R)	29	RX(R)	(2/12)
(2/12)	DTR(R)	30	DCD(R)	(2/12)
(2/12)	RTS(R)	31	CTS(R)	(2/12)
(2/12)	DSR(R)	32	SEG SW	(3/12)
(8/12)	DIF SS CSIT/COMP	33	DIF SS 4FSC(G)	(1/12)
(1/12)	DIF SS 4FSC(X)	34	L;SYS RESET 3.3V	(3/12)
(1/12)	L;SYS RESET	35	ERROR FLAG	(7/12)
(3/12)	SVCNT ERR	36	L;B-CAM SEL	(3/12)
(3/12)	PRTY ERR	37	L;SYSTEM EE1	(3/12)
(3/12)	PRTY CLR	38	L;SYSTEM EE2	(3/12)
(3/12)	PA3	39	H;REC LOCK OUT	(3/12)
(3/12)	MODE PR	40	H;REV/L;FWD	(3/12)
(3/12)	L;DIF CHA CS	41	DIF CHA CK	(3/12)
(3/12)	DIF CHA DT	42	S CHARA SIG(X)	(4/12)
(4/12)	S CHARA FRAME	43	S CHARA SIG(G)	(4/12)
(6/12)	REG +15V-2	44	REG +15V-2	(6/12)
(3/12)	REG +15V-2	45	REG +15V-2	(3/12)
(6/12)	REG -15V-2	46	REG -15V-2	(6/12)
(3/12)	REG -15V-2	47	REG -15V-2	(3/12)
(6/12)	GND-2	48	GND-2	(6/12)
(6/12)	GND-2	49	GND-2	(6/12)
(6/12)	GND-2	50	GND-2	(6/12)

FOR SS-52B BOARD

CN123

SS BOARD SHEET No.	A		B	SS BOARD SHEET No.
(3/12)	SS VD	1	SS HD	(3/12)
(4/12)	CHARA FRAME	2	CHARA SIG(X)	(4/12)
(3/12)	SS CK 13.5(X)	3	CHARA SIG(G)	(4/12)
(3/12)	SS CK 13.5(G)	4	L;SS RESET	(1/12)
(4/12)	PB LTC	5	LTC SOURCE	(4/12)
(4/12)	REC LTC	6	LTC OUT	(4/12)
(8/12)	CAPSTAN LOCK	7	DRUM LOCK	(8/12)
(7/12)	SY 1/2 VD	8	L;DT LOCK	(9/12)
(10/12)	Y WZ	9	C WZ	(10/12)
(7/12)	Y PB SYNC	10	SERVO V	(7/12)
(9/12)	DT V	11	PB O/E	(10/12)
(8/12)	L;REV/H;FWD	12	L;NOISELESS PB	(8/12)
(10/12)	L;DT	13	JUMP ID1	(9/12)
(8/12)	PB FP1	14	PB FP2	(8/12)
(5/12)	DM TBC SS JP0	15	DM TBC SS JP1	(5/12)
(7/12)	ADV Y SW PLS	16	ADV C SW PLS	(7/12)
(7/12)	L;Y DO PLS	17	L;C DO PLS	(7/12)
(8/12)	H;FAST SEARCH	18	L;SLOW BID	(8/12)
(10/12)	L;RF Y VBLK	19	L;RF C VBLK	(10/12)
(6/12)	DM SS JP3	20	DM SS JP2	(6/12)
(9/12)	Y RF ENVELOPE(X)	21	Y RF ENVELOPE(G)	(9/12)
(9/12)	ADV AC ENV	22	ADV BD ENV	(9/12)
(8/12)	SAT CK(G)	23	SAT CK(X)	(8/12)
(8/12)	GND-2	24	GND-2	(8/12)
(8/12)	GND-2	25	PB SAT REC AC	(8/12)
(8/12)	GND-2	26	EQ GND1	(8/12)
(8/12)	GND-2	27	PB SAT REC BD	(8/12)
(8/12)	GND-2	28	EQ GND2	(8/12)
(8/12)	GND-2	29	PB SAT ADV AC	(8/12)
(8/12)	EQ SS JP1	30	EQ GND3	(8/12)
(8/12)	GND-2	31	PB SAT ADV BD	(8/12)
(7/12)	REC SAT AC	32	EQ GND4	(8/12)
(8/12)	GND-2	33	L;FAST SEARCH	(8/12)
(7/12)	L;SAT AC EN	34	EQ SS JP2	(8/12)
(7/12)	L;FE A EN	35	L;FE B EN	(7/12)
(7/12)	CNF AC FREQ	36	CNF BD FREQ	(7/12)
(7/12)	ADV AC FREQ	37	ADV BD FREQ	(7/12)
(7/12)	SS CF	38	VPR SS JP1	(5/12)
(7/12)	SEG 0	39	SEG 1	(7/12)
(7/12)	SEG 2(FIELD)	40	DT 2F	(7/12)
(7/12)	DT SEG 0	41	DT SEG 1	(7/12)
(7/12)	SYNC PLS	42	PP SV-REF	(7/12)
(8/12)	H;SV LOCK	43	DIRECTION	(7/12)
(7/12)	PB 2F	44	PB 4F	(7/12)
(7/12)	PB 8F	45	CAP 8FG	(7/12)
(7/12)	5F INERTIA	46	DT JUMP	(7/12)
(7/12)	REC AC SEL	47	REC BD SEL	(7/12)
(7/12)	CNF AC SEL	48	CNF BD SEL	(7/12)
(7/12)	ADV AC SEL	49	ADV BD SEL	(7/12)
(7/12)	L;B-CAM 3.3V	50	START PLS	(8/12)

LOT NO. 306-402 ONLY
101-24A, 104-22B



1-182

MB-441 (6/6)

FOR SS-52B BOARD

SS BOARD SHEET No.	CN124 A		CN124 B	SS BOARD SHEET No.	
(6/12)	GND-2	1	GND-2	(6/12)	
(6/12)	GND-2	2	GND-2	(6/12)	
(6/12)	GND-2	3	GND-2	(6/12)	
(6/12)	REG +8V-2	4	REG +8V-2	(6/12)	8V-2
(6/12)	REG +8V-2	5	REG +8V-2	(6/12)	
(6/12)	REG -8V-2	6	REG -8V-2	(6/12)	-8V-2
(6/12)	REG -8V-2	7	REG -8V-2	(6/12)	
(6/12)	REG +5V-2	8	REG +5V-2	(6/12)	5V-2
(6/12)	REG +5V-2	9	REG +5V-2	(6/12)	
(6/12)	REG +3.3V-2	10	REG +3.3V-2	(6/12)	3.3V-2
(6/12)	REG +3.3V-2	11	REG +3.3V-2	(6/12)	
(6/12)	REG +3.3V-2	12	REG +3.3V-2	(6/12)	
(6/12)	REG +3.3V-2	13	REG +3.3V-2	(6/12)	
(7/12)	DE4NP	14	NC	(6/12)	116-38A
(6/12)	TAPE BEGIN	15	TAPE END	(6/12)	146-8
(7/12)	CTL SIG	16	SWITCHED CTL	(7/12)	146-10
(6/12)	H;CTL REC	17	SC RDY	(6/12)	146-58
(7/12)	SHAPED THREADING FG	18	REC CTL	(7/12)	146-14
(7/12)	CAPSTAN FG(A) NORM	19	CAPSTAN FG(B) NORM	(7/12)	146-16
(7/12)	CAPSTAN FG(A)	20	CAPSTAN FG(B)	(7/12)	146-18
(7/12)	SHAPED S REEL FG(A)	21	SHAPED S REEL FG(B)	(7/12)	146-20
(7/12)	SHAPED T REEL FG(A)	22	SHAPED T REEL FG(B)	(7/12)	146-22
(1/12)	SYS POWER CONT	23	L;DRUM REC EN	(7/12)	146-24
(7/12)	NC	24	NC	(6/12)	
(7/12)	DRUM FG	25	DRUM PG	(7/12)	146-27
(7/12)	GND-2	26	GND-2	(7/12)	-2
(7/12)	DRUM PWM	27	CAPSTAN PWM	(7/12)	146-31
(7/12)	LOADING PWM	28	GND-2	(7/12)	-2
(7/12)	S REEL PWM	29	T REEL PWM	(7/12)	146-35
(6/12)	L;I/O RESET	30	CTL GAIN	(8/12)	146-37
(8/12)	S REEL DIR	31	T REEL DIR	(8/12)	146-44
(7/12)	CAPSTAN DIR	32	SC1	(6/12)	146-3
(6/12)	SC2	33	SCK	(6/12)	146-5
(7/12)	DR SS JP2	34	DR SS JP3	(7/12)	146-47
(6/12)	CAPSTAN CURRENT	35	TENSION SENSOR CUR.	(7/12)	146-49
(6/12)	S REEL CURRENT	36	T REEL CURRENT	(6/12)	146-51
(6/12)	CAPSTAN FG(A) ANA	37	CAPSTAN FG(B) ANA	(7/12)	146-53
(6/12)	S-TENSION	38	T-TENSION	(6/12)	146-55
(6/12)	L;BUSY	39	CAPSTAN MOTOR DIR	(7/12)	146-59
(6/12)	FAN MOTOR CHECK 2	40	NC	(7/12)	156-3
(10/12)	L;Y PCM MUTE	41	L;C PCM MUTE	(10/12)	103-47B, 102-49A
(9/12)	JUMP ID0	42	JUMP ID2	(9/12)	101-27A
(7/12)	DM SS JP0	43	DM SS JP1	(7/12)	103-43B
(7/12)	DT TR JMP	44	SV 1/2 VD	(7/12)	116-5A
(8/12)	REG TEMP	45	FAN MOTOR CHECK	(6/12)	156-2
(9/12)	BIM DRIVE SIG(A)	46	BIM DRIVE SIG(B)	(9/12)	149-2
(11/12)	BIM DRIVE A	47	BIM DRIVE B	(11/12)	149-4
(9/12)	MODE SW	48	OFFSET	(11/12)	149-6
(11/12)	SG A (DIGITAL)	49	SG A (ANALOG)	(11/12)	149-8
(11/12)	SG B (DIGITAL)	50	SG B (ANALOG)	(11/12)	149-10

SWC-19B BOARD

CN148	CN148		CN580	
REG +8V-2	1	1	15	KY, 590-15
REG +8V-2	2	2	4	KY, 590-4
REG +8V-2	3	3	5	KY-590-5
GND-2	4	4	6	KY, 590-6
GND-2	5	5	1	KY, 590-1
GND-2	6	6	2	KY, 590-2
KEY TX(+)	7	7	3	KY, 590-3
KEY TX(-)	8	8	7	KY, 590-7
KEY RX(+)	9	9	10	KY, 590-10
KEY RX(-)	10	10	8	KY, 590-8
REG +5V-2	11	11	9	KY, 590-9
REG +5V-2	12	12	16	KY, 590-16
GND-2	13	13		
GND-2	14	14		
L;HM CS	15	15		
SYIF3 RDY	16	16		
SYIF3 SCK	17	17		
SYIF3 RES	18	18		
SYIF3 CMD	19	19		
NC	20	20		

(1/2)

CN146		DR-200 CN302 BOARD	
GND-2	1	1	(4/4)
NC	2	2	(4/4)
SC1	3	3	
SC2	4	4	(1/4)
SCK	5	5	
NC	6	6	
TAPE BEGIN	7	7	
TAPE END	8	8	
CTL SIG	9	9	(4/4)
SWITCHED CTL	10	10	
H;CTL REC	11	11	
NC	12	12	
SHAPED THREADING FG	13	13	(3/4)
REC CTL	14	14	(4/4)
CAPSTAN FG(A) NORM	15	15	
CAPSTAN FG(B) NORM	16	16	
CAPSTAN FG(A)	17	17	
CAPSTAN FG(B)	18	18	
SHAPED S REEL FG(A)	19	19	(3/4)
SHAPED S REEL FG(B)	20	20	
SHAPED T REEL FG(A)	21	21	
SHAPED T REEL FG(B)	22	22	
SYS POWER CONT	23	23	(1/4)
L;DRUM REC EN	24	24	(4/4)
NC	25	25	(4/4)
DRUM FG	26	26	(1/4)
DRUM PG	27	27	(1/4)
GND-2	28	28	(4/4)
GND-2	29	29	(4/4)
DRUM PWM	30	30	(1/4)
CAPSTAN PWM	31	31	(2/4)
LOADING PWM	32	32	(2/4)
NC	33	33	(4/4)
S REEL PWM	34	34	(2/4)
T REEL PWM	35	35	(2/4)
L;I/O RESET	36	36	(1/4)
CTL GAIN	37	37	(4/4)
NC	38	38	
NC	39	39	(4/4)
NC	40	40	
S REEL DIR	41	41	(2/4)
NC	42	42	(4/4)
NC	43	43	(4/4)
T REEL DIR	44	44	(2/4)
CAPSTAN DIR	45	45	(2/4)
DR SS JP2	46	46	(4/4)
DR SS JP3	47	47	(4/4)
CAPSTAN CURRENT	48	48	(2/4)
TENSION SENSOR CUR.	49	49	(3/4)
S REEL CURRENT	50	50	(2/4)
T REEL CURRENT	51	51	(2/4)
CAPSTAN FG(A) ANA	52	52	
CAPSTAN FG(B) ANA	53	53	(3/4)
S-TENSION	54	54	
T-TENSION	55	55	
NC	56	56	(4/4)
L;BUSY	57	57	(1/4)
SC RDY	58	58	(1/4)
CAPSTAN MOTOR DIR	59	59	(2/4)
GND-2	60	60	(4/4)

FLAT CABLE, 60P

SHEET NUMBER OF DR-200 SCHEMATIC DIAGRAM

CN149		CN201	CN208	
BIM DRIVE SIG(A)	1	1	1	DT, 390-1
BIM DRIVE SIG(B)	2	2	2	DT, 390-2
BIM DRIVE A	3	3	3	DT, 390-3
BIM DRIVE B	4	4	4	DT, 390-4
MODE SW	5	5	5	DT, 390-5
OFFSET	6	6		
SG A (DIGITAL)	7	7		
SG A (ANALOG)	8	8		
SG B (DIGITAL)	9	9		
SG B (ANALOG)	10	10		

CN154		CN205
REG -15V	1	1
REG +15V	2	2
GND	3	3
REG +5V	4	4
REG -8V	5	5
REG +8V	6	6

(1/3)

CN207	CN207	CN241	
6	6	9	BURSH ASS' Y, 9
7	7	7	BURSH ASS' Y, 7
8	8	3	BURSH ASS' Y, 3
9	9	8	BURSH ASS' Y, 8
10	10	4	BURSH ASS' Y, 4
14	14		TP243(BIM-A)
15	15		TP244(BIM-B)

HN-185 BOARD

HN-181 BOARD

LOT NO.	BOARD NO.
307-402	1-648-560-12
403-	1-648-560-13

CN122
CN123
CN124
CN130
CN132
CN133
CN134
CN146
CN148
CN149
CN150-156

Mother board

MB-441 BOARD (6/6)

BOARD NO. 1-648-560-12, 13
BOARD' S LOT NO. 307-
DVW-A510 (J, UC) :MB-441BA MCB
DVW-A510P (EK) :MB-441BA MCB
DVW-510 (J, UC) :MB-441B MCB
DVW-510P (EK) :MB-441B MCB
DVW-CA510(J, UC) :MB-441BA MCB
DVW-CA510P(EK) :MB-441BA MCB

DVW-MB441-ALL-PLAY-S/M-03

Section 2
Schematic Diagram for Optional Boards

Circuit Function

Model name	Board name	Circuit Function	Page
BKDW-507	PP-45	Audio program play	2-4
BKDW-509	RM-130	Parallel (50P) interface	2-3

Note

The ⚠-marked components are critical to safety.
Replace only with same components as specified.

NOTE:
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

1SS300-TE85L PIN LAYOUT

2SC4177 PIN LAYOUT

POWER ON RESET

IC2 μPD78014FGC-637-AB8 8-BIT MICROCOMPUTER FOR PARALLEL(50P) INTERFACE

QFP 64P

OUTPUT/INPUT BUFFERS

SS(1/12), 122-35A	122-35A	137-29	404-29	405-4B	420-4B	L;SYS RESET	35 RESET
SS(3/12), 122-11A	122-11A	137-34	404-34	405-3B	420-3B	L;REM CS	36 INT0
SS(3/12), 122-9B	122-9B	137-33	404-33	405-3A	420-3A	SYIF3 SCK	64 SCK0
SS(3/12), 122-8B	122-8B	137-31	404-31	405-1A	420-1A	SYIF3 RES	63 SO0
SS(3/12), 122-9A	122-9A	137-32	404-32	405-2A	420-2A	SYIF3 CMD	62 SI0
SS(3/12), 122-8A	122-8A	137-30	404-30	405-2B	420-2B	SYIF3 RDY	61 P24
							X1 8.38MHz 41 X1 / 42 X2
							44 XT2 / 43 (Vpp)
							40 VDD / 55 AVDD / 56 AVDD
							9 GND / 24 GND / 46 GND
SW REG, 201-8	151-8	137-28	404-28	405-5B	420-5B	REG +5V	
SW REG, 201-2	151-2	137-25	404-25	405-1B	420-1B	REG +15V	
		137-26	404-26	405-4A	420-4A	GND	
		137-27	404-27	405-5A	420-5A	GND	

MB-441 BOARD

CP-220 BOARD or CP-220B BOARD

IC3 L78M12T-FA +12V REG

IC3 PIN LAYOUT

P50	PREROLL OUT	421-50
P51	ASSEMBLE PRESET OUT	421-26
P52	INSERT PRESET OUT	421-45
P53	EDIT OUT	421-27
P54	EJECT OUT	421-28
P55	CUE PRESET OUT	421-10
P56	TC PRESET OUT	421-11
P57	VIDEO PRESET OUT	421-44
P40	A1 PRESET OUT	421-39
P41	A2 PRESET OUT	421-38
P42	A3 PRESET OUT	421-42
P43	A4 PRESET OUT	421-41
P44	CODING HOLE #1 OUT	421-30
P45	CODING HOLE #2 OUT	421-13
P46	CODING HOLE #3 OUT	421-29
P47	CODING HOLE #4 OUT	421-12
P60	USER HOLE #1 OUT	421-32
P61	USER HOLE #2 OUT	421-15
P62	USER HOLE #3 OUT	421-31
P63	USER HOLE #4 OUT	421-14
P64	FWD LAMP OUT	421-40
P65	STBY ON OUT	421-46
P66	REV LAMP OUT	421-37
P67	PLAY OUT	421-47
P30	REMOTE OUT	421-48
P31	STOP OUT	421-43
P32	REC OUT	421-24
P33	ENTRY SW OUT	421-5
P34	PLAY SW OUT	421-3
P35	STOP SW OUT	421-4
P36	REC SW OUT	421-2
P20	ALARM OUT	421-49
P21	SYNC LOCK OUT	421-25
P22	REF ERROR OUT	421-6
P23	CF LOCK OUT	421-7
P01 P02	DRUM LOCK OUT	421-8
	CAP LOCK OUT	421-9
P10	PREROLL IN	421-18
P11	ENTRY IN	421-21
P12	REW IN	421-20
P13	STBY ON IN	421-19
P14	FF IN	421-1
P15		
P16		
P17		
P01	REC IN	421-36
P02	STOP IN	421-35
P03	PLAY IN	421-34
P04	EJECT IN	421-23
	STBY OFF IN	421-22
	GND	421-17
	GND	421-33
	REG +12V	421-16

CN421
REMOTE
PARALLEL(50P)

D-SUB 50P(FEMALE)
(EXT. VIEW)

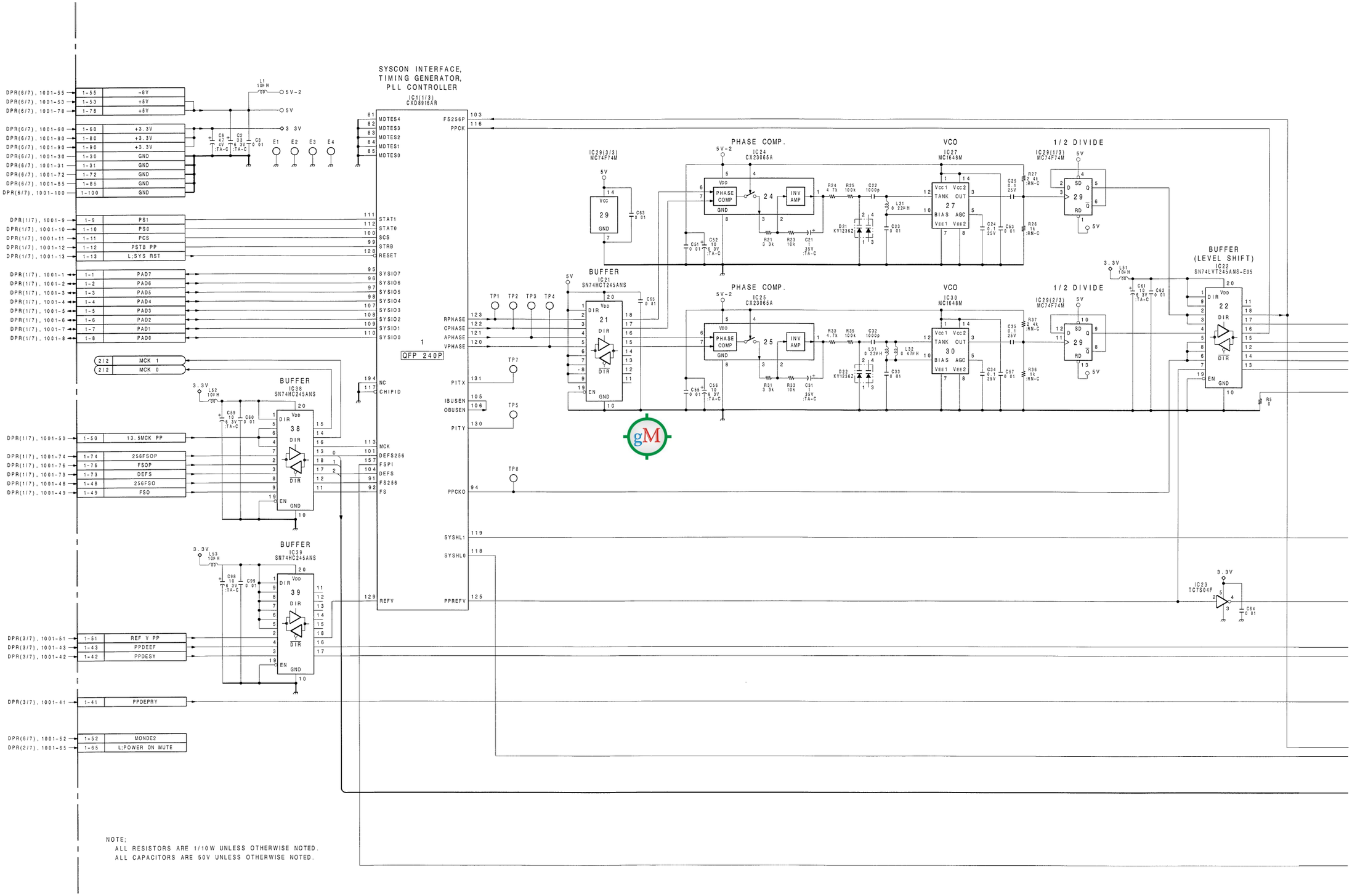
BOARD NO.	SERIAL NO.
1-648-558-11	#10001-

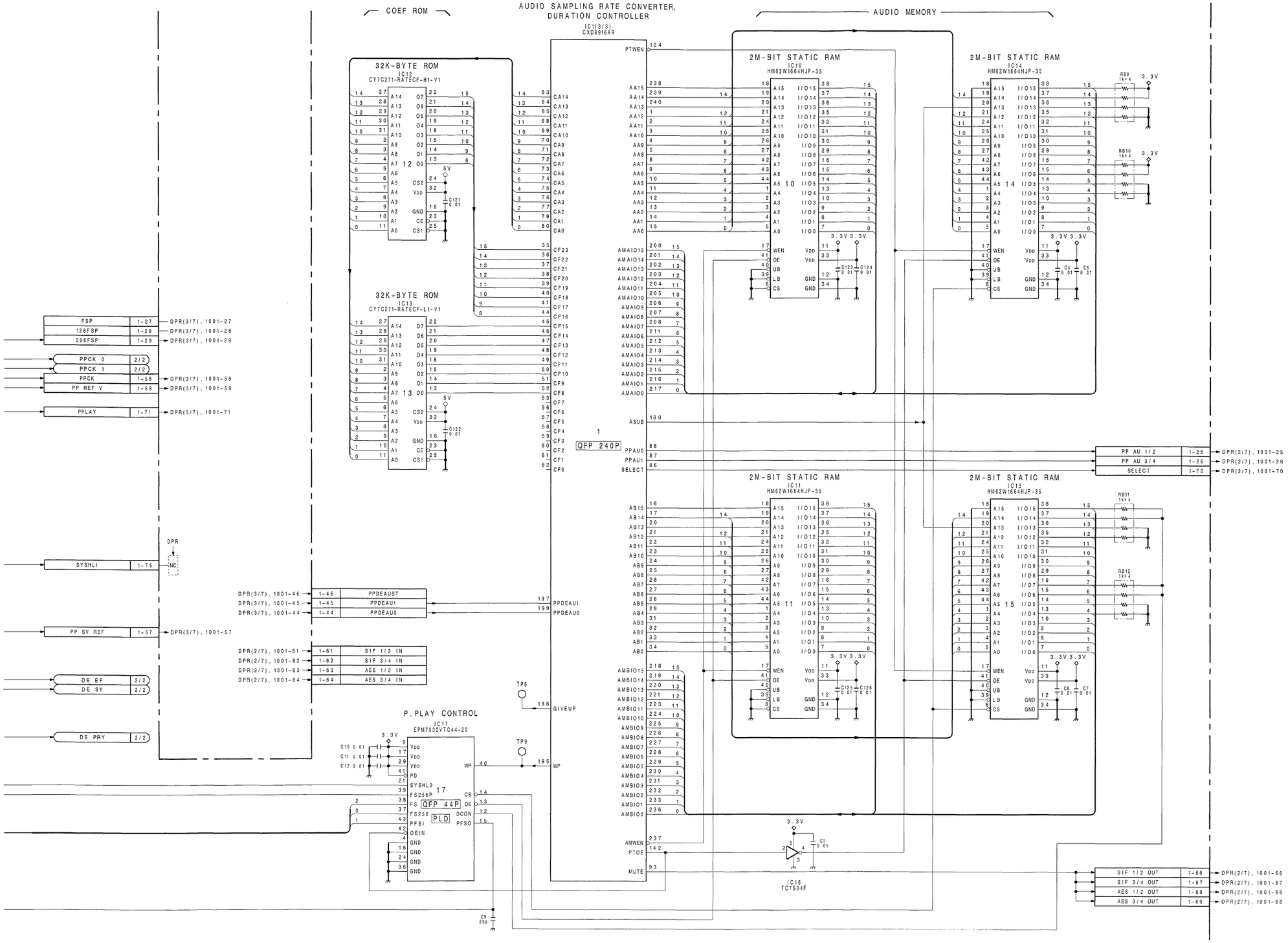
Parallel(50P)Interface

RM-130 BOARD

BOARD NO. 1-648-558-11
BKDW-509 :RM-130 MCB :#10001-

DVW-RM130-ALL-ALL-S/M-04


SYSCON INTERFACE,
TIMING GENERATOR,
PLL CONTROLLER
IC1(1/3)
CXD8916AR
QFP 240P
PHASE COMP.
VCO
1/2 DIVIDE
BUFFER
BUFFER
(LEVEL SHIFT)
IC24
CX23065A
IC25
CX23065A
IC27
MC1648M
IC30
MC1648M
IC21
SN74HCT245ANS
IC22
SN74LVT245ANS-E05
IC38
SN74HC245ANS
IC39
SN74HC245ANS
IC23
TC7S04F
DPR(6/7), 1001-55
DPR(6/7), 1001-53
DPR(6/7), 1001-78
DPR(6/7), 1001-60
DPR(6/7), 1001-80
DPR(6/7), 1001-90
DPR(6/7), 1001-30
DPR(6/7), 1001-31
DPR(6/7), 1001-72
DPR(6/7), 1001-85
DPR(6/7), 1001-100
DPR(1/7), 1001-9
DPR(1/7), 1001-10
DPR(1/7), 1001-11
DPR(1/7), 1001-12
DPR(1/7), 1001-13
DPR(1/7), 1001-1
DPR(1/7), 1001-2
DPR(1/7), 1001-3
DPR(1/7), 1001-4
DPR(1/7), 1001-5
DPR(1/7), 1001-6
DPR(1/7), 1001-7
DPR(1/7), 1001-8
DPR(1/7), 1001-50
DPR(1/7), 1001-74
DPR(1/7), 1001-76
DPR(1/7), 1001-73
DPR(1/7), 1001-48
DPR(1/7), 1001-49
DPR(3/7), 1001-51
DPR(3/7), 1001-43
DPR(3/7), 1001-42
DPR(3/7), 1001-41
DPR(6/7), 1001-52
DPR(2/7), 1001-65
-8V
+5V
+5V
+3.3V
+3.3V
+3.3V
GND
GND
GND
GND
GND
PS1
PS0
PCS
PSTB PP
L;SYS RST
PAD7
PAD6
PAD5
PAD4
PAD3
PAD2
PAD1
PAD0
MCK 1
MCK 0
13.5MCK PP
256FSOP
FSOP
DEFS
256FSO
FSO
REF V PP
PPDEEF
PPDESY
PPDEPRY
MONDE2
L;POWER ON MUTE
MDTES4
MDTES3
MDTES2
MDTES1
MDTES0
STAT1
STAT0
SCS
STRB
RESET
SYSIO7
SYSIO6
SYSIO5
SYSIO4
SYSIO3
SYSIO2
SYSIO1
SYSIO0
NC
CHIPID
MCK
DEFS256
FSPI
DEFS
FS256
FS
REFV
FS256P
PPCK
RPHASE
CPHASE
APHASE
VPHASE
PITX
IBUSEN
OBUSEN
PITY
PPCKO
SYSHL1
SYSHL0
PPREFV
TP1
TP2
TP3
TP4
TP5
TP7
TP8
5V-2
5V
3.3V
NOTE;
ALL RESISTORS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

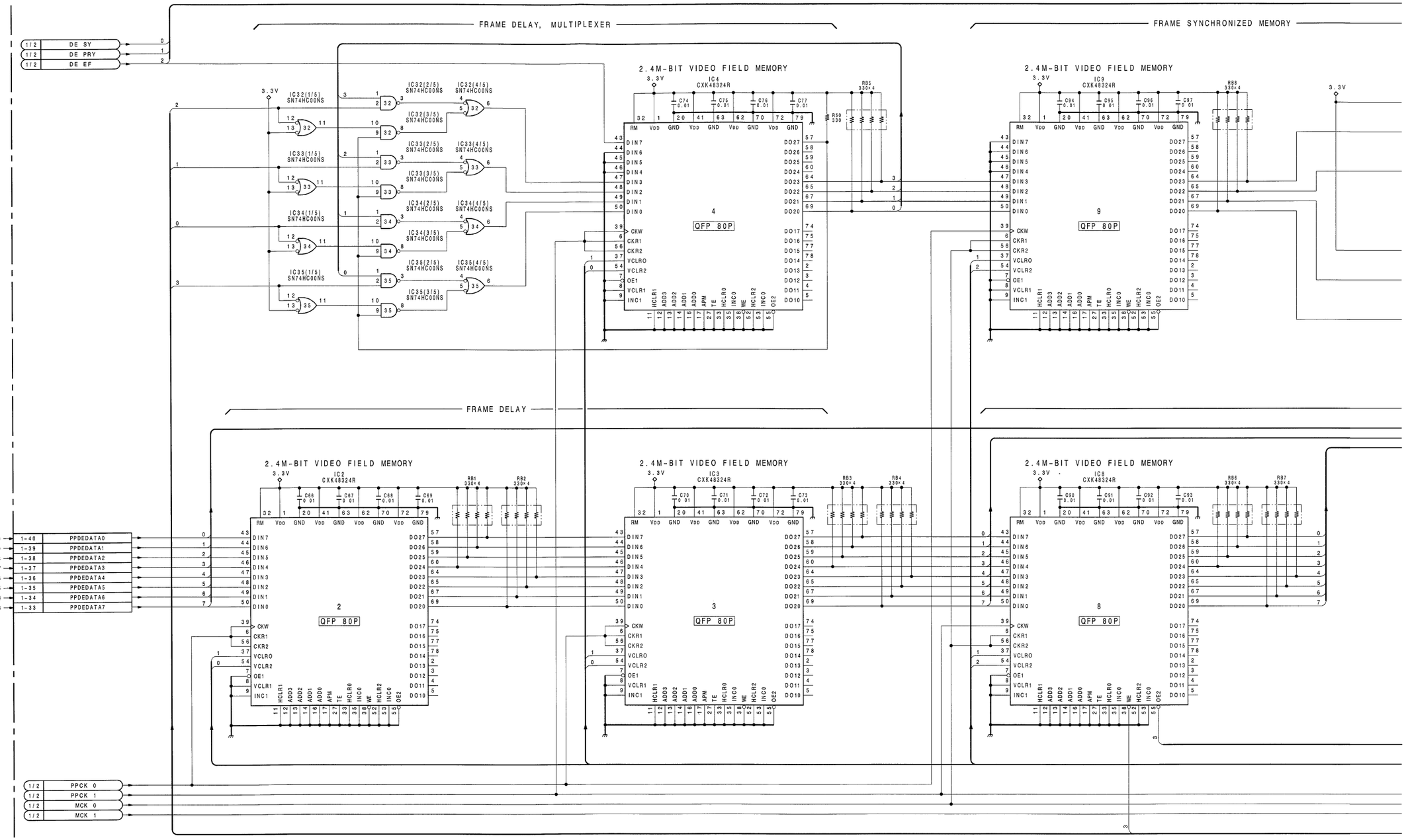


Clock Generator, System Control Interface, Audio Memory Control

PP-45 BOARD (1/2)

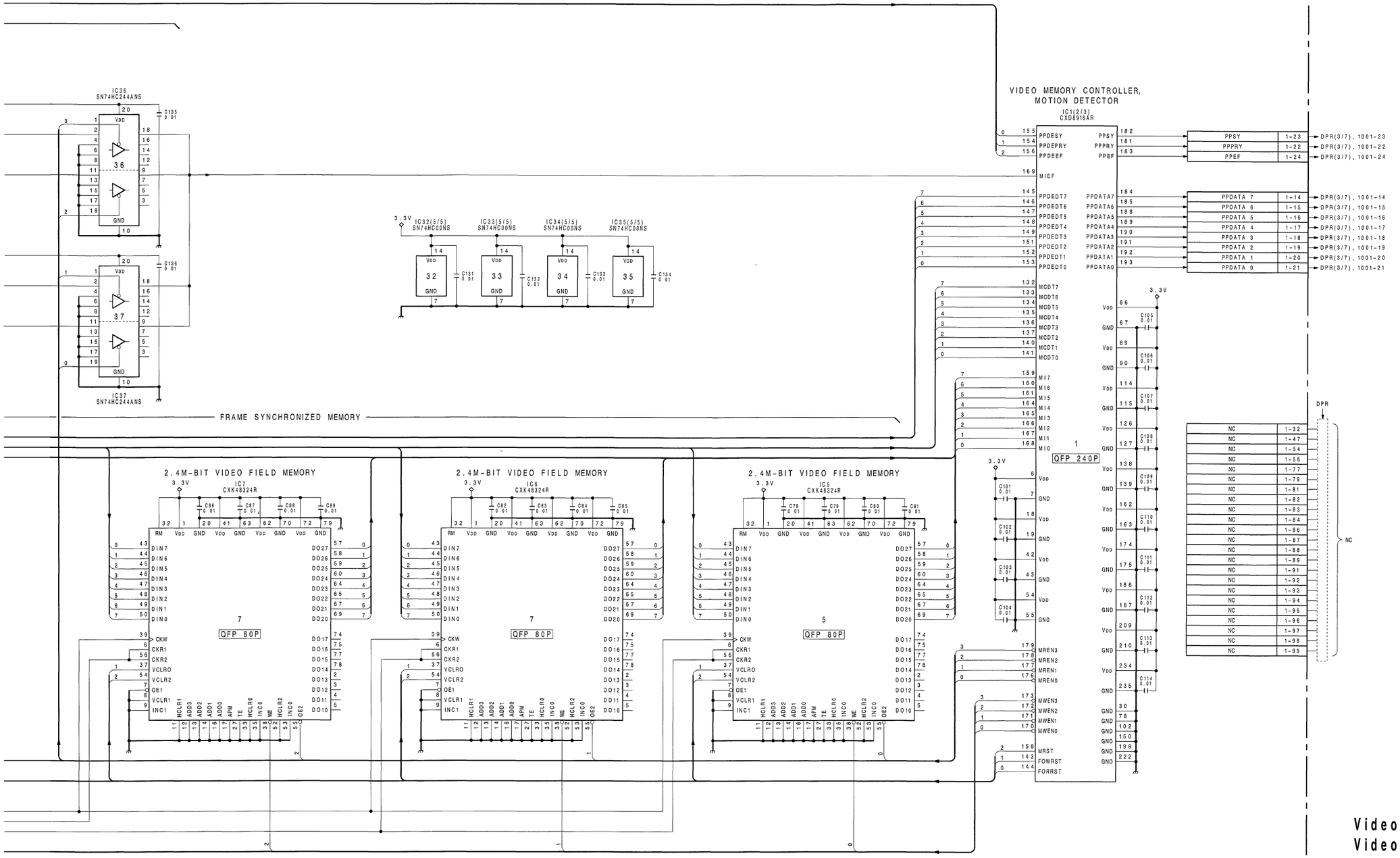
BOARD NO. 1-652-642-13
BKDW-507 :PP-45 MCB :#10001-

DVW-PP45-ALL-ALL-S/M-02



NOTE;
ALL RESISTERS ARE 1/10W UNLESS OTHERWISE NOTED.
ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

PP-45 (2/2) BKDW-507



Video Data Frame Delay,
Video Memory Control

PP-45 BOARD (2/2)

BOARD NO. 1-652-642-13
BKDW-507 :PP-45 MCB :#10001-

DVW-PP45-ALL-ALL-S/M-02

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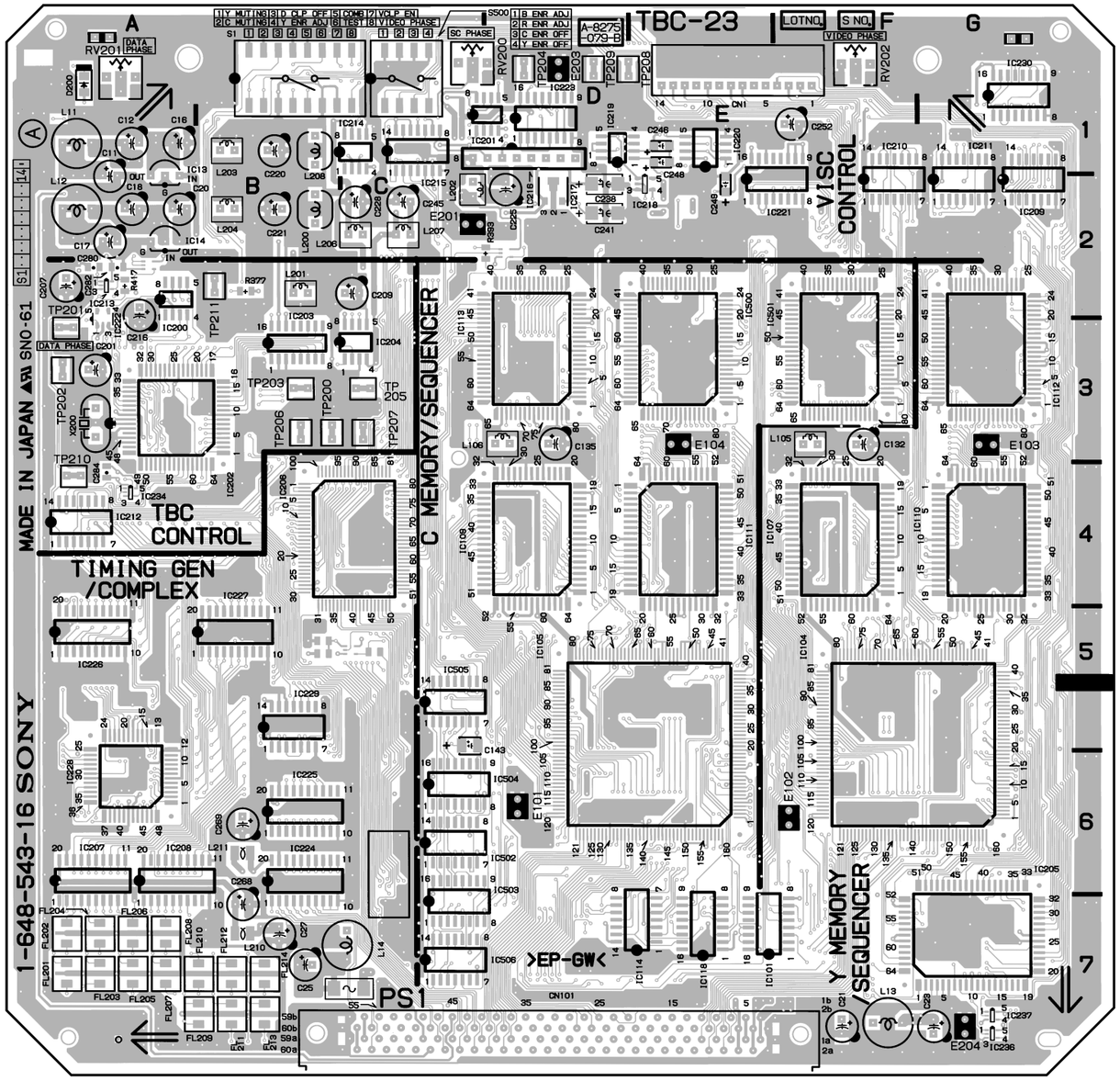
TBC-23 ; TBC (Sequence & Reference blocks)

(Board's Lot No. 803 and higher)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



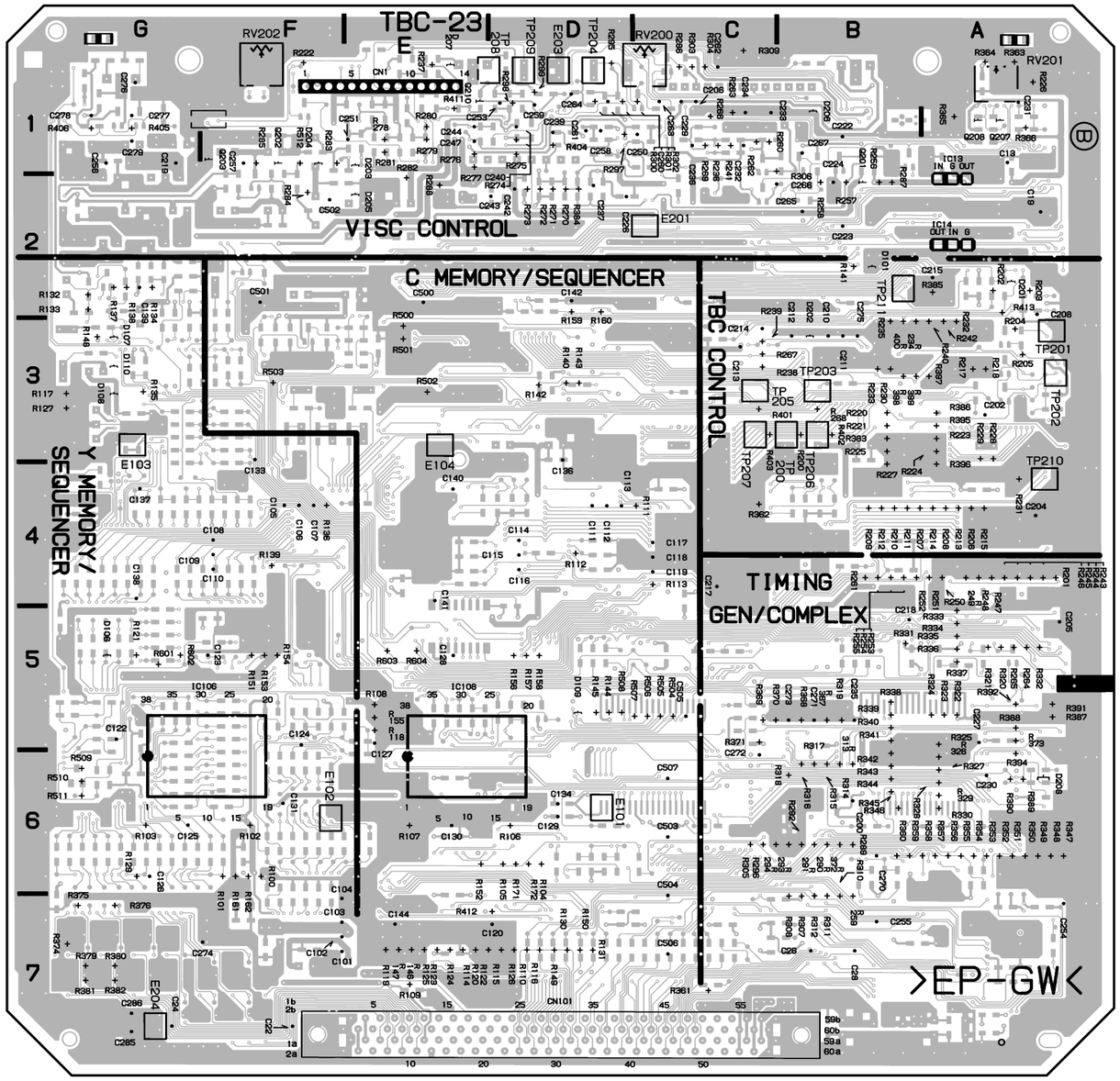
TBC-23 BOARD -A SIDE-

1-648-543-16 (LOT No. 803 -)

DVW-A500(J)	; TBC-23 MCB
DVW-A500(UC)	; TBC-23 MCB
DVW-A500P(EK)	; TBC-23P MCB
DVW-A500P(UC)	; TBC-23P MCB
DVW-A510(J)	; TBC-23 MCB
DVW-A510(UC)	; TBC-23 MCB
DVW-A510P(EK)	; TBC-23P MCB
DVW-CA510(J)	; TBC-23 MCB
DVW-CA510(UC)	; TBC-23 MCB
DVW-CA510P(EK)	; TBC-23P MCB

TBC-23 (1-648-543-16)

CN1	E1	IC505	C5
CN101	D7	IC506	C7
D101	*B2	L11	A1
D106	*G5	L12	A2
D107	*G3	L13	F7
D108	*G3	L14	C7
D109	*D5	L105	F3
D110	*G3	L106	D3
D200	A1	L200	B2
D201	*A2	L201	B2
D202	*B3	L202	C2
D203	*E1	L203	B1
D204	*F1	L204	B2
D205	*E2	L206	C2
D206	*B1	L207	C2
D207	*E1	L208	B1
D208	*A6	L210	B7
		L211	B6
E101	D6		
E103	G3	PS1	C7
E201	C2		
E203	D1	Q201	*B2
E204	G7	Q202	*F1
		Q203	*F1
FL201	A7	Q207	*A1
FL202	A7	Q208	*A1
FL203	A7	Q210	*E1
FL204	A7		
FL205	A7	RV200	C1
FL206	A7	RV201	A1
FL207	A7	RV202	F1
FL208	A7		
FL209	B7	S1	B1
FL210	B7	S500	C1
FL211	B7		
FL212	B7	TP201	A3
FL213	B7	TP203	B3
FL214	B7	TP204	D1
		TP208	E1
IC13	A2	TP209	D1
IC14	A2		
IC101	F7	X200	A3
IC104	F5		
IC105	E5	*:B SIDE	
IC107	F4		
IC109	D4		
IC110	G4		
IC111	E4		
IC112	G3		
IC113	D3		
IC114	E7		
IC118	E7		
IC200	A3		
IC201	C1		
IC202	A3		
IC203	B3		
IC204	C3		
IC205	G7		
IC206	C4		
IC207	A7		
IC208	A7		
IC209	G2		
IC210	F2		
IC211	G2		
IC212	A4		
IC213	A2		
IC214	C1		
IC215	C1		
IC216	D1		
IC217	D2		
IC218	E2		
IC219	E1		
IC220	E1		
IC221	E2		
IC222	A3		
IC223	D1		
IC224	B7		
IC225	B6		
IC226	A5		
IC227	B5		
IC228	A6		
IC229	B5		
IC230	G1		
IC234	A4		
IC236	G7		
IC237	G7		
IC500	E3		
IC501	F3		
IC502	C6		
IC503	C7		
IC504	C6		



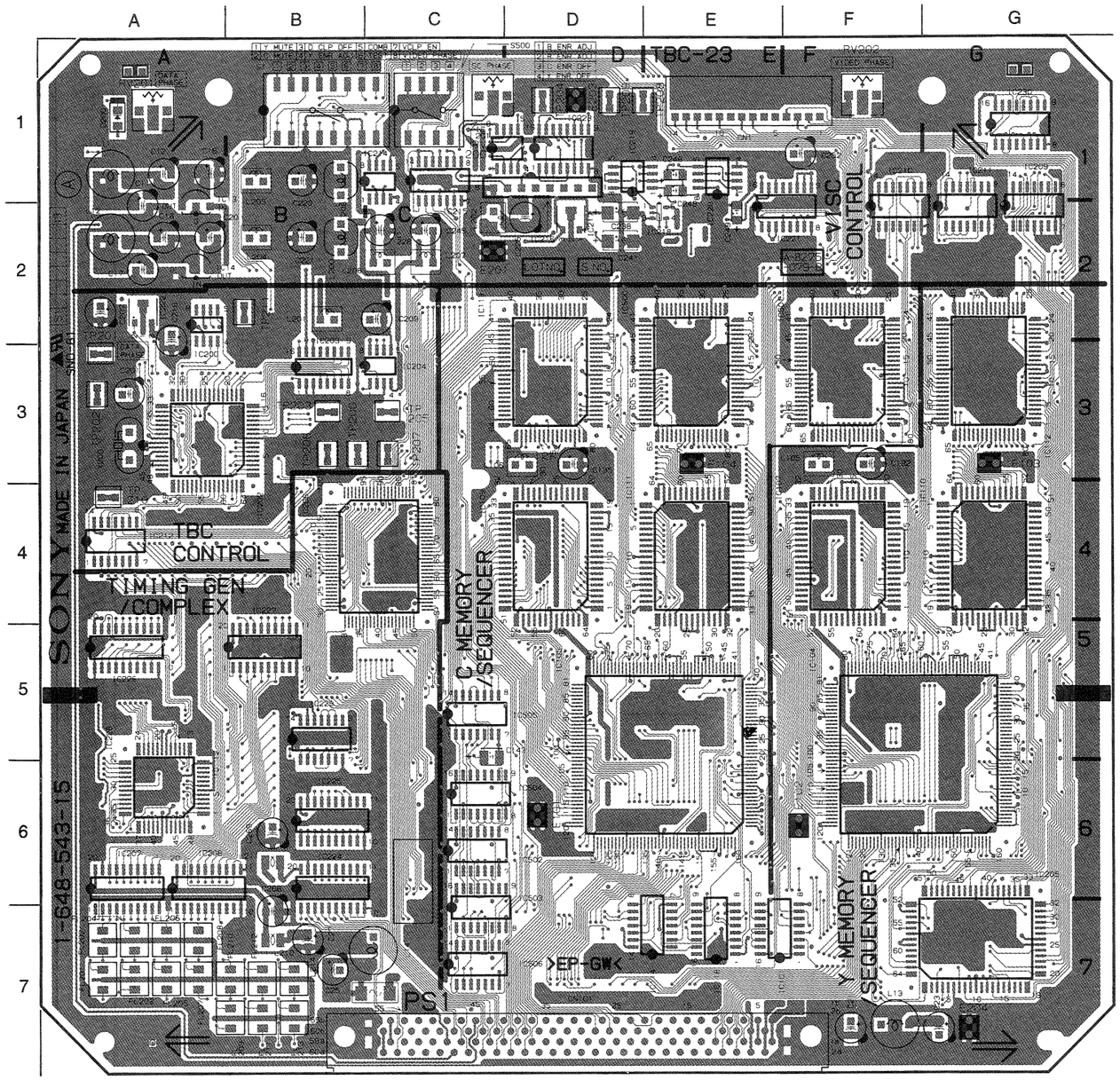
TBC-23 BOARD -B SIDE-

1-648-543-16 (LOT No. 803 -)

DVW-A500(J)	; TBC-23 MCB
DVW-A500(UC)	; TBC-23 MCB
DVW-A500P(EK)	; TBC-23P MCB
DVW-A500P(UC)	; TBC-23P MCB
DVW-A510(J)	; TBC-23 MCB
DVW-A510(UC)	; TBC-23 MCB
DVW-A510P(EK)	; TBC-23P MCB
DVW-CA510(J)	; TBC-23 MCB
DVW-CA510(UC)	; TBC-23 MCB
DVW-CA510P(EK)	; TBC-23P MCB

TBC-23 ; TBC (Sequence & Reference blocks)

(Board's Lot No. 605 through 802)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



TBC-23 BOARD -A SIDE-

1-648-543-15 (LOT No. 605 - 802)

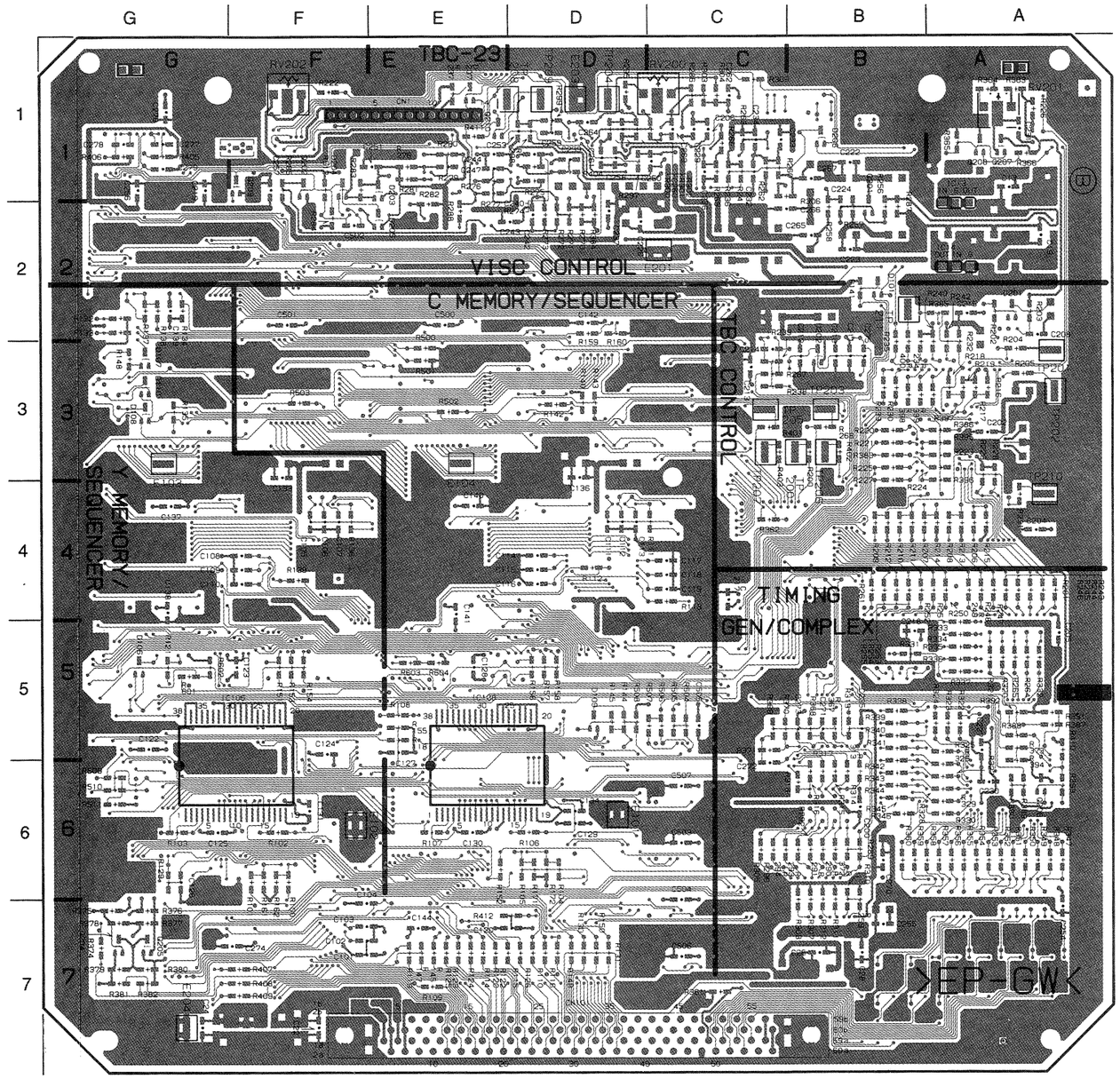
DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23P	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(J)	; TBC-23	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23(1-648-543-15)

CN1	E-1	IC229	B-5
CN101	D-7	IC230	G-1
		IC500	E-3
*D101	B-2	IC501	F-3
*D106	G-5	IC502	C-6
*D107	G-3	IC503	C-7
*D108	G-3	IC504	C-6
*D109	D-5	IC505	C-5
*D110	G-3	IC506	C-7
D200	A-1		
*D201	A-2	L11	A-1
*D202	B-3	L12	A-2
*D203	E-1	L13	F-7
*D204	F-1	L14	C-7
*D205	E-2	L105	F-3
*D206	B-1	L106	D-3
*D207	E-1	L200	B-2
		L201	B-2
E101	D-6	L202	C-2
E103	G-3	L203	B-1
E201	C-2	L204	B-2
E203	D-1	L206	C-2
E204	G-7	L207	C-2
		L208	B-1
FL201	A-7	L210	B-7
FL202	A-7	L211	B-6
FL203	A-7		
FL204	A-7	PS1	C-7
FL205	A-7		
FL206	A-7	*Q201	B-2
FL207	A-7	*Q202	F-1
FL208	A-7	*Q203	F-1
FL209	B-7	*Q204	G-7
FL210	B-7	*Q205	G-7
FL211	B-7	*Q207	A-1
FL212	B-7	*Q208	A-1
FL213	B-7	*Q210	E-1
FL214	B-7		
		RV200	C-1
IC13	A-2	RV201	A-1
IC14	A-2	RV202	F-1
IC101	F-7		
IC104	F-5	S1	B-1
IC105	E-5	S500	C-1
IC107	F-4		
IC109	D-4	TP201	A-3
IC110	G-4	TP203	B-3
IC111	E-4	TP204	D-1
IC112	G-3	TP208	E-1
IC113	D-3	TP209	D-1
IC114	E-7		
IC118	E-7	X200	A-3
IC200	A-3		
IC201	C-1		
IC202	A-3		
IC203	B-3		
IC204	C-3		
IC205	G-7		
IC206	C-4		
IC207	A-7		
IC208	A-7		
IC209	G-2		
IC210	F-2		
IC211	G-2		
IC212	A-4		
IC214	C-1		
IC215	C-1		
IC216	D-1		
IC217	D-2		
IC218	E-2		
IC219	E-1		
IC220	E-1		
IC221	E-2		
IC222	A-2		
IC223	D-1		
IC224	B-7		
IC225	B-6		

* : B SIDE

LOT NO. D-2



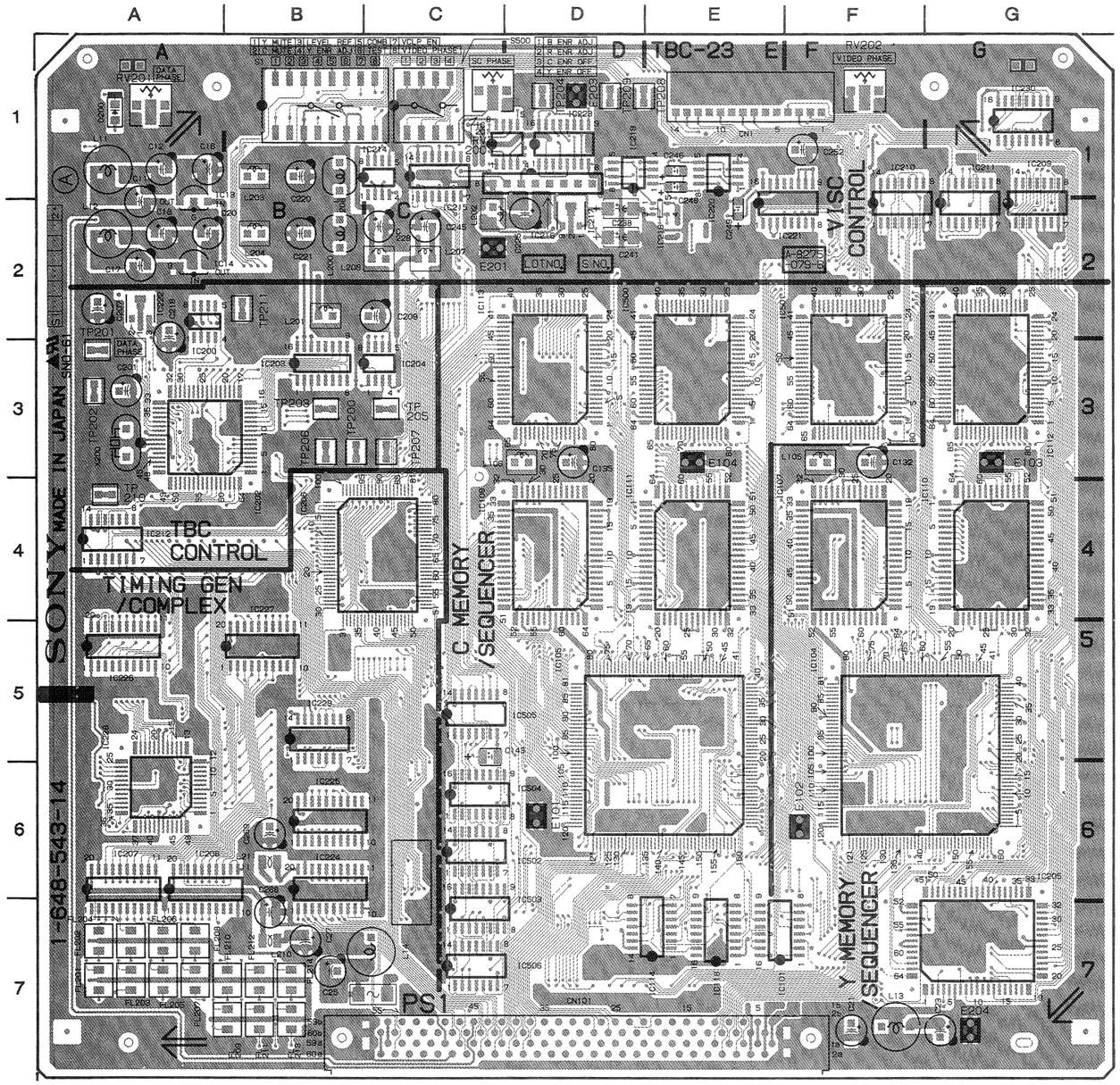
TBC-23 BOARD -B SIDE-

1-648-543-15 (LOT No. 605 - 802)

DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23P	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(J)	; TBC-23	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23 ; TBC (Sequence & Reference blocks)

(Board's Lot No. 501 through 603)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



TBC-23 BOARD -A SIDE-

1-648-543-14 (LOT No. 501 - 603)

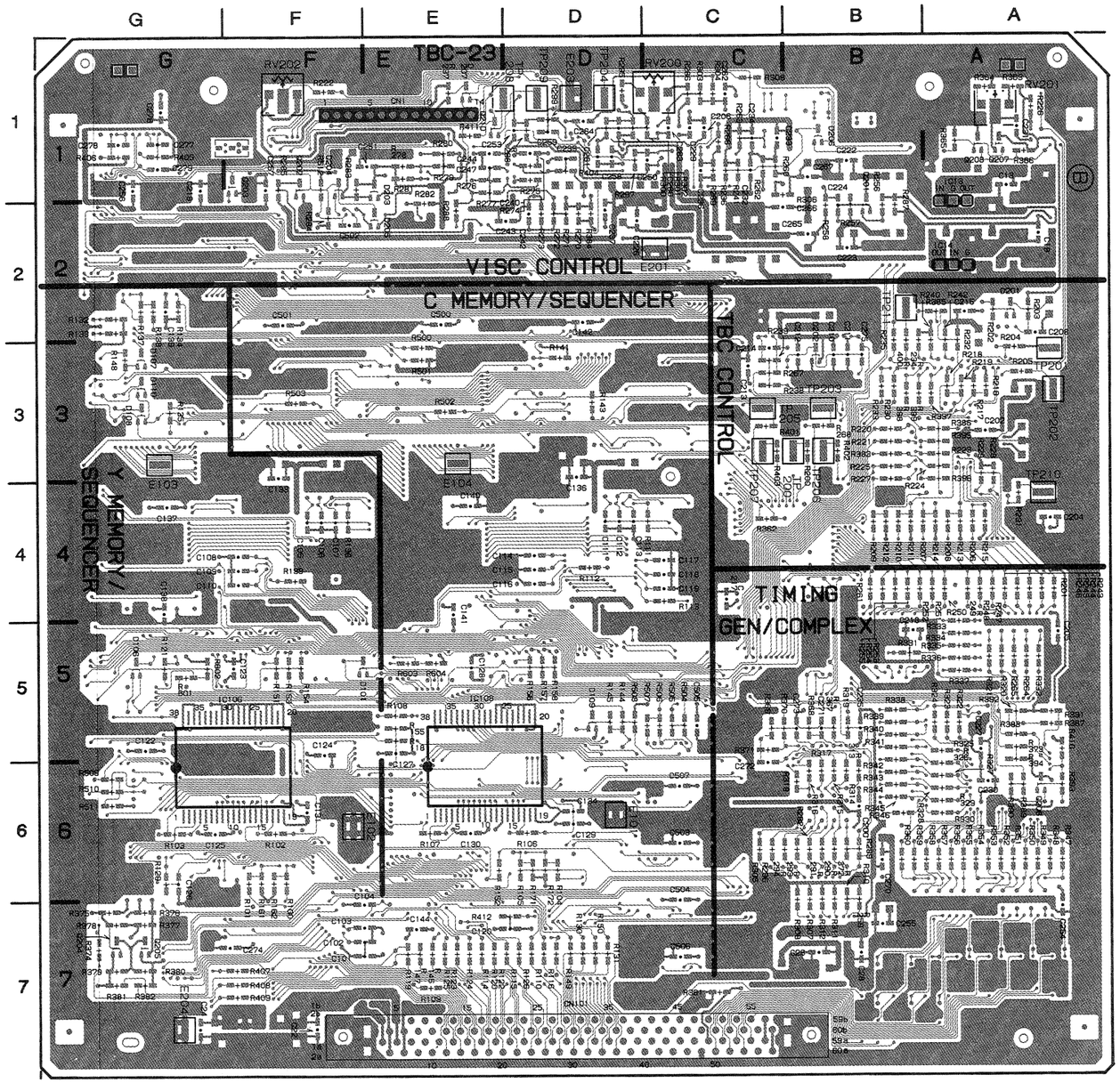
DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23P	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(J)	; TBC-23	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23(1-648-543-14)

CN1	E-1	IC221	E-2
CN101	D-7	IC222	A-2
		IC223	D-1
✱D101	F-5	IC224	B-7
✱D106	G-5	IC225	B-6
✱D107	G-3	IC226	A-5
✱D108	G-3	IC227	B-5
✱D109	D-5	IC228	A-6
✱D110	G-3	IC229	B-5
D200	A-1	IC230	G-1
✱D201	A-2	IC500	E-3
✱D202	B-3	IC501	F-3
✱D203	E-1	IC502	C-6
✱D204	F-1	IC503	C-7
✱D205	E-2	IC504	C-6
✱D206	B-1	IC505	C-5
✱D207	E-1	IC506	C-7
E101	D-6	PS1	C-7
E102	F-6		
E103	G-3	✱Q201	B-2
E104	E-3	✱Q202	F-1
E201	C-2	✱Q203	F-1
E203	D-1	✱Q204	G-7
E204	G-7	✱Q205	G-7
		✱Q206	A-6
FL201	A-7	✱Q207	A-1
FL202	A-7	✱Q208	A-1
FL203	A-7	✱Q210	E-1
FL204	A-7		
FL205	A-7	RV200	C-1
FL206	A-7	RV201	A-1
FL207	A-7	RV202	F-1
FL208	A-7		
FL209	B-7	S1	B-1
FL210	B-7	S500	C-1
FL211	B-7		
FL212	B-7	TP200	B-3
FL213	B-7	TP201	A-3
FL214	B-7	TP202	A-3
		TP203	B-3
IC13	A-2	TP204	D-1
IC14	A-2	TP205	C-3
IC101	F-7	TP206	B-3
IC104	F-6	TP207	C-3
IC105	D-6	TP208	E-1
✱IC106	G-6	TP209	D-1
IC107	F-4	TP210	A-4
✱IC108	E-6	TP211	B-2
IC109	D-4		
IC110	G-4	X200	A-3
IC111	E-4		
IC112	G-3		
IC113	D-3		
IC114	E-7		
IC118	E-7		
IC200	A-2		
IC201	C-1		
IC202	B-3		
IC203	B-3		
IC204	C-3		
IC205	G-7		
IC206	B-4		
IC207	A-7		
IC208	A-7		
IC209	G-2		
IC210	F-2		
IC211	G-2		
IC212	A-4		
IC214	C-1		
IC215	C-1		
IC216	D-1		
IC217	D-2		
IC218	E-2		
IC219	E-1		
IC220	E-1		

✱ : B SIDE

LOT NO. D-2



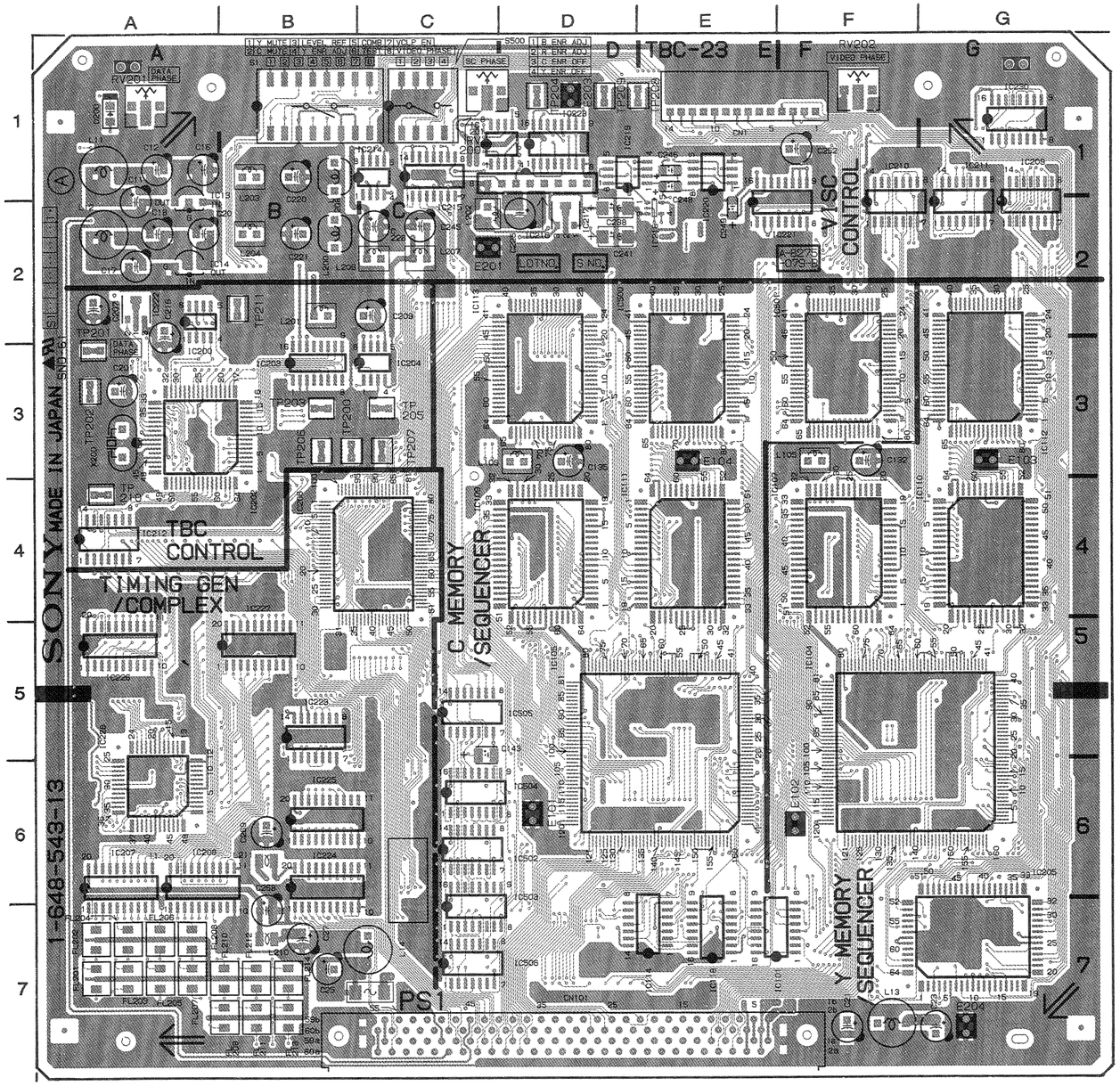
TBC-23 BOARD -B SIDE-

1-648-543-14 (LOT No. 501 - 603)

DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23P	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(J)	; TBC-23	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23 ; TBC (Sequence & Reference blocks)

(Board's Lot No. 312 through 412)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



TBC-23 BOARD -A SIDE-

1-648-543-13 (LOT No. 312 - 412)

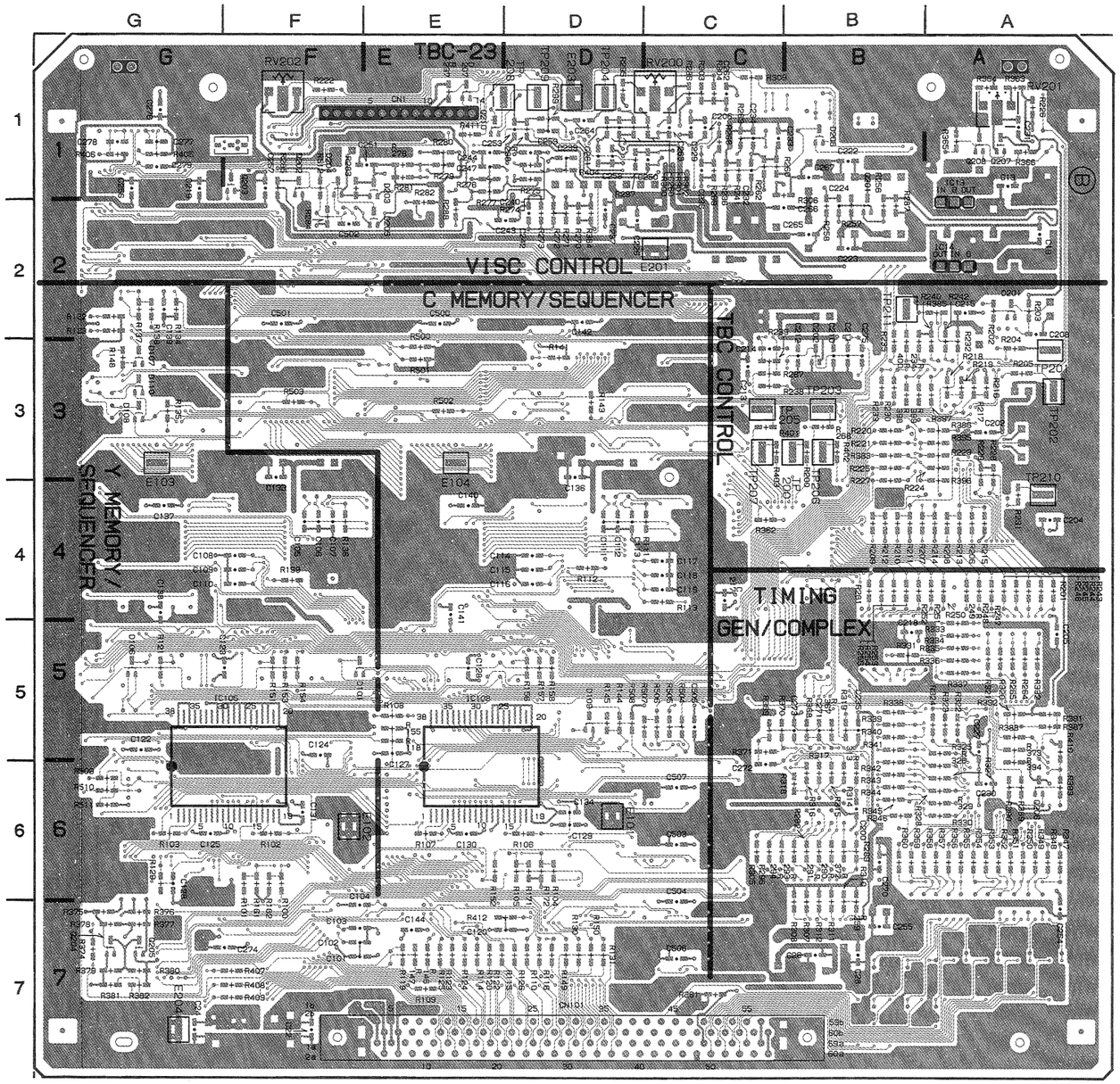
DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23PG	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(J)	; TBC-23	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23(1-648-543-13)

CN1	E-1	IC221	E-2
CN101	D-7	IC222	A-2
		IC223	D-1
✱D101	F-5	IC224	B-7
✱D106	G-5	IC225	B-6
✱D107	G-3	IC226	A-5
✱D108	G-3	IC227	B-5
✱D109	D-5	IC228	A-6
✱D110	G-3	IC229	B-5
D200	A-1	IC230	G-1
✱D201	A-2	IC500	E-3
✱D202	B-3	IC501	F-3
✱D203	E-1	IC502	C-6
✱D204	F-1	IC503	C-7
✱D205	E-2	IC504	C-6
✱D206	B-1	IC505	C-5
✱D207	E-1	IC506	C-7
E101	D-6	PS1	C-7
E102	F-6		
E103	G-3	✱Q201	B-2
E104	E-3	✱Q202	F-1
E201	C-2	✱Q203	F-1
E203	D-1	✱Q204	G-7
E204	G-7	✱Q205	G-7
		✱Q206	A-6
FL201	A-7	✱Q207	A-1
FL202	A-7	✱Q208	A-1
FL203	A-7	✱Q210	E-1
FL204	A-7		
FL205	A-7	RV200	C-1
FL206	A-7	RV201	A-1
FL207	A-7	RV202	F-1
FL208	A-7		
FL209	B-7	S1	B-1
FL210	B-7	S500	C-1
FL211	B-7		
FL212	B-7	TP200	B-3
FL213	B-7	TP201	A-3
FL214	B-7	TP202	A-3
		TP203	B-3
IC13	A-2	TP204	D-1
IC14	A-2	TP205	C-3
IC101	F-7	TP206	B-3
IC104	F-6	TP207	C-3
IC105	D-6	TP208	E-1
✱IC106	G-6	TP209	D-1
IC107	F-4	TP210	A-4
✱IC108	E-6	TP211	B-2
IC109	D-4		
IC110	G-4	X200	A-3
IC111	E-4		
IC112	G-3		
IC113	D-3		
IC114	E-7		
IC118	E-7		
IC200	A-2		
IC201	C-1		
IC202	B-3		
IC203	B-3		
IC204	C-3		
IC205	G-7		
IC206	B-4		
IC207	A-7		
IC208	A-7		
IC209	G-2		
IC210	F-2		
IC211	G-2		
IC212	A-4		
IC214	C-1		
IC215	C-1		
IC216	D-1		
IC217	D-2		
IC218	E-2		
IC219	E-1		
IC220	E-1		

✱ : B SIDE

LOT NO. D-2



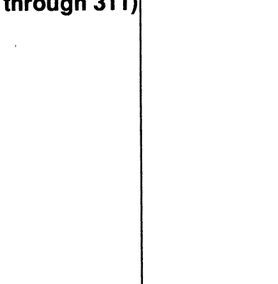
TBC-23 BOARD -B SIDE-

1-648-543-13 (LOT No. 312 - 412)

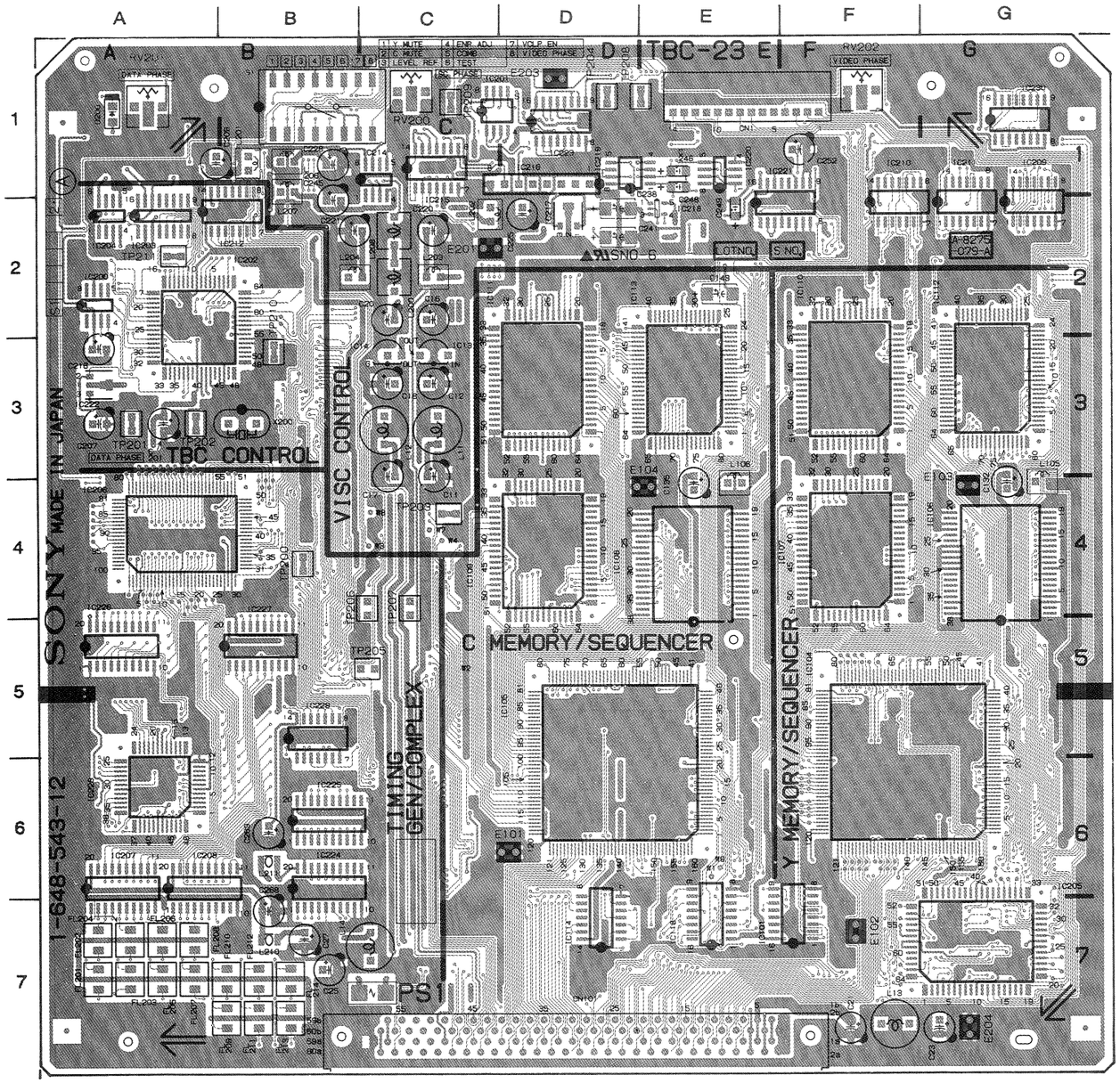
DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23PG	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(J)	; TBC-23	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23 ; TBC (Sequence & Reference blocks)
DUS-679

(Board's Lot No. 305 through 311)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



DUS-679 BOARD -A SIDE-
1-649-068-11



TBC-23 BOARD -A SIDE-
1-648-543-12 (LOT No. 305 - 311)

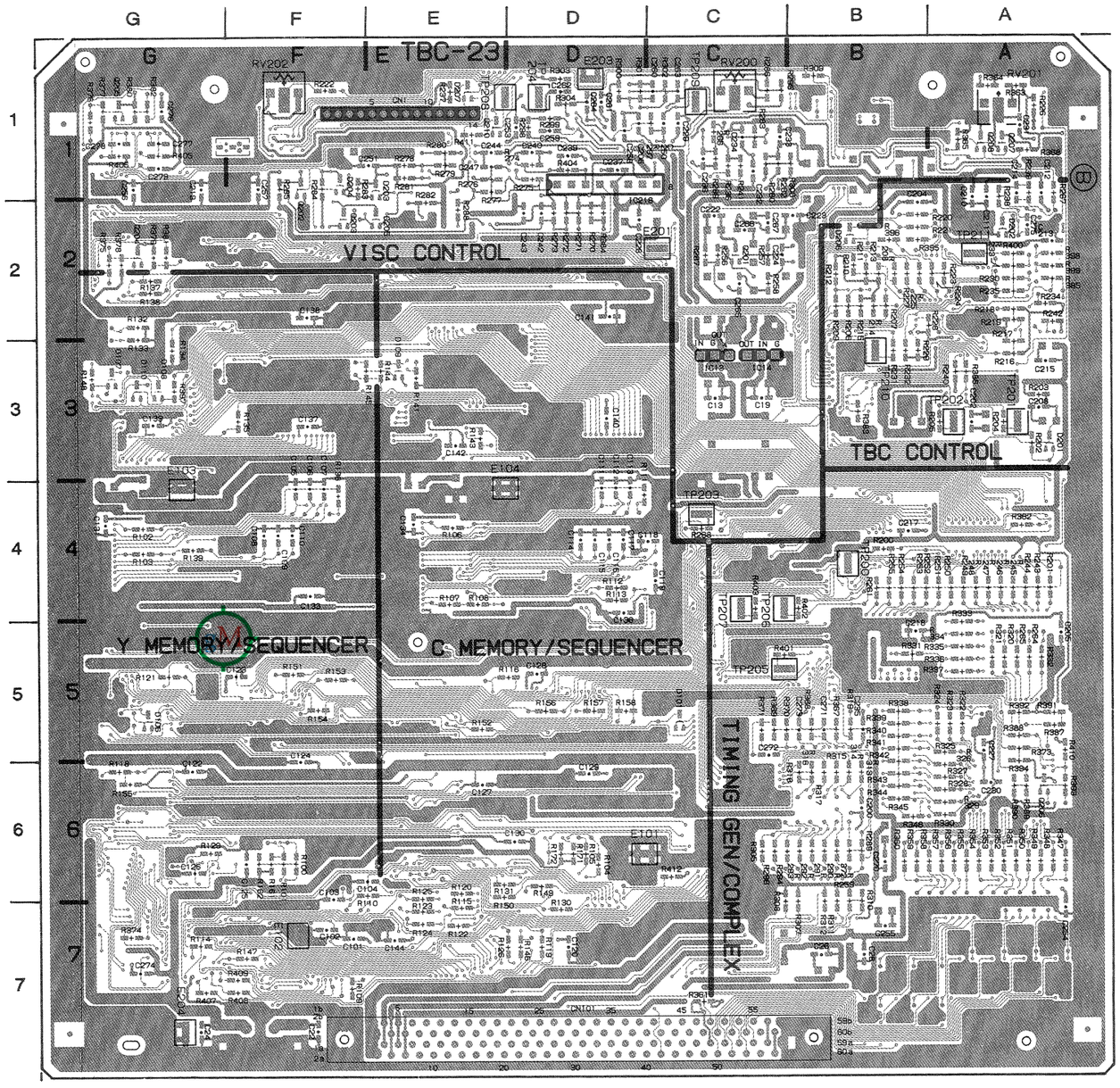
DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23PG	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23(1-648-543-12)

CN1	E-1	IC221	E-2
CN101	D-7	IC222	A-3
		IC223	D-1
✱D101	C-5	IC224	B-7
✱D106	G-5	IC225	B-6
✱D107	G-3	IC226	A-5
✱D108	G-3	IC227	B-5
✱D109	E-3	IC228	A-6
✱D110	G-3	IC229	B-5
D200	A-1	IC230	G-1
✱D201	A-3		
✱D202	A-2	PS1	C-7
✱D203	E-1		
✱D204	F-1	✱Q201	C-2
✱D205	E-2	✱Q202	F-1
✱D206	B-2	✱Q203	F-2
✱D207	E-1	✱Q204	G-2
		✱Q205	G-1
E101	D-6	✱Q206	A-6
E102	F-7	✱Q207	A-1
E103	G-4	✱Q208	A-1
E104	E-4	✱Q210	E-1
E201	C-2		
E203	F-1	RV200	C-1
E204	G-7	RV201	A-1
		RV202	F-1
FL201	A-7		
FL202	A-7	S1	B-1
FL203	A-7		
FL204	A-7	TP200	B-4
FL205	A-7	TP201	A-3
FL206	A-7	TP202	A-3
FL207	A-7	TP203	C-4
FL208	A-7	TP204	D-1
FL209	B-7	TP205	C-5
FL210	B-7	TP206	C-4
FL211	B-7	TP207	C-4
FL212	B-7	TP208	D-1
FL213	B-7	TP209	C-1
FL214	B-7	TP210	B-3
		TP211	A-2
IC13	C-3		
IC14	C-3	X200	B-3
IC101	F-7		
IC104	F-6		
IC105	D-6		
IC106	G-4		
IC107	F-4		
IC108	E-4		
IC109	D-4		
IC110	F-3		
IC111	D-3		
IC112	G-3		
IC113	E-3		
IC114	D-7		
IC118	E-7		
IC200	A-2		
IC201	C-1		
IC202	A-2		
IC203	A-2		
IC204	A-2		
IC205	G-7		
IC206	A-4		
IC207	A-7		
IC208	A-7		
IC209	G-2		
IC210	F-2		
IC211	G-2		
IC212	A-2		
IC214	C-1		
IC215	C-1		
IC216	D-1		
IC217	D-2		
IC218	E-2		
IC219	E-1		
IC220	E-1		

✱ : B SIDE

LOT NO. E-2



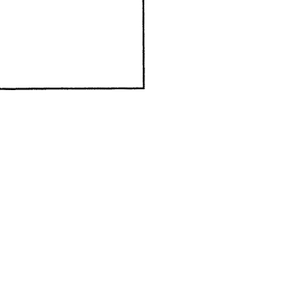
TBC-23 BOARD -B SIDE-

1-648-543-12 (LOT No. 305 - 311)

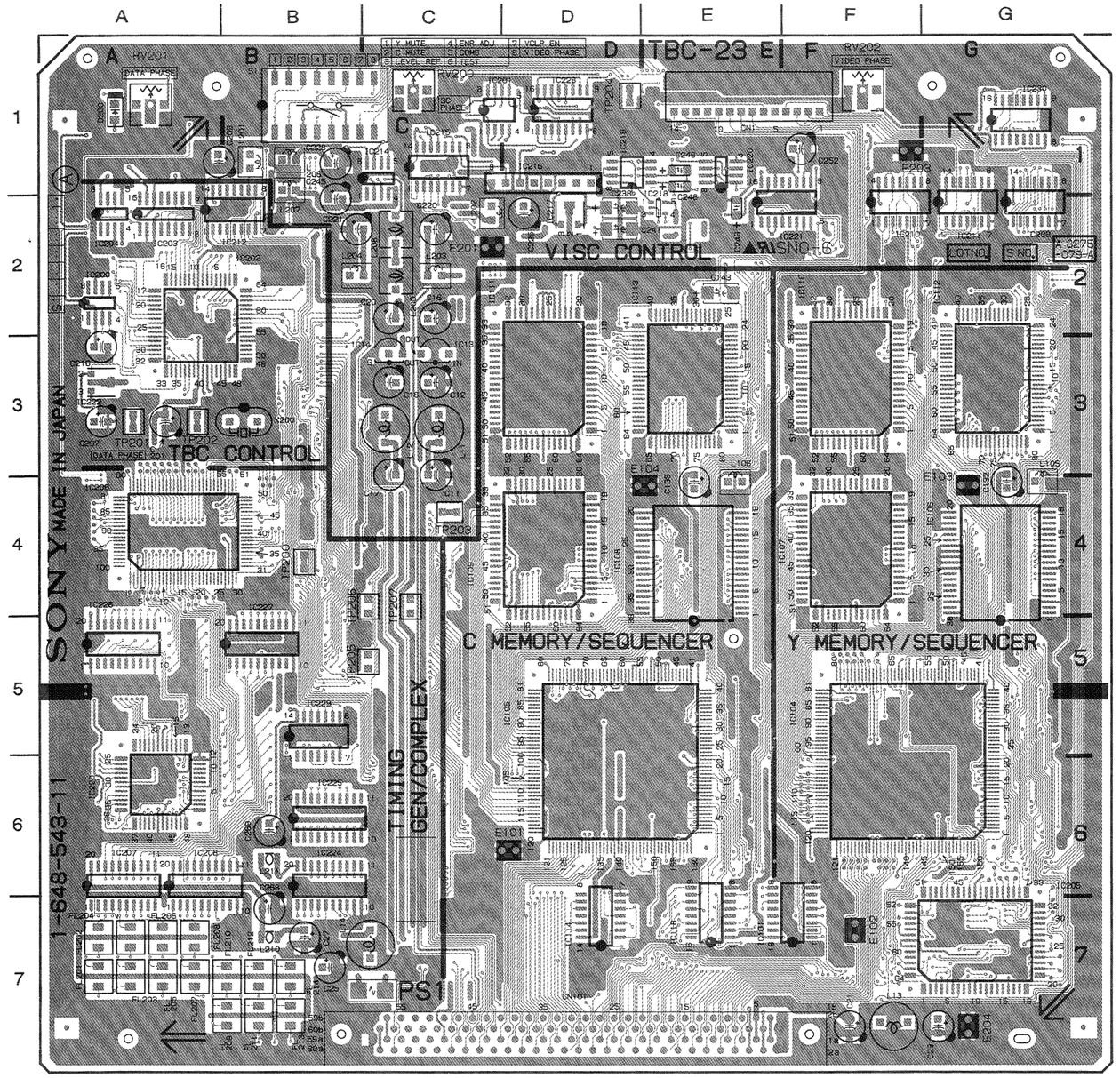
DVW-A500(J)	; TBC-23	MCB
DVW-A500(UC)	; TBC-23	MCB
DVW-A500P(EK)	; TBC-23P	MCB
DVW-A500P(UC)	; TBC-23PG	MCB
DVW-A510(J)	; TBC-23	MCB
DVW-A510(UC)	; TBC-23	MCB
DVW-A510P(EK)	; TBC-23P	MCB
DVW-CA510(UC)	; TBC-23	MCB
DVW-CA510P(EK)	; TBC-23P	MCB

TBC-23 ; TBC (Sequence & Reference blocks)
DUS-679

(Board's Lot No. 302 through 304)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)



DUS-679 BOARD **-A SIDE-**
1-649-068-11



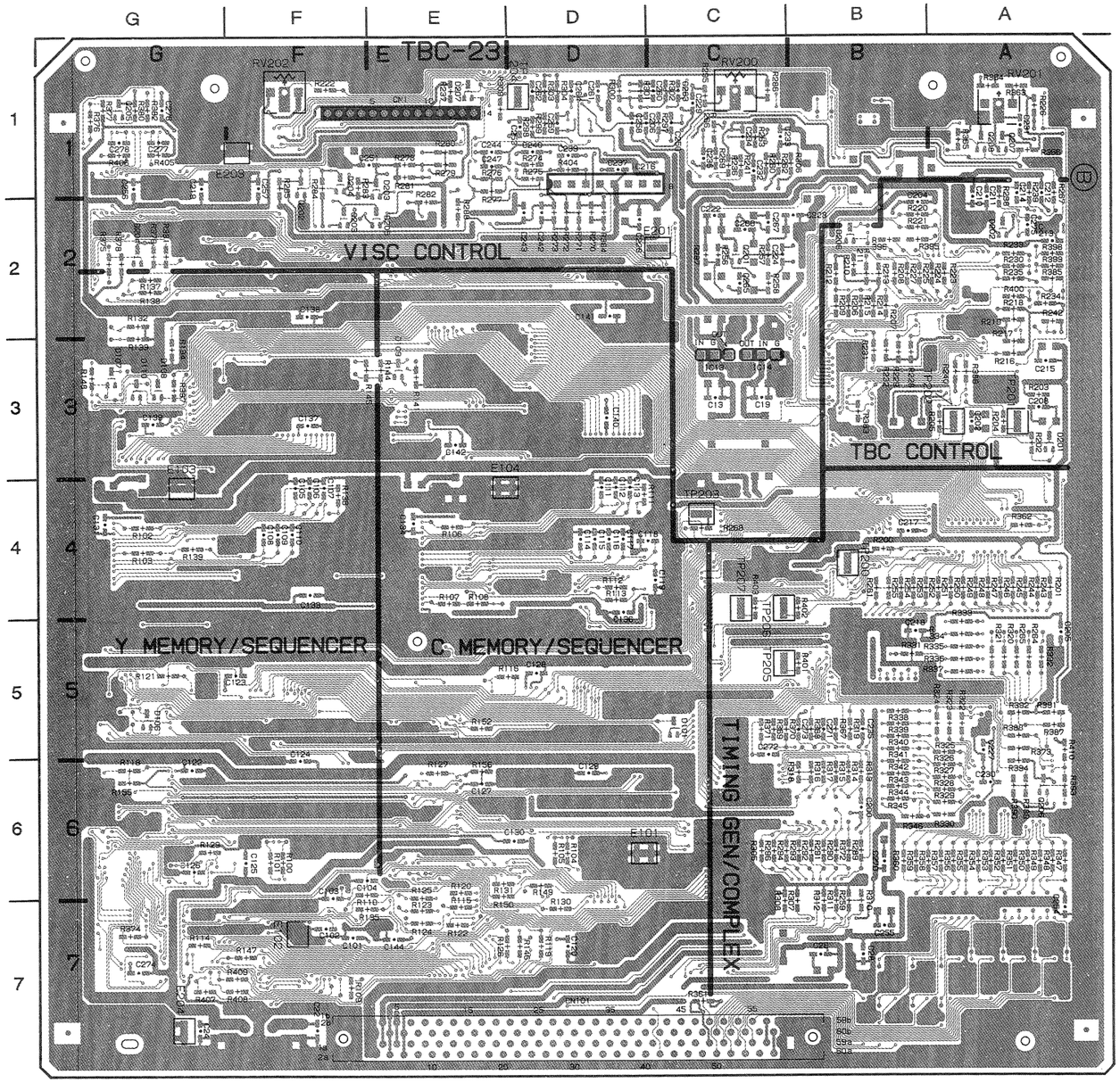
TBC-23 BOARD **-A SIDE-**
1-648-543-11 (LOT No. 302 - 304)
DVW-A500(J) ; TBC-23 MCB
DVW-A500(UC) ; TBC-23 MCB
DVW-A500P(EK) ; TBC-23P MCB

TBC-23(1-648-543-11)

CN1	E-1	IC221	E-2
CN101	D-7	IC222	A-3
		IC223	D-1
✱D101	C-5	IC224	B-7
✱D106	G-5	IC225	B-6
✱D107	G-3	IC226	A-5
✱D108	G-3	IC227	B-5
✱D109	E-3	IC228	A-6
✱D110	G-3	IC229	B-5
D200	A-1	IC230	G-1
✱D201	A-3		
✱D202	A-2	PS1	C-7
✱D203	E-1		
✱D204	F-1	✱Q201	C-2
✱D205	E-2	✱Q202	F-1
✱D206	B-2	✱Q203	F-2
✱D207	E-1	✱Q204	G-2
		✱Q205	G-1
E101	D-6	✱Q206	A-6
E102	F-7	✱Q207	A-1
E103	G-4	✱Q208	A-1
E104	E-4		
E201	C-2	RV200	C-1
E203	F-1	RV201	A-1
E204	G-7	RV202	F-1
FL201	A-7	S1	B-1
FL202	A-7		
FL203	A-7	TP200	B-4
FL204	A-7	TP201	A-3
FL205	A-7	TP202	A-3
FL206	A-7	TP203	C-4
FL207	A-7	TP204	D-1
FL208	A-7	TP205	C-5
FL209	B-7	TP206	C-4
FL210	B-7	TP207	C-4
FL211	B-7		
FL212	B-7	X200	B-3
FL213	B-7		
FL214	B-7		
IC13	C-3		
IC14	C-3		
IC101	F-7		
IC104	F-6		
IC105	D-6		
IC106	G-4		
IC107	F-4		
IC108	E-4		
IC109	D-4		
IC110	F-3		
IC111	D-3		
IC112	G-3		
IC113	E-3		
IC114	D-7		
IC118	E-7		
IC200	A-2		
IC201	C-1		
IC202	A-2		
IC203	A-2		
IC204	A-2		
IC205	G-7		
IC206	A-4		
IC207	A-7		
IC208	A-7		
IC209	G-2		
IC210	F-2		
IC211	G-2		
IC212	A-2		
IC214	C-1		
IC215	C-1		
IC216	D-1		
IC217	D-2		
IC218	E-2		
IC219	E-1		
IC220	E-1		

✱ : B SIDE

LOT NO. E-2

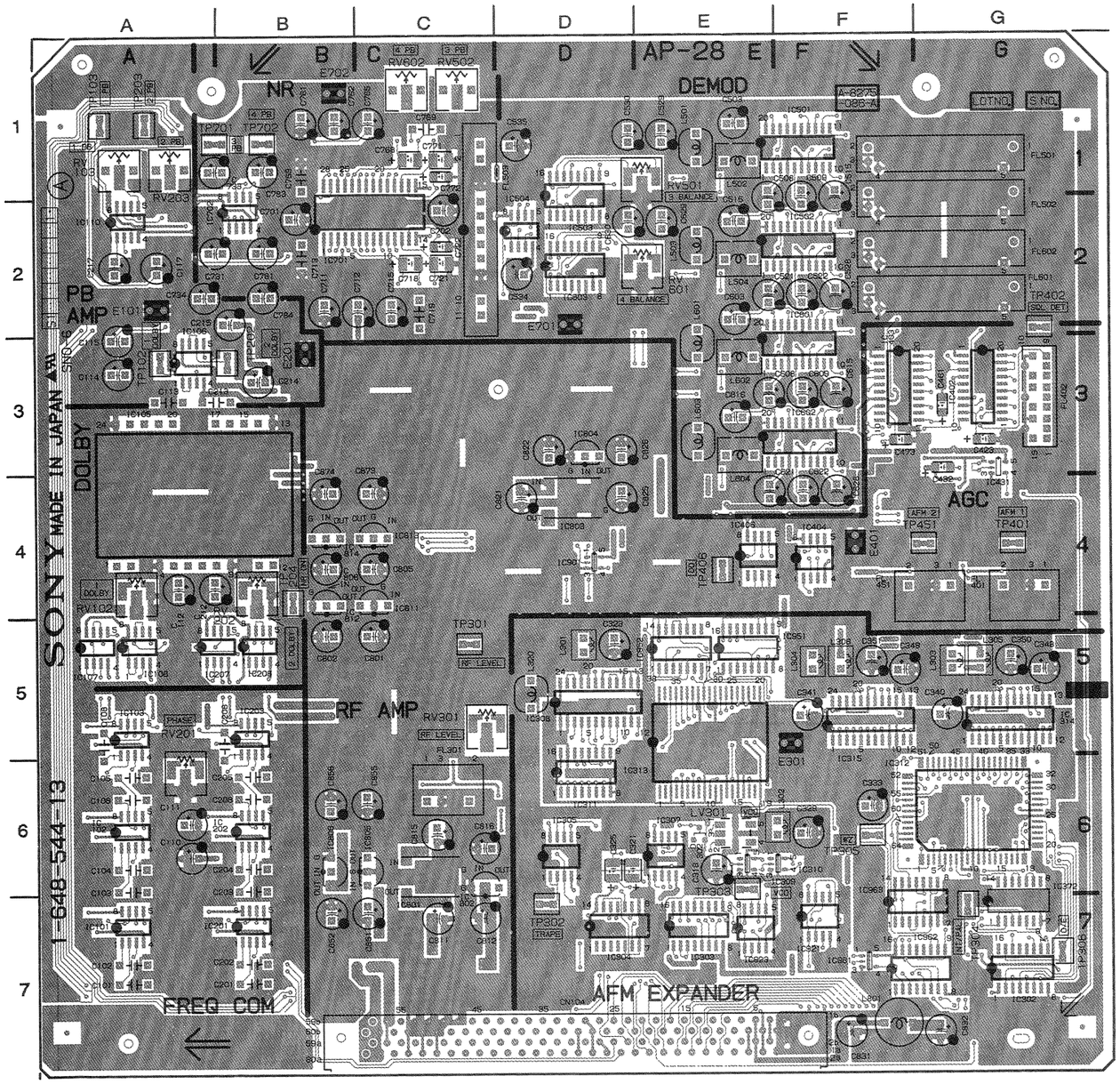


TBC-23 BOARD **-B SIDE-**

1-648-543-11 (LOT No. 302 - 304)
DVW-A500(J) ; TBC-23 MCB
DVW-A500(UC) ; TBC-23 MCB
DVW-A500P(EK) ; TBC-23P MCB

AP-28 ; AFM demodulator & LAU noise reduction

(Board's Lot No. 401 and higher)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



AP-28 BOARD -A SIDE-

1-648-544-13 (LOT No. 401 -)

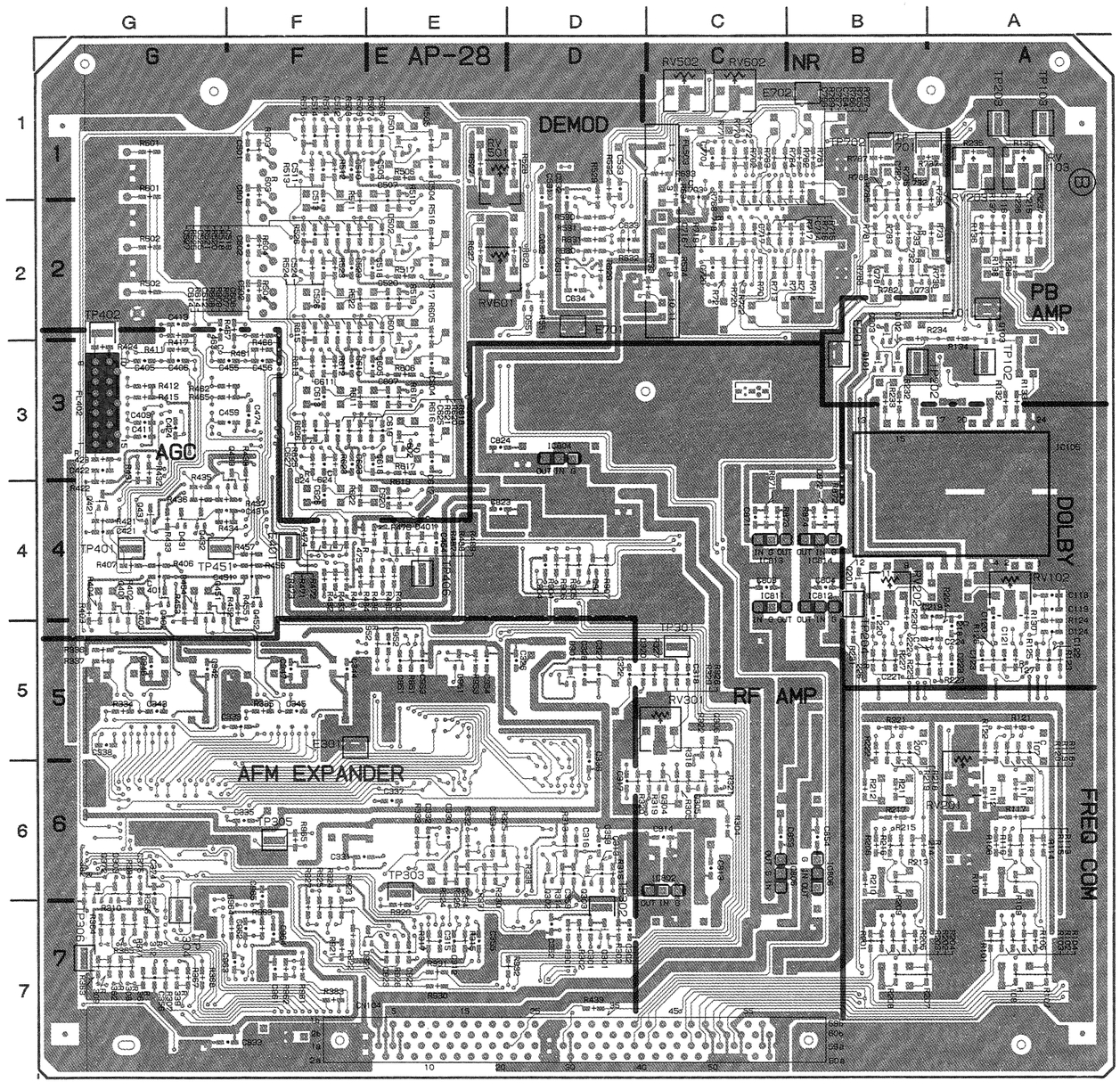
DVW-A500(J)	; AP-28	MCB
DVW-A500(UC)	; AP-28	MCB
DVW-A500P(EK)	; AP-28P	MCB
DVW-A500P(UC)	; AP-28P	MCB
DVW-A510(J)	; AP-28	MCB
DVW-A510(UC)	; AP-28	MCB
DVW-A510P(EK)	; AP-28P	MCB
DVW-CA510(J)	; AP-28	MCB
DVW-CA510(UC)	; AP-28	MCB
DVW-CA510P(EK)	; AP-28P	MCB

AP-28(1-648-544-13)

CN104	D-7	IC804	D-3
		IC805	C-6
✱D301	D-5	IC806	B-6
D302	E-6	IC811	C-4
✱D303	G-6	IC812	B-4
✱D401	E-4	IC813	C-4
✱D431	G-4	IC814	B-4
✱D501	E-1	IC901	D-4
✱D502	E-2	IC921	F-7
✱D551	D-2	IC923	E-7
✱D601	E-3	IC951	E-5
✱D602	E-3	IC952	E-5
✱D921	F-7	IC961	F-7
✱D951	E-5	IC962	F-7
		IC963	F-6
E101	A-2		
E201	B-3	LV301	E-6
E301	F-5		
E401	F-4	✱Q101	B-3
E701	D-2	✱Q102	B-3
E702	B-1	✱Q103	A-2
		✱Q201	B-4
FL301	C-6	✱Q203	B-2
FL401	G-4	✱Q301	D-7
FL402	G-3	✱Q302	D-6
FL451	G-4	✱Q303	D-6
FL501	G-1	✱Q304	C-6
FL502	G-2	✱Q305	C-6
FL503	C-2	✱Q306	C-5
FL601	G-2	✱Q372	G-6
FL602	G-2	✱Q401	G-4
		✱Q402	G-4
IC101	A-7	✱Q421	G-4
IC102	A-6	✱Q431	G-4
IC103	A-5	✱Q432	G-4
IC105	A-4	✱Q433	F-3
IC106	A-3	✱Q451	G-4
IC107	A-5	✱Q452	F-4
IC108	A-5	✱Q731	A-2
IC110	A-2	✱Q781	B-2
IC201	B-7	✱Q901	D-4
IC202	B-6		
IC203	B-5	RV102	A-4
IC207	A-5	RV103	A-1
IC208	B-5	RV201	A-6
IC302	G-7	RV202	B-4
IC303	E-7	RV203	A-1
IC304	D-7	RV301	C-5
IC305	D-6	RV501	E-1
IC307	E-6	RV502	C-1
IC308	D-5	RV601	E-2
IC309	E-6	RV602	C-1
IC310	E-6		
IC311	D-6	TP102	A-3
IC312	G-6	TP103	A-1
IC313	E-6	TP202	B-3
IC314	G-5	TP203	A-1
IC315	F-5	TP204	B-4
IC372	G-7	TP301	C-5
IC402	G-3	TP302	D-7
IC403	F-3	TP303	E-6
IC404	F-4	TP304	G-7
IC406	E-4	TP305	F-6
IC431	G-3	TP306	G-7
IC501	E-1	TP401	G-4
IC502	E-2	TP402	G-2
IC503	D-2	TP406	E-2
IC504	D-2	TP451	F-4
IC601	E-3	TP701	A-1
IC602	E-3	TP702	B-1
IC603	D-2		
IC701	B-2		
IC702	B-2		
IC801	C-6		
IC802	C-6		
IC803	D-4		

✱ : B SIDE

LOT NO. G-1



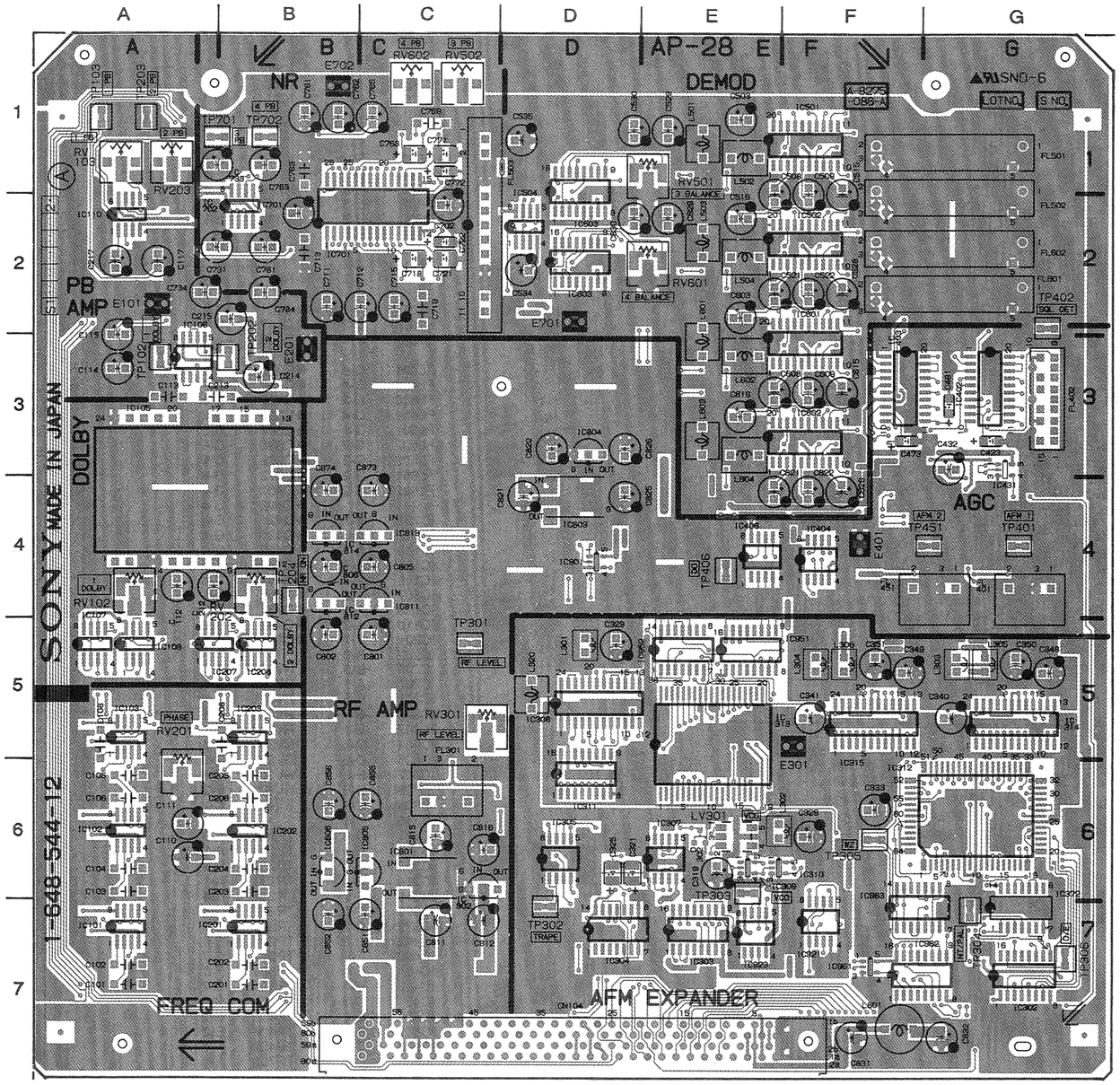
AP-28 BOARD -B SIDE-

1-648-544-13 (LOT No. 401 -)

DVW-A500(J)	; AP-28	MCB
DVW-A500(UC)	; AP-28	MCB
DVW-A500P(EK)	; AP-28P	MCB
DVW-A500P(UC)	; AP-28P	MCB
DVW-A510(J)	; AP-28	MCB
DVW-A510(UC)	; AP-28	MCB
DVW-A510P(EK)	; AP-28P	MCB
DVW-CA510(J)	; AP-28	MCB
DVW-CA510(UC)	; AP-28	MCB
DVW-CA510P(EK)	; AP-28P	MCB

AP-28 ; AFM demodulator & LAU noise reduction

(Board's Lot No. 305 through 312)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



AP-28 BOARD -A SIDE-

1-648-544-12 (LOT No. 305 - 312)

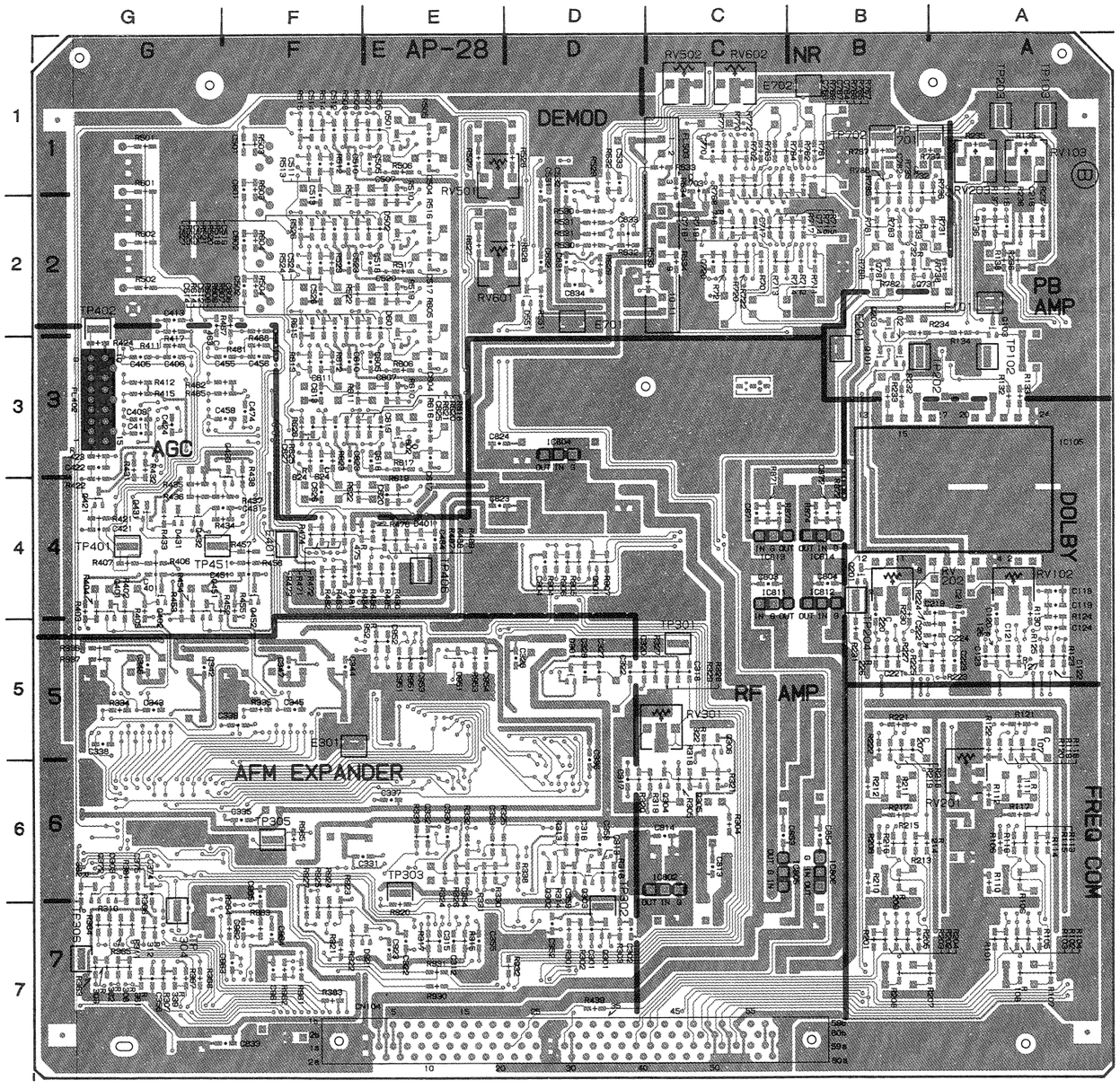
DVW-A500(J)	; AP-28	MCB
DVW-A500(UC)	; AP-28	MCB
DVW-A500P(EK)	; AP-28P	MCB
DVW-A500P(UC)	; AP-28P	MCB
DVW-A510(J)	; AP-28	MCB
DVW-A510(UC)	; AP-28	MCB
DVW-A510P(EK)	; AP-28P	MCB
DVW-CA510(UC)	; AP-28	MCB
DVW-CA510P(EK)	; AP-28P	MCB

AP-28(1-648-544-12)

CN104	D-7	IC804	D-3
		IC805	C-6
✱D301	D-5	IC806	B-6
D302	E-6	IC811	C-4
✱D303	G-6	IC812	B-4
✱D401	E-4	IC813	C-4
✱D431	G-4	IC814	B-4
✱D501	E-1	IC901	D-4
✱D502	E-2	IC921	F-7
✱D551	D-2	IC923	E-7
✱D601	E-3	IC951	E-5
✱D602	E-3	IC952	E-5
✱D921	F-7	IC961	F-7
✱D951	E-5	IC962	F-7
		IC963	F-6
E101	A-2		
E201	B-3	LV301	E-6
E301	F-5		
E401	F-4	✱Q101	B-3
E701	D-2	✱Q102	B-3
E702	B-1	✱Q103	A-2
		✱Q201	B-4
FL301	C-6	✱Q203	B-2
FL401	G-4	✱Q301	D-7
FL402	G-3	✱Q302	D-6
FL451	G-4	✱Q303	D-6
FL501	G-1	✱Q304	C-6
FL502	G-2	✱Q305	C-6
FL503	C-2	✱Q306	C-5
FL601	G-2	✱Q372	G-6
FL602	G-2	✱Q401	G-4
		✱Q402	G-4
IC101	A-7	✱Q421	G-4
IC102	A-6	✱Q431	G-4
IC103	A-5	✱Q432	G-4
IC105	A-4	✱Q433	F-3
IC106	A-3	✱Q451	G-4
IC107	A-5	✱Q452	F-4
IC108	A-5	✱Q731	A-2
IC110	A-2	✱Q781	B-2
IC201	B-7	✱Q901	D-4
IC202	B-6		
IC203	B-5	RV102	A-4
IC207	A-5	RV103	A-1
IC208	B-5	RV201	A-6
IC302	G-7	RV202	B-4
IC303	E-7	RV203	A-1
IC304	D-7	RV301	C-5
IC305	D-6	RV501	E-1
IC307	E-6	RV502	C-1
IC308	D-5	RV601	E-2
IC309	E-6	RV602	C-1
IC310	E-6		
IC311	D-6	TP102	A-3
IC312	G-6	TP103	A-1
IC313	E-6	TP202	B-3
IC314	G-5	TP203	A-1
IC315	F-5	TP204	B-4
IC372	G-7	TP301	C-5
IC402	G-3	TP302	D-7
IC403	F-3	TP303	E-6
IC404	F-4	TP304	G-7
IC406	E-4	TP305	F-6
IC431	G-3	TP306	G-7
IC501	E-1	TP401	G-4
IC502	E-2	TP402	G-2
IC503	D-2	TP406	E-2
IC504	D-2	TP451	F-4
IC601	E-3	TP701	A-1
IC602	E-3	TP702	B-1
IC603	D-2		
IC701	B-2		
IC702	B-2		
IC801	C-6		
IC802	C-6		
IC803	D-4		

✱ : B SIDE

LOT NO. G-1



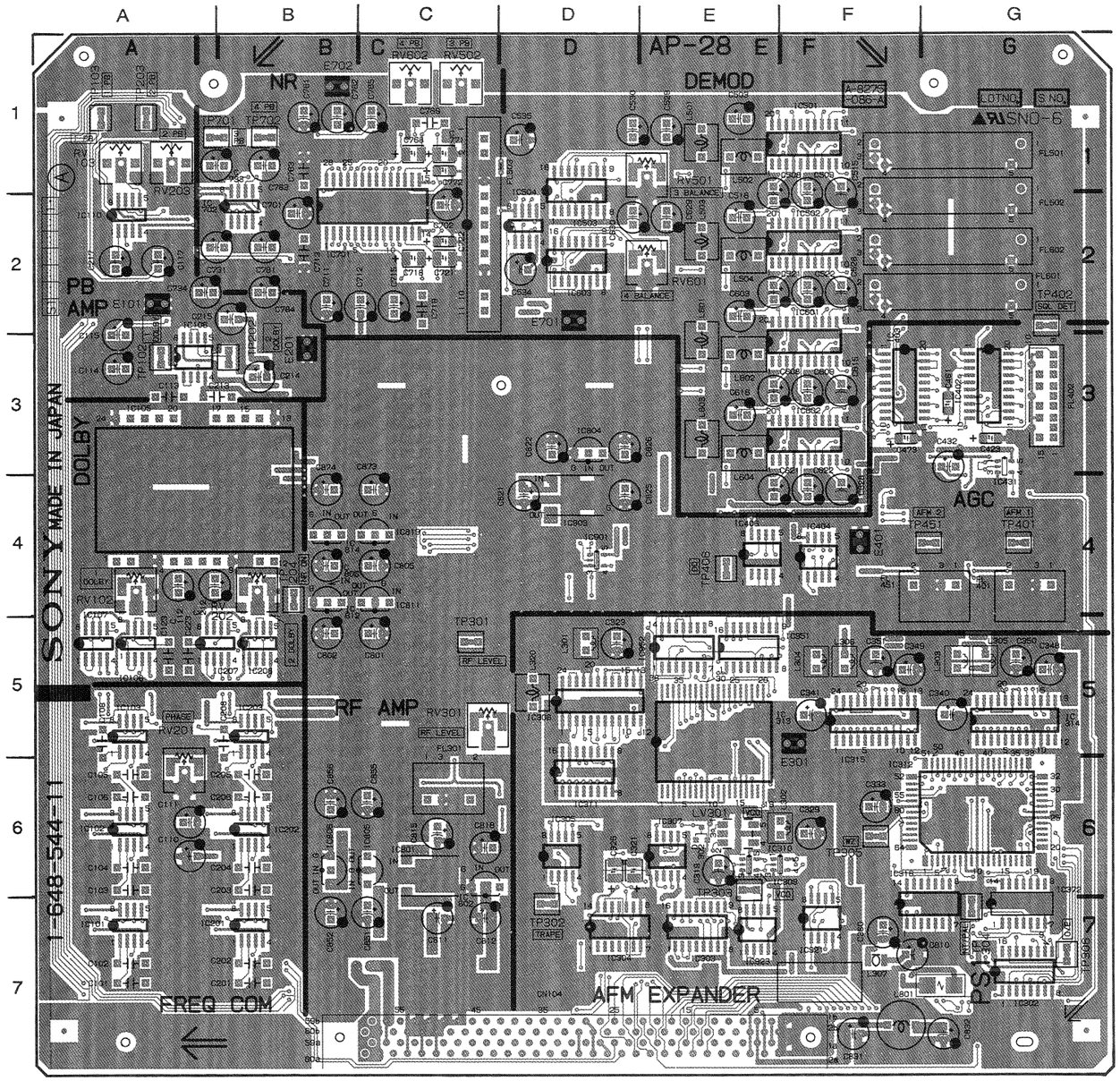
AP-28 BOARD -B SIDE-

1-648-544-12 (LOT No. 305 - 312)

DVW-A500(J)	; AP-28	MCB
DVW-A500(UC)	; AP-28	MCB
DVW-A500P(EK)	; AP-28P	MCB
DVW-A500P(UC)	; AP-28P	MCB
DVW-A510(J)	; AP-28	MCB
DVW-A510(UC)	; AP-28	MCB
DVW-A510P(EK)	; AP-28P	MCB
DVW-CA510(UC)	; AP-28	MCB
DVW-CA510P(EK)	; AP-28P	MCB

AP-28 ; AFM demodulator & LAU noise reduction

(Board's Lot No. 302 through 304)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)



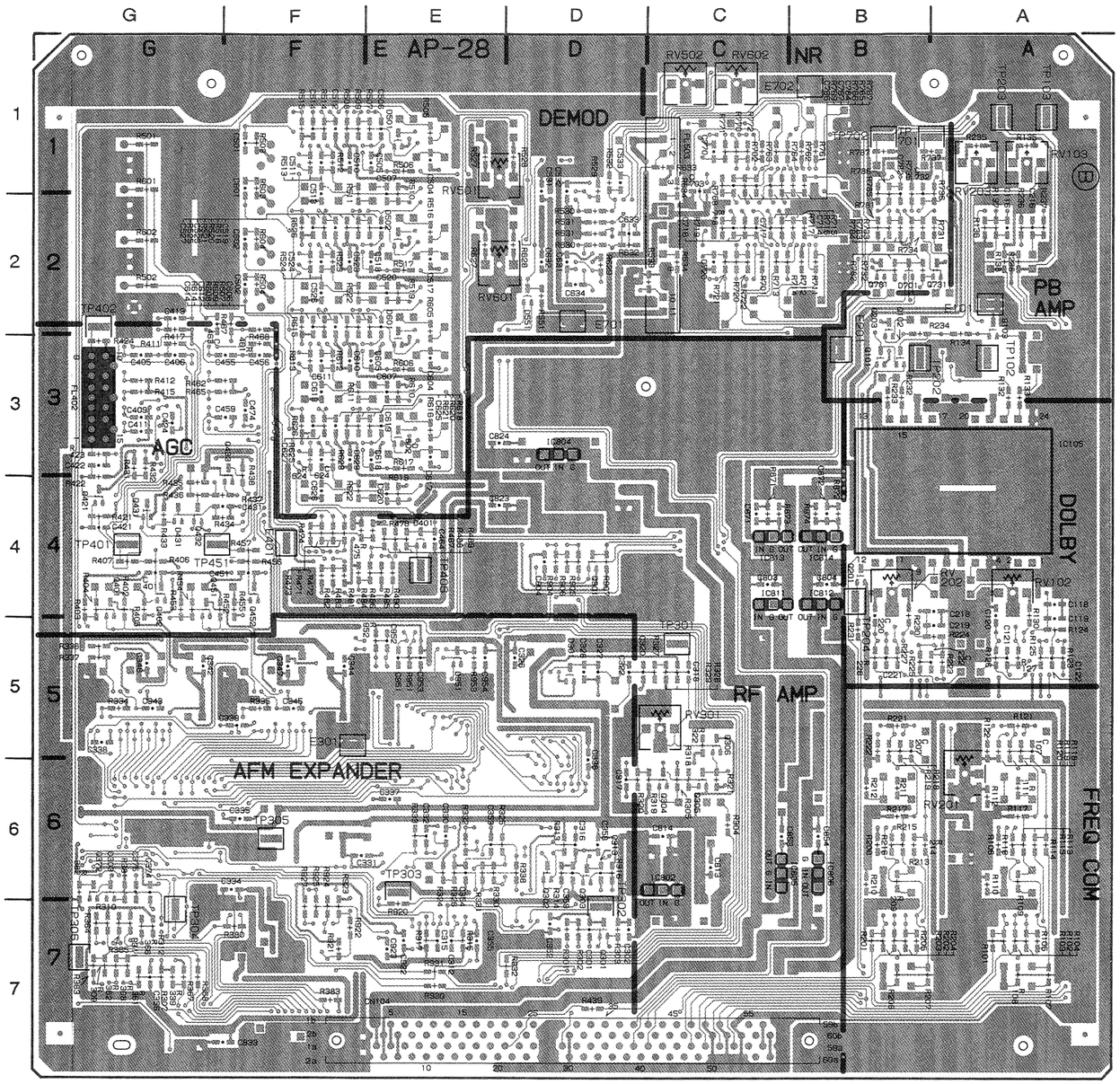
AP-28 BOARD -A SIDE-
1-648-544-11 (LOT No. 302 - 304)
DVW-A500(J) ; AP-28 MCB
DVW-A500(UC) ; AP-28 MCB
DVW-A500P(EK) ; AP-28P MCB

AP-28(1-648-544-11)

CN104	D-7	IC803	D-4
		IC804	D-3
✱D301	D-5	IC805	C-6
D302	E-6	IC806	B-6
✱D303	G-6	IC811	C-4
✱D401	E-4	IC812	B-4
✱D431	G-4	IC813	C-4
✱D501	E-1	IC814	B-4
✱D502	E-2	IC901	D-4
✱D551	D-2	IC921	F-7
✱D601	E-3	IC923	E-7
✱D602	E-3	IC951	E-5
✱D701	B-2	IC952	E-5
✱D951	E-5		
		LV301	E-6
E101	A-2		
E201	B-3	PS1	G-7
E301	F-5		
E401	F-4	✱Q101	B-3
E701	D-2	✱Q102	B-3
E702	B-1	✱Q103	A-2
		✱Q201	B-4
FL301	C-6	✱Q203	B-2
FL401	G-4	✱Q301	D-7
FL402	G-3	✱Q302	D-6
FL451	G-4	✱Q303	D-6
FL501	G-1	✱Q304	C-6
FL502	G-2	✱Q305	C-6
FL503	C-2	✱Q306	C-5
FL601	G-2	✱Q372	G-6
FL602	G-2	✱Q401	G-4
		✱Q402	G-4
IC101	A-7	✱Q421	G-4
IC102	A-6	✱Q431	G-4
IC103	A-5	✱Q432	G-4
IC105	A-4	✱Q433	F-3
IC106	A-3	✱Q451	G-4
IC107	A-5	✱Q452	F-4
IC108	A-5	✱Q731	A-2
IC110	A-2	✱Q781	B-2
IC201	B-7	✱Q901	D-4
IC202	B-6		
IC203	B-5	RV102	A-4
IC207	A-5	RV103	A-1
IC208	B-5	RV201	A-6
IC302	G-7	RV202	B-4
IC303	E-7	RV203	A-1
IC304	D-7	RV301	C-5
IC305	D-6	RV501	E-1
IC307	E-6	RV502	C-1
IC308	D-5	RV601	E-2
IC309	E-6	RV602	C-1
IC310	E-6		
IC311	D-6	TP102	A-3
IC312	G-6	TP103	A-1
IC313	E-6	TP202	B-3
IC314	G-5	TP203	A-1
IC315	F-5	TP204	B-4
IC316	F-7	TP301	C-5
IC372	G-7	TP302	D-7
IC402	G-3	TP303	E-6
IC403	F-3	TP304	G-7
IC404	F-4	TP305	F-6
IC406	E-4	TP306	G-7
IC431	G-3	TP401	G-4
IC501	E-1	TP402	G-2
IC502	E-2	TP406	E-2
IC503	D-2	TP451	F-4
IC504	D-2	TP701	A-1
IC601	E-3	TP702	B-1
IC602	E-3		
IC603	D-2		
IC701	B-2		
IC702	B-2		
IC801	C-6		
IC802	C-6		

✱ : B SIDE

LOT NO. G-1

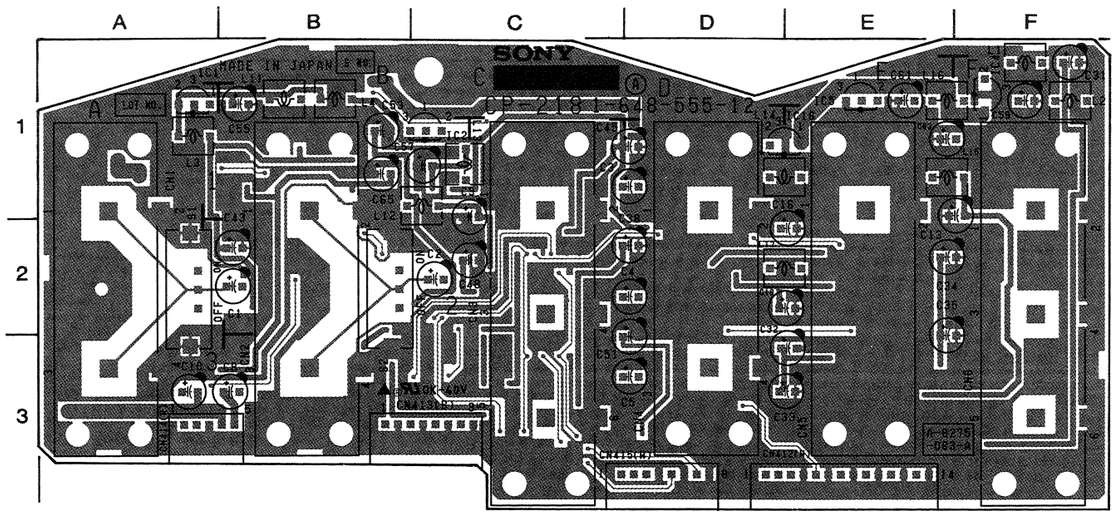


AP-28 BOARD -B SIDE-

1-648-544-11 (LOT No. 302 - 304)
DVW-A500(J) ; AP-28 MCB
DVW-A500(UC) ; AP-28 MCB
DVW-A500P(EK) ; AP-28P MCB

CP-218 ; Rear connector board (Analog video)

(Board's Lot No. 307 and higher)
All recorder models



CP-218 BOARD -A SIDE-

1-648-555-12 (LOT No. 307 -)

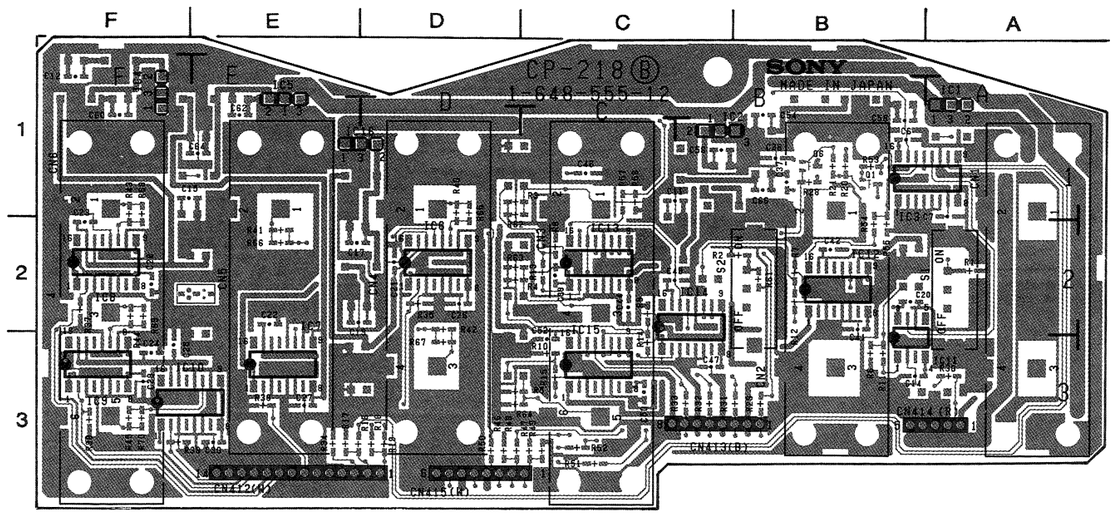
DVW-A500(J)	; CP-218	MCB
DVW-A500(UC)	; CP-218	MCB
DVW-A500P(EK)	; CP-218	MCB
DVW-A500P(UC)	; CP-218	MCB
DVW-500(J)	; CP-218	MCB
DVW-500(UC)	; CP-218	MCB
DVW-500P(EK)	; CP-218	MCB
DVW-500P(UC)	; CP-218	MCB

CP-218(1-648-555-12)

CN1	A-2
CN2	B-2
CN3	C-2
CN4	D-2
CN5	E-2
CN6	F-2
CN412	E-3
CN413	C-3
CN414	A-3
CN415	D-3
IC1	A-1
IC2	C-1
✱IC3	B-1
IC4	F-1
✱IC5	E-2
✱IC6	E-2
✱IC7	E-3
✱IC8	F-2
✱IC9	F-3
✱IC10	F-3
✱IC11	B-3
✱IC12	B-2
✱IC13	C-2
✱IC14	C-3
✱IC15	C-3
IC16	D-1
✱Q1	B-1
✱Q6	B-1
S1	A-2
S2	B-2

✱ : B SIDE

LOT NO. A-1



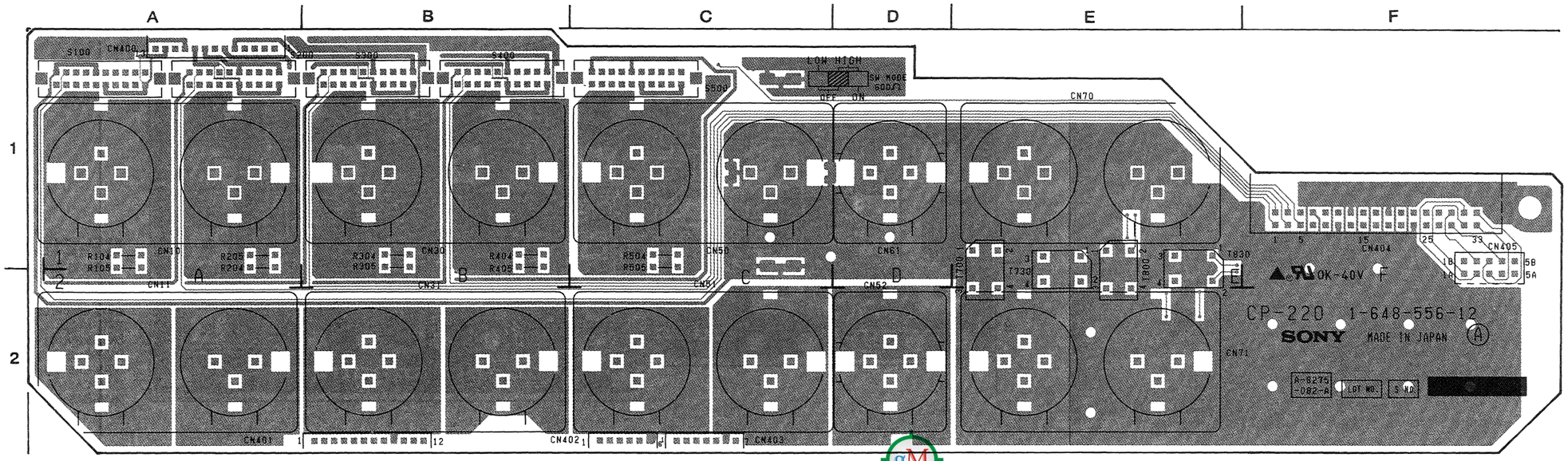
CP-218 BOARD -B SIDE-

1-648-555-12 (LOT No. 307 -)

DVW-A500(J)	; CP-218	MCB
DVW-A500(UC)	; CP-218	MCB
DVW-A500P(EK)	; CP-218	MCB
DVW-A500P(UC)	; CP-218	MCB
DVW-500(J)	; CP-218	MCB
DVW-500(UC)	; CP-218	MCB
DVW-500P(EK)	; CP-218	MCB
DVW-500P(UC)	; CP-218	MCB

CP-220 ; Rear connector board (Analog/Digital audio, TC)

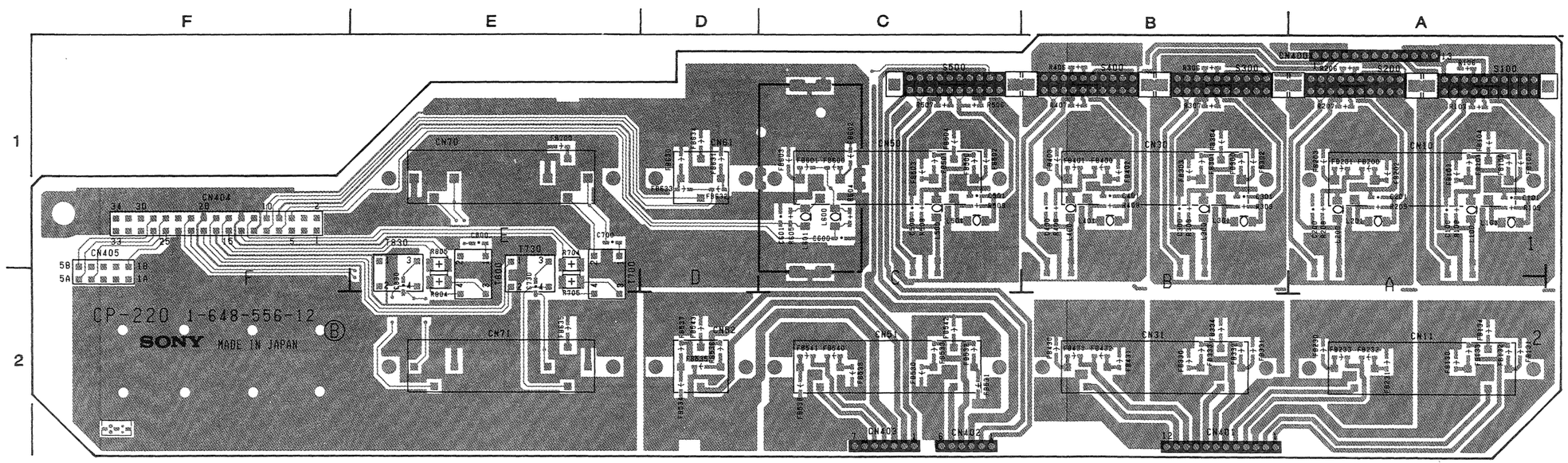
(Board's Lot No. 307 and higher)
All recorder models



CP-220 BOARD -A SIDE-

1-648-556-12 (LOT No. 307 -)

DVW-A500(J)	; CP-220J	MCB
DVW-A500(UC)	; CP-220	MCB
DVW-A500P(EK)	; CP-220	MCB
DVW-A500P(UC)	; CP-220	MCB
DVW-500(J)	; CP-220J	MCB
DVW-500(UC)	; CP-220	MCB
DVW-500P(EK)	; CP-220	MCB
DVW-500P(UC)	; CP-220	MCB



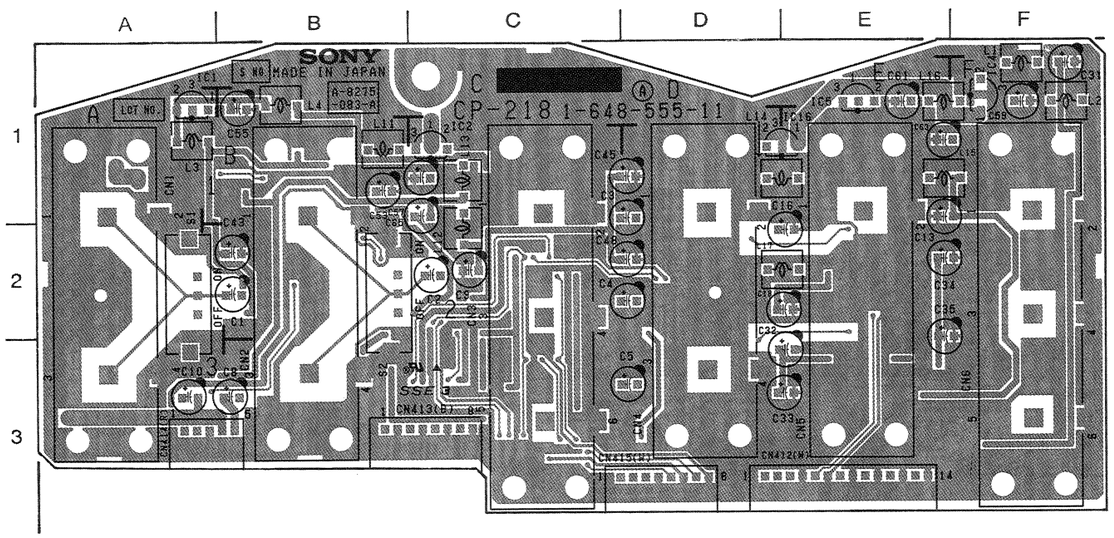
CP-220 BOARD -B SIDE-

1-648-556-12 (LOT No. 307 -)

DVW-A500(J)	; CP-220J	MCB
DVW-A500(UC)	; CP-220	MCB
DVW-A500P(EK)	; CP-220	MCB
DVW-A500P(UC)	; CP-220	MCB
DVW-500(J)	; CP-220J	MCB
DVW-500(UC)	; CP-220	MCB
DVW-500P(EK)	; CP-220	MCB
DVW-500P(UC)	; CP-220	MCB

CP-218 ; Rear connector board (Analog video)

(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)



CP-218 BOARD -A SIDE-

1-648-555-11 (LOT No. 302 - 306)

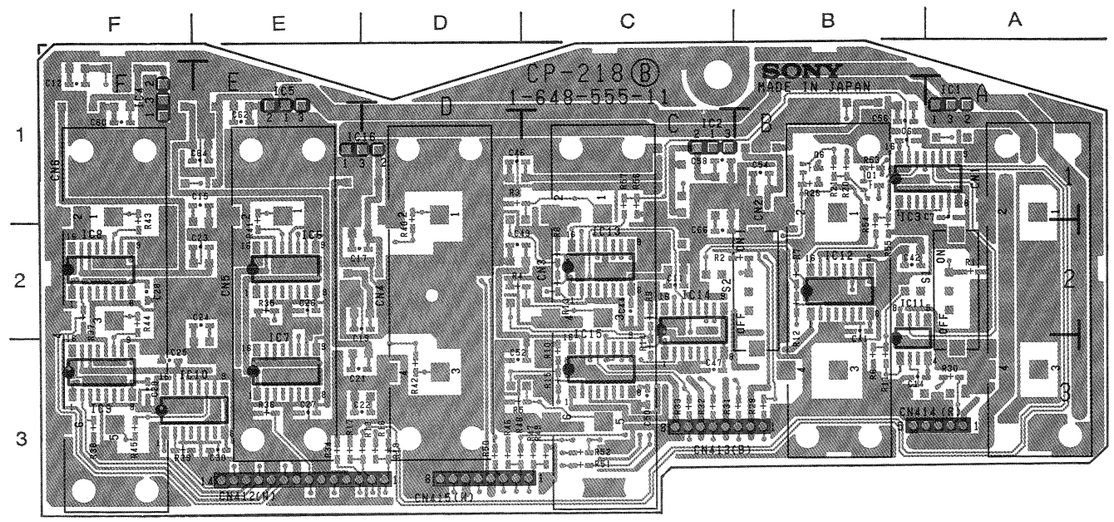
DVW-A500(J)	; CP-218	MCB
DVW-A500(UC)	; CP-218	MCB
DVW-A500P(EK)	; CP-218	MCB
DVW-A500P(UC)	; CP-218	MCB
DVW-500(J)	; CP-218	MCB
DVW-500(UC)	; CP-218	MCB
DVW-500P(EK)	; CP-218	MCB

CP-218(1-648-555-11)

CN1	A-2
CN2	B-2
CN3	C-2
CN4	D-2
CN5	E-2
CN6	F-2
CN412	E-3
CN413	C-3
CN414	A-3
CN415	D-3
IC1	A-1
IC2	C-1
✱IC3	B-1
IC4	F-1
✱IC5	E-2
✱IC6	E-2
✱IC7	E-3
✱IC8	F-2
✱IC9	F-3
✱IC10	F-3
✱IC11	B-3
✱IC12	B-2
✱IC13	C-2
✱IC14	C-3
✱IC15	C-3
IC16	D-1
✱Q1	B-1
✱Q6	B-1
S1	A-2
S2	B-2

✱: B SIDE

LOT NO. A-1



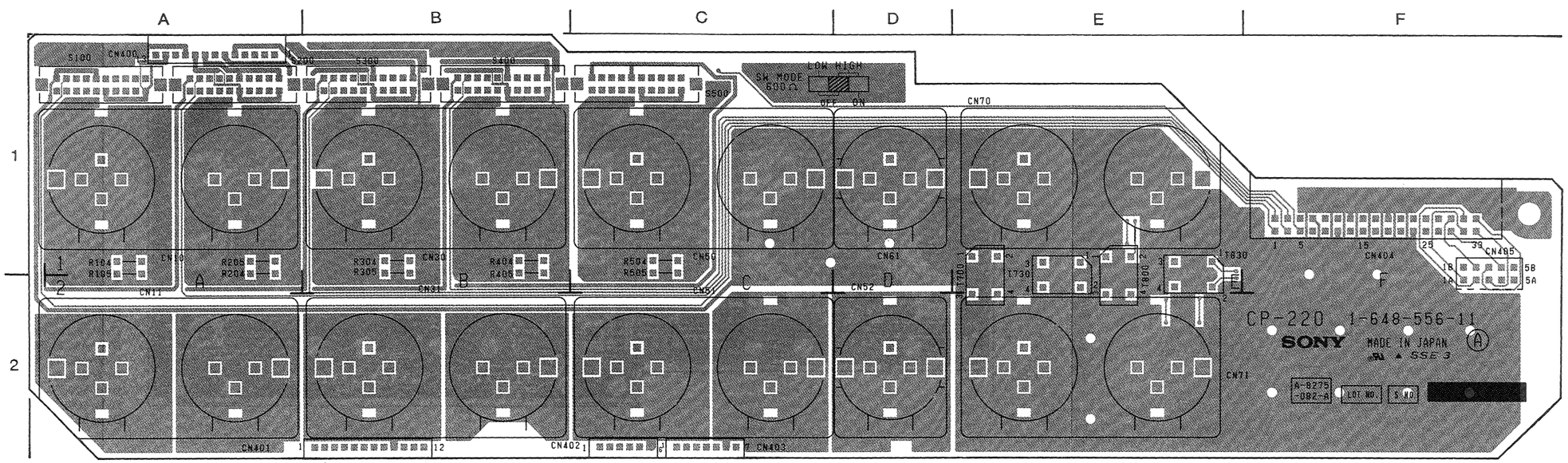
CP-218 BOARD -B SIDE-

1-648-555-11 (LOT No. 302 - 306)

DVW-A500(J)	; CP-218	MCB
DVW-A500(UC)	; CP-218	MCB
DVW-A500P(EK)	; CP-218	MCB
DVW-A500P(UC)	; CP-218	MCB
DVW-500(J)	; CP-218	MCB
DVW-500(UC)	; CP-218	MCB
DVW-500P(EK)	; CP-218	MCB

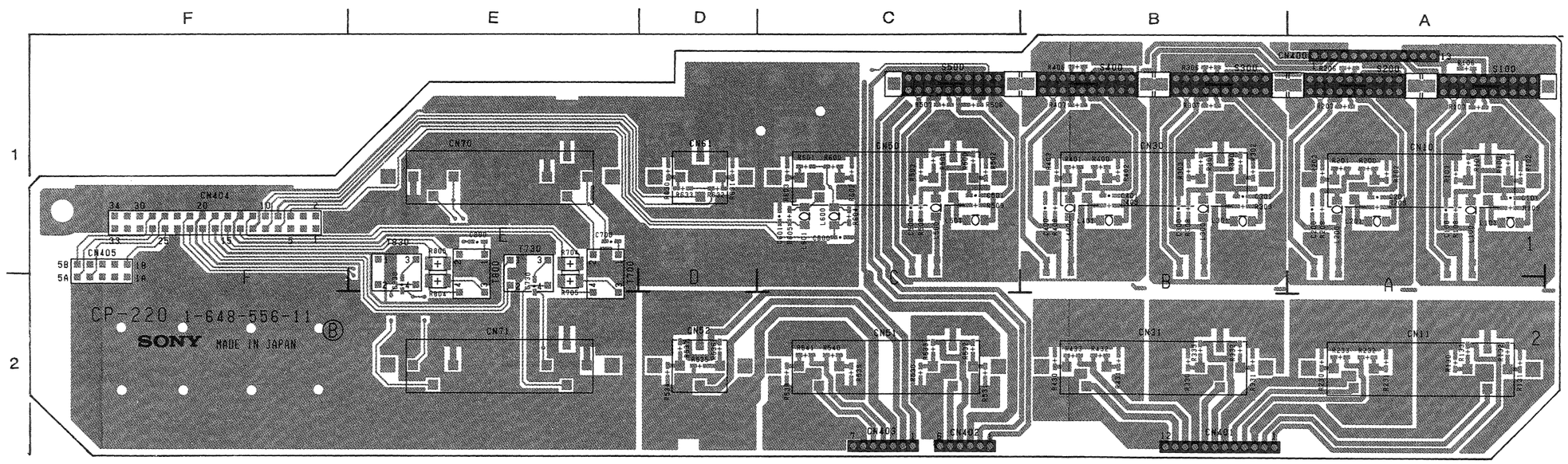
CP-220 ; Rear connector board (Analog/Digital audio, TC)

(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)



CP-220 BOARD -A SIDE-

1-648-556-11 (LOT No. 302 - 306)
DVW-A500(J) ; CP-220J MCB
DVW-A500(UC) ; CP-220 MCB
DVW-A500P(EK) ; CP-220 MCB
DVW-A500P(UC) ; CP-220 MCB
DVW-500(J) ; CP-220J MCB
DVW-500(UC) ; CP-220 MCB
DVW-500P(EK) ; CP-220 MCB

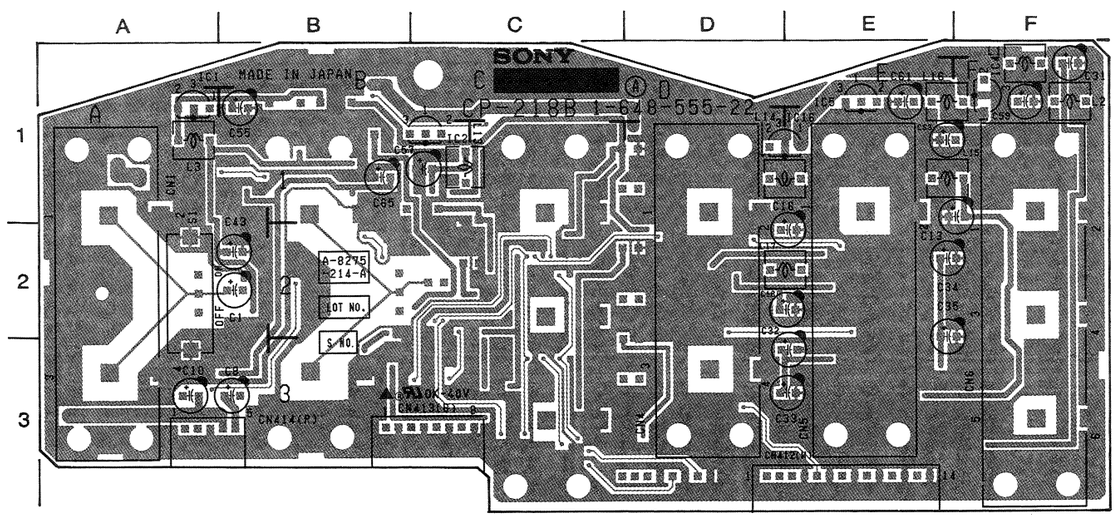


CP-220 BOARD -B SIDE-

1-648-556-11 (LOT No. 302 - 306)
DVW-A500(J) ; CP-220J MCB
DVW-A500(UC) ; CP-220 MCB
DVW-A500P(EK) ; CP-220 MCB
DVW-A500P(UC) ; CP-220 MCB
DVW-500(J) ; CP-220J MCB
DVW-500(UC) ; CP-220 MCB
DVW-500P(EK) ; CP-220 MCB

CP-218B ; Rear connector board (Analog video)

(Board's Lot No. 307 and higher)
All player models



CP-218B BOARD -A SIDE-

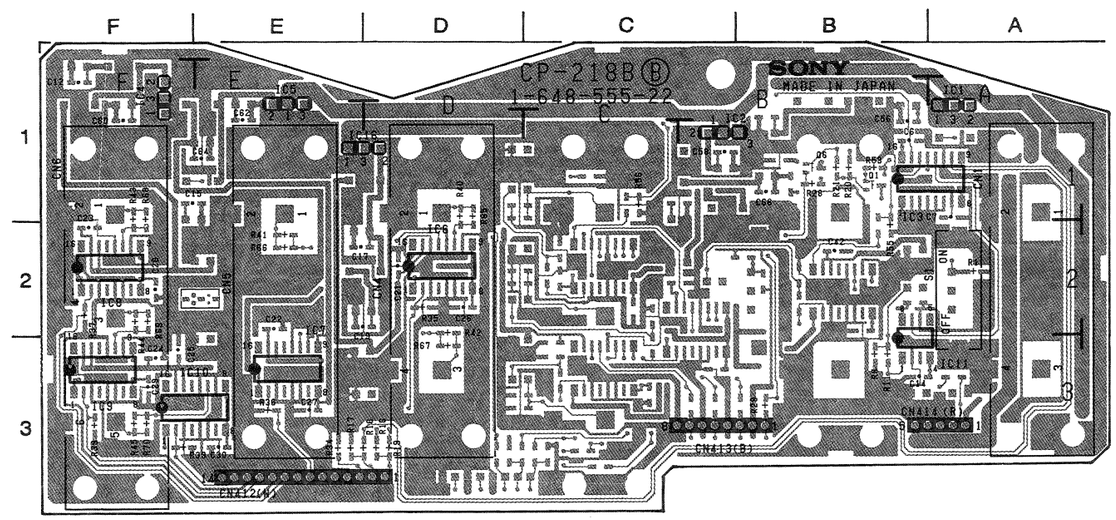
1-648-555-22 (LOT No. 307 -)
DVW-A510(J) ; CP-218B MCB
DVW-A510(UC) ; CP-218B MCB
DVW-A510P(EK) ; CP-218B MCB
DVW-510(J) ; CP-218B MCB
DVW-510(UC) ; CP-218B MCB
DVW-510P(EK) ; CP-218B MCB
DVW-CA510(J) ; CP-218B MCB
DVW-CA510(UC) ; CP-218B MCB
DVW-CA510P(EK) ; CP-218B MCB

CP-218B(1-648-555-22)

CN1	A-2
CN4	D-2
CN5	E-2
CN6	F-2
CN412	E-3
CN413	C-3
CN414	A-3
IC1	A-1
IC2	C-1
✱IC3	B-1
IC4	F-1
✱IC5	E-2
✱IC6	E-2
✱IC7	E-3
✱IC8	F-2
✱IC9	F-3
✱IC10	F-3
✱IC11	B-3
IC16	D-1
✱Q1	B-1
✱Q6	B-1
S1	A-2

✱ : B SIDE

LOT NO. A-1

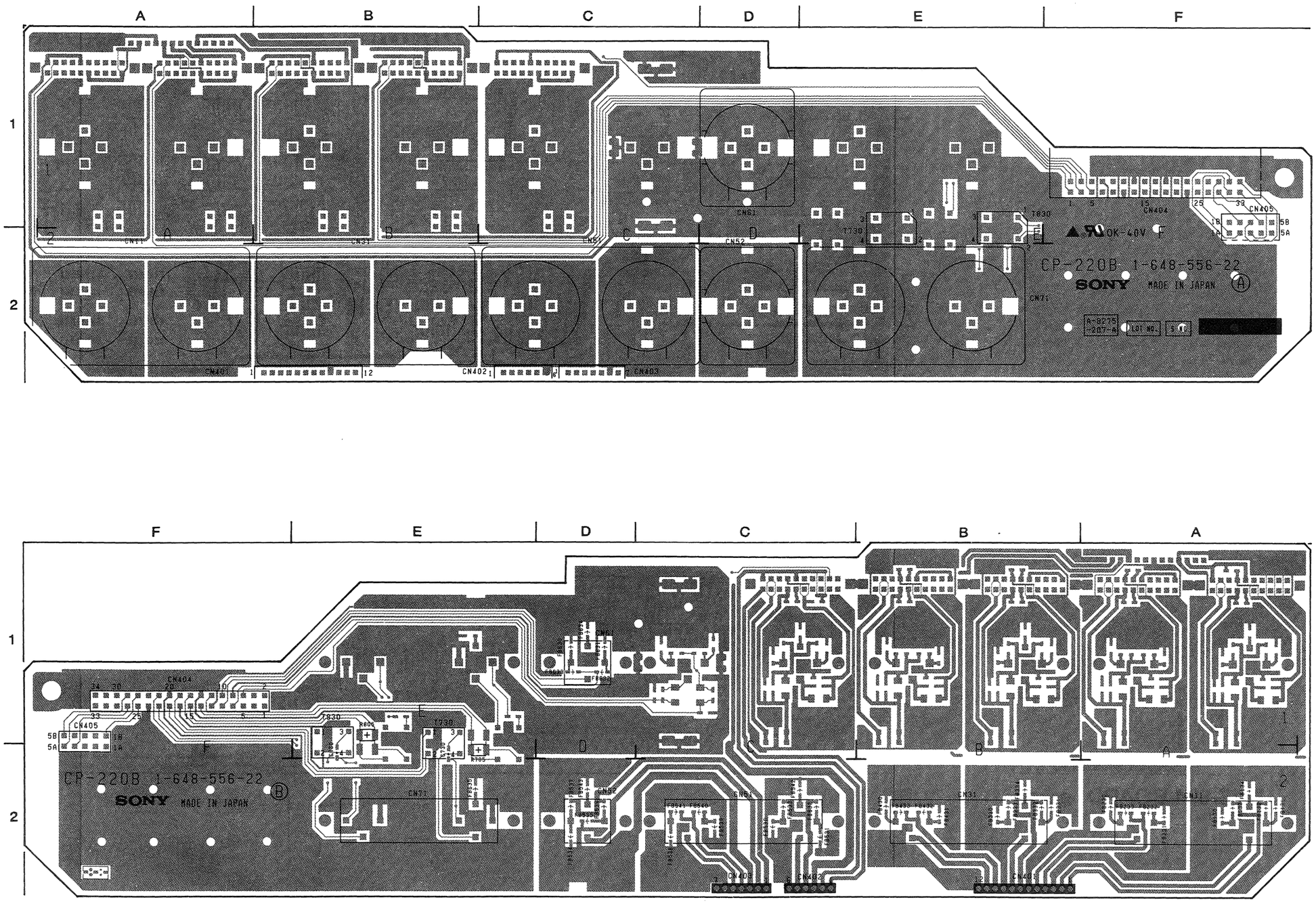


CP-218B BOARD -B SIDE-

1-648-555-22 (LOT No. 307 -)
DVW-A510(J) ; CP-218B MCB
DVW-A510(UC) ; CP-218B MCB
DVW-A510P(EK) ; CP-218B MCB
DVW-510(J) ; CP-218B MCB
DVW-510(UC) ; CP-218B MCB
DVW-510P(EK) ; CP-218B MCB
DVW-CA510(J) ; CP-218B MCB
DVW-CA510(UC) ; CP-218B MCB
DVW-CA510P(EK) ; CP-218B MCB

CP-220B ; Rear connector board (Analog/Digital audio, TC)

(Board's Lot No. 307 and higher)
All player models



CP-220B BOARD -A SIDE-

1-648-556-22 (LOT No. 307 -)

DVW-A510(J)	; CP-220BJ	MCB
DVW-A510(UC)	; CP-220B	MCB
DVW-A510P(EK)	; CP-220B	MCB
DVW-510(J)	; CP-220BJ	MCB
DVW-510(UC)	; CP-220B	MCB
DVW-510P(EK)	; CP-220B	MCB
DVW-CA510(J)	; CP-220BJ	MCB
DVW-CA510(UC)	; CP-220B	MCB
DVW-CA510P(EK)	; CP-220B	MCB

CP-220B BOARD -B SIDE-

1-648-556-22 (LOT No. 307 -)

DVW-A510(J)	; CP-220BJ	MCB
DVW-A510(UC)	; CP-220B	MCB
DVW-A510P(EK)	; CP-220B	MCB
DVW-510(J)	; CP-220BJ	MCB
DVW-510(UC)	; CP-220B	MCB
DVW-510P(EK)	; CP-220B	MCB
DVW-CA510(J)	; CP-220BJ	MCB
DVW-CA510(UC)	; CP-220B	MCB
DVW-CA510P(EK)	; CP-220B	MCB

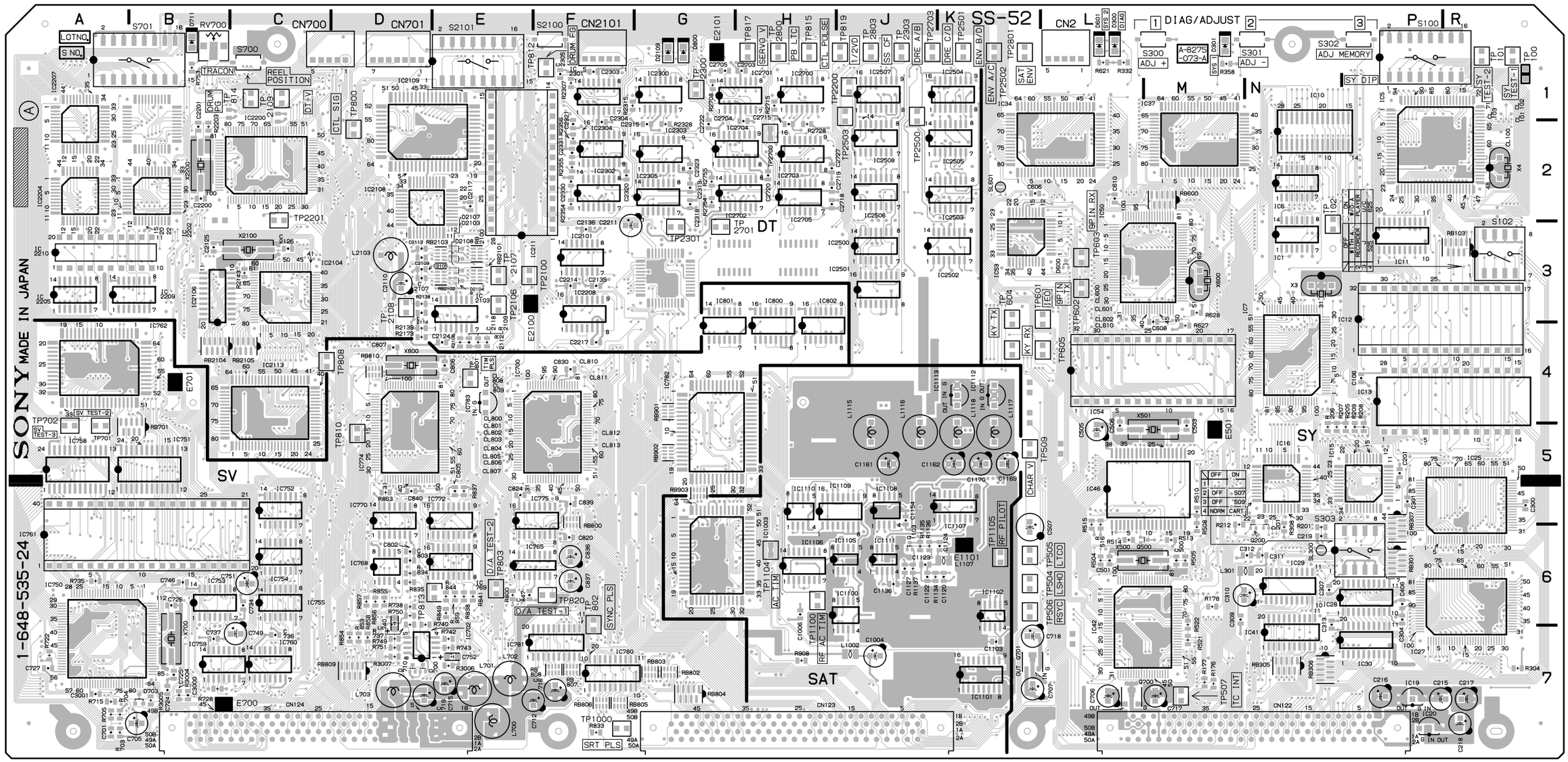
SS-52 ; System, Servo, Digital DT control

(Board's Lot No. 509 and higher)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-500P(UC)

SS-52 (1-648-535-24)

CNI12	P4	IC29	N6	IC2115	*C4	RB2105	C4
CNI54	L4	IC30	P7	IC2200	C2	RB2106	*C4
CNI211	F3	IC31	*N7	IC2202	B2	RB2107	*E1
CNI761	A6	IC32	*N6	IC2204	A2		
		IC34	L2	IC2205	A3	RV700	B1
CN2	L1	IC35	*L2	IC2207	A2		
CN122	N7	IC37	M2	IC2208	F4	S100	P1
CN123	H7	IC38	*M2	IC2209	A3	S102	R3
CN124	C7	IC39	*P7	IC2210	A3	S300	M1
CN700	C1	IC41	N7	IC2300	G1	S301	N1
CN701	D1	IC42	M7	IC2301	F1	S302	P1
CN2101	F1	IC43	*M6	IC2302	F2	S303	P6
		IC45	*L5	IC2303	G2	S700	C1
D100	*R3	IC46	L5	IC2304	F2	S701	B1
D201	N5	IC47	*L6	IC2305	G2	S2100	F1
D202	*N5	IC48	*K3	IC2500	J3	S2101	E1
D203	*N5	IC49	*M3	IC2501	J3		
D300	L1	IC50	M3	IC2502	J3	TP100	R1
D301	M1	IC52	*M3	IC2503	J2	TP101	R1
D600	L3	IC53	K3	IC2504	J1	TP504	K6
D601	L1	IC54	L4	IC2505	J2	TP505	K6
D700	D7	IC55	*K2	IC2506	J2	TP506	K6
D701	*A7	IC56	*M7	IC2507	J1	TP507	M7
D703	B7	IC211	F3	IC2508	J2	TP509	K5
D704	*A6	IC700	F5	IC2700	H1	TP601	L3
D705	*A6	IC702	E7	IC2701	G1	TP602	L3
D706	*A7	IC747	*B7	IC2702	G2	TP603	L3
D707	*B7	IC748	*A7	IC2703	H2	TP604	K3
D708	*B7	IC749	*A6	IC2704	G2	TP605	L4
D709	*B7	IC750	A7	IC2705	H2	TP701	A5
D710	D7	IC751	A5			TP702	A5
D711	B1	IC752	C5	L301	N6	TP800	D2
D800	G1	IC753	B6	L700	E7	TP801	E4
D801	*G3	IC754	C6	L701	E7	TP802	F6
D1100	*J7	IC755	C6	L702	E7	TP803	E6
D1101	*H7	IC756	*C7	L703	D7	TP808	C4
D1102	*H7	IC757	*C7	L1002	J7	TP810	D5
D1103	*H5	IC758	A5	L1101	*K7	TP812	F1
D1104	*J5	IC759	B7	L1105	*K6	TP813	E6
D2101	*E3	IC760	C7	L1107	K6	TP814	C1
D2102	*E3	IC761	A6	L1114	*K6	TP815	H1
D2103	E3	IC762	A4	L1115	J5	TP817	H1
D2104	E3	IC763	*C6	L1116	J5	TP819	J1
D2105	*E3	IC764	*B6	L1117	K5	TP820	F6
D2106	*E3	IC765	E6	L1118	K5	TP1000	F7
D2107	E3	IC766	*E6	L2103	D3	TP1100	H6
D2108	E3	IC767	*E6			TP1104	H6
D2109	G1	IC768	D6	Q200	N5	TP1105	K6
D2110	*E2	IC769	E6	Q500	M6	TP2100	E3
D2300	*F2	IC770	D6	Q700	L7	TP2106	E3
D2301	*F2	IC771	*D6	Q701	K7	TP2107	E3
D2302	*F2	IC772	E6	Q702	*C6	TP2108	D3
D2500	*J2	IC773	*F6	Q1103	J6	TP2109	C1
D2501	*K2	IC774	D5	Q1105	*K7	TP2200	J1
D2502	*J2	IC775	E6	Q1106	*K5	TP2201	C2
D2503	*J2	IC776	*F6			TP2300	G1
D2700	*H2	IC777	*F6	RB100	*P1	TP2301	G3
D2701	*H2	IC778	*H7	RB101	*R2	TP2303	J1
D2702	*G2	IC779	*G7	RB103	R3	TP2500	J1
		IC780	F7	RB105	*P1	TP2501	K1
E501	M5	IC781	E7	RB106	*P2	TP2502	K1
E700	B7	IC782	G5	RB107	*R1	TP2503	J1
E701	B4	IC783	E4	RB109	*R1	TP2700	H2
E1101	K6	IC800	H4	RB110	*N4	TP2701	G3
E2100	E3	IC801	G4	RB300	*P5	TP2703	J1
E2101	G1	IC802	H4	RB301	P6	TP2800	H1
		IC1001	*J7	RB302	*P6	TP2801	K1
IC1	N3	IC1002	*H7	RB304	*P7	TP2803	J1
IC2	*N2	IC1003	G6	RB305	N7		
IC3	*N3	IC1004	*H6	RB306	N7	X3	N3
IC5	P2	IC1100	J7	RB307	P6	X4	R2
IC6	N2	IC1101	K7	RB600	M2	X500	M6
IC7	N4	IC1102	K7	RB700	*A4	X501	M5
IC8	*N4	IC1105	J6	RB701	B5	X600	M3
IC10	N2	IC1106	H6	RB800	F5	X700	B7
IC11	P3	IC1107	K5	RB802	G7	X800	D4
IC12	P4	IC1108	J5	RB803	G7	X2100	C3
IC13	P5	IC1109	H6	RB804	G7	X2200	B2
IC15	P5	IC1110	H6	RB805	F7		
IC16	N5	IC1111	J6	RB806	F7	*:B SIDE	
IC17	*M5	IC1112	K4	RB807	F7		
IC18	*N5	IC1113	K4	RB808	F7		
IC19	P7	IC2100	*C3	RB809	D7		
IC20	P7	IC2101	F3	RB810	D4		
IC21	*P5	IC2103	E4	RB901	G4		
IC22	*R6	IC2104	C3	RB902	G5		
IC23	*M7	IC2106	C3	RB903	G5		
IC24	*M6	IC2107	*C4	RB2100	E3		
IC25	R5	IC2108	D2	RB2101	E3		
IC26	*R7	IC2109	D2	RB2102	E3		
IC27	R6	IC2113	C4	RB2103	E3		
IC28	P6	IC2114	*C2	RB2104	B4		

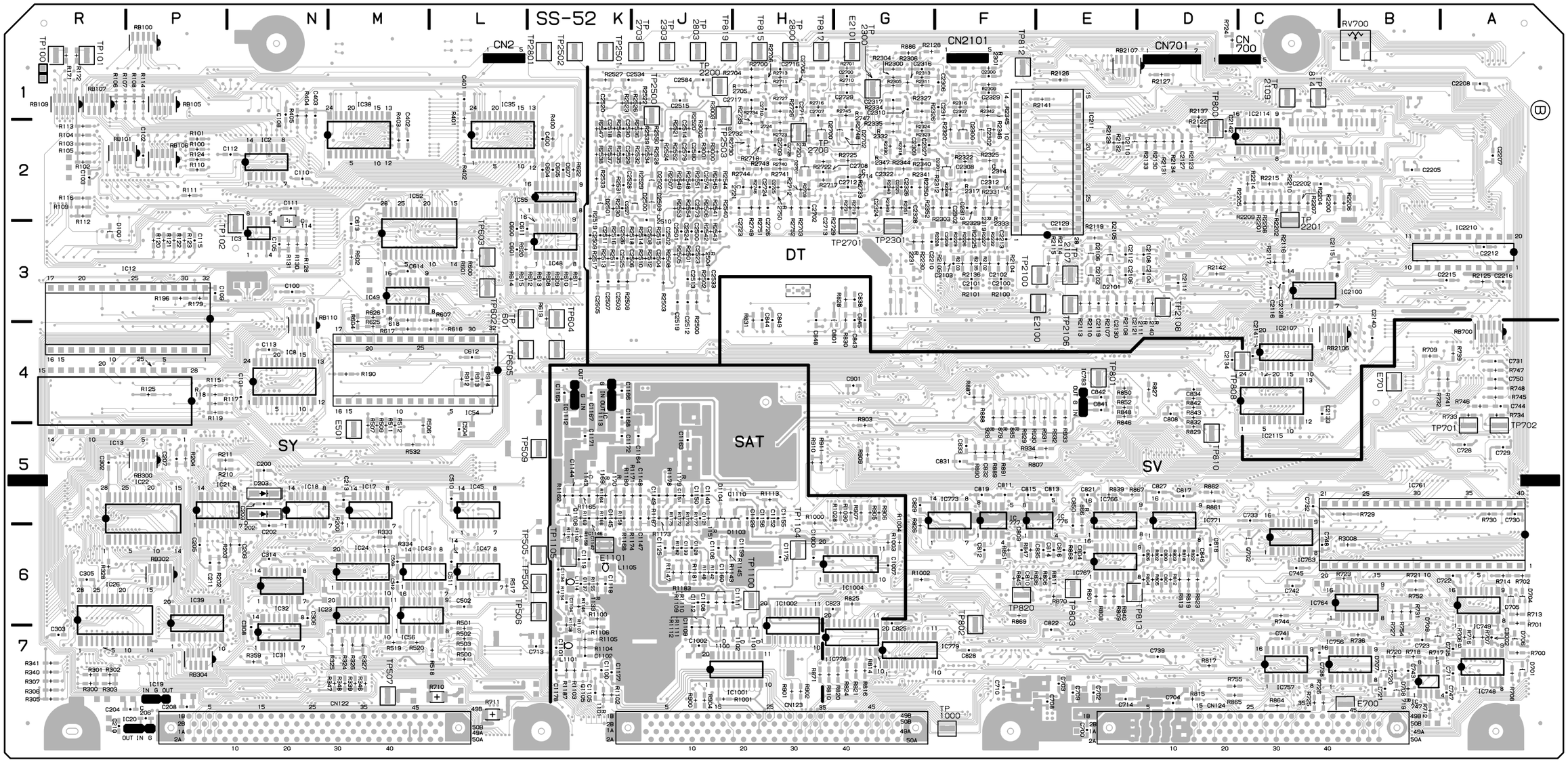
1-71 (d)



SS-52 BOARD -A SIDE-

1-648-535-24 (LOT No. 509 -)

DVW-500(J)	; SS-52	MCB
DVW-500(UC)	; SS-52	MCB
DVW-500P(EK)	; SS-52P	MCB
DVW-500P(UC)	; SS-52P	MCB



SS-52 BOARD -B SIDE-

1-648-535-24 (LOT No. 509 -)

DVW-500(J)	; SS-52	MCB
DVW-500(UC)	; SS-52	MCB
DVW-500P(EK)	; SS-52P	MCB
DVW-500P(UC)	; SS-52P	MCB

SS-52 ; System, Servo, Digital DT control

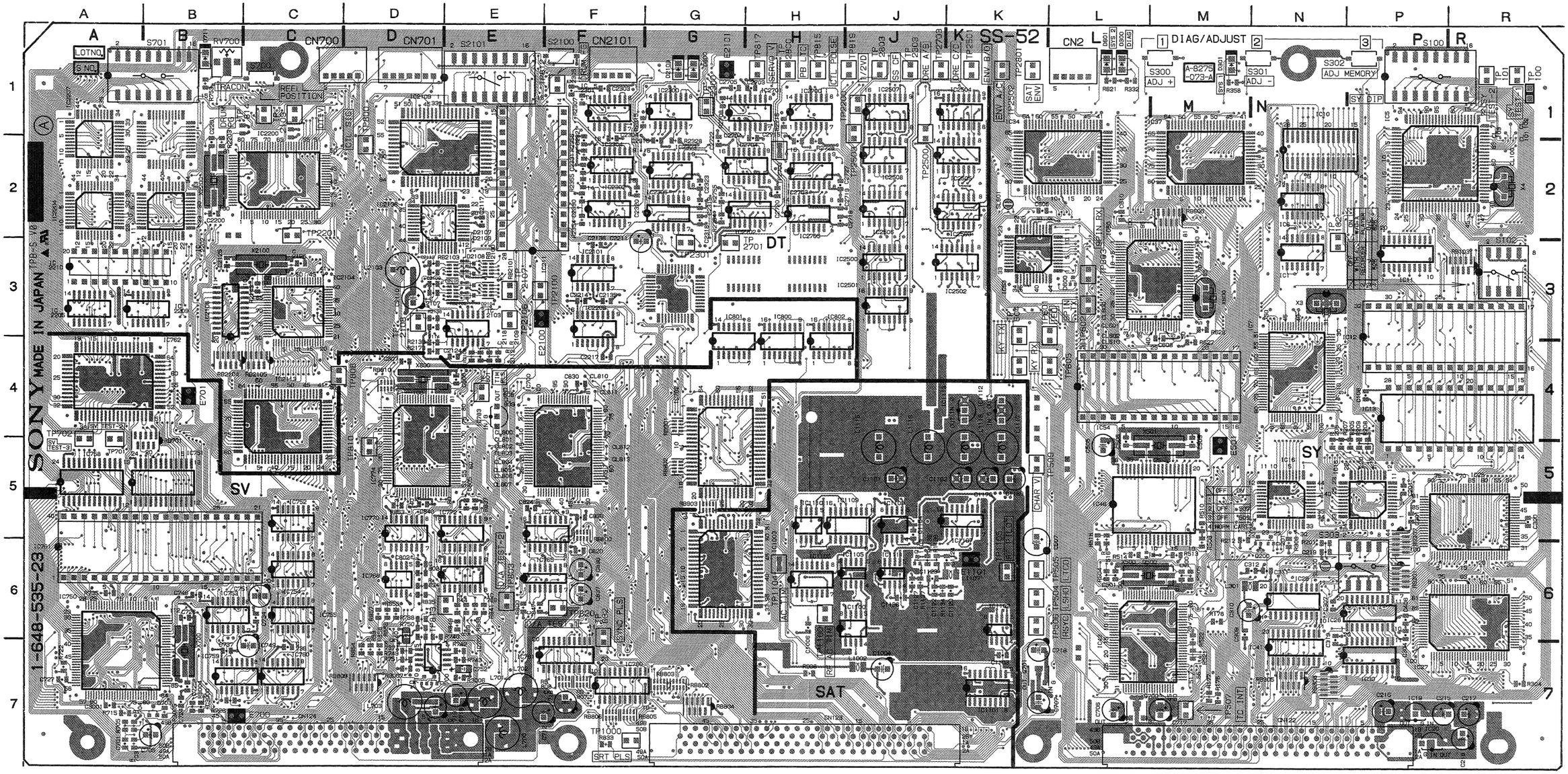
(Board's Lot No. 410 through 508)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-500P(UC)

SS-52(1-648-535-23)

CN2	L-1	IC20	R-7	✱IC1002	H-7	✱RB304	P-7	TP1105	K-6		
CN122	N-7	✱IC21	P-5	IC1003	G-6	RB305	N-7	TP2100	E-3		
CN123	H-7	✱IC22	R-6	✱IC1004	G-6	RB306	N-7	TP2106	E-3		
CN124	C-7	✱IC23	M-7	IC1100	J-6	RB307	P-6	TP2107	E-3		
CN700	C-1	✱IC24	M-6	IC1101	K-7	RB600	M-2	TP2108	D-3		
CN701	D-1	IC25	R-5	IC1102	K-7	✱RB700	A-4	TP2109	C-1		
CN2101	F-1	✱IC26	R-7	IC1105	J-6	RB701	B-5	TP2200	J-1		
		IC27	R-6	IC1106	H-6	RB800	F-5	TP2201	C-2		
✱D100	R-3	IC28	P-6	IC1107	K-5	RB802	G-7	TP2300	G-1		
D201	N-5	IC29	N-6	IC1108	J-5	RB803	G-7	TP2301	G-3		
✱D202	N-5	IC30	P-7	IC1109	H-6	RB804	G-7	TP2303	J-1		
✱D203	N-5	✱IC31	N-7	IC1110	H-6	RB805	F-7	TP2500	J-1		
D300	L-1	✱IC32	N-6	IC1111	J-6	RB806	F-7	TP2501	K-1		
D301	M-1	IC34	L-2	IC1112	K-4	RB807	F-7	TP2502	K-1		
D600	L-3	✱IC35	L-2	IC1113	K-4	RB808	F-7	TP2503	J-1		
D601	L-1	IC37	M-2	✱IC2100	C-3	RB809	D-7	TP2700	H-2		
✱D701	A-7	✱IC38	M-2	IC2101	F-3	RB810	D-4	TP2701	G-3		
D703	B-7	✱IC39	P-7	IC2103	E-4	RB901	G-4	TP2703	J-1		
✱D704	A-6	IC41	N-7	IC2104	C-3	RB902	G-5	TP2800	H-1		
✱D705	A-6	IC42	M-7	IC2106	B-3	RB903	G-5	TP2801	K-1		
✱D706	A-7	✱IC43	M-6	✱IC2107	C-4	RB2100	E-3	TP2803	J-1		
✱D707	B-7	✱IC45	L-5	IC2108	D-2	RB2101	E-3				
✱D708	B-7	IC46	L-5	IC2109	D-2	RB2102	E-3	X3	N-3		
✱D709	B-7	✱IC47	L-6	IC2113	C-4	RB2103	E-3	X4	R-2		
D710	D-7	✱IC48	K-3	✱IC2114	C-2	RB2104	B-4	X500	M-6		
D711	B-1	✱IC49	M-3	✱IC2115	C-4	RB2105	C-4	X501	M-5		
D800	G-1	IC50	M-3	IC2200	C-2	✱RB2106	C-4	X600	M-3		
✱D801	G-4	✱IC52	M-3	IC2202	B-2	✱RB2107	E-1	X700	B-7		
✱D1100	J-7	IC53	K-3	IC2204	A-2			X800	D-4		
✱D1101	H-7	IC54	L-4	IC2205	A-3	RV700	B-1	X2100	C-3		
✱D1102	H-7	✱IC55	K-2	IC2207	A-2			X2200	B-2		
✱D1103	H-5	✱IC56	M-7	IC2208	F-4	S100	P-1				
✱D1104	J-5	IC211	F-3	IC2209	A-3	S102	R-3				
✱D2101	E-3	IC700	F-5	IC2210	A-3	S300	M-1				
✱D2102	E-3	IC702	E-7	IC2300	G-1	S301	N-1				
D2103	E-3	✱IC747	B-7	IC2301	F-1	S302	P-1				
D2104	E-3	✱IC748	A-7	IC2302	F-2	S303	P-6				
✱D2105	E-3	✱IC749	A-6	IC2303	G-2	S700	C-1				
✱D2106	E-3	IC750	A-7	IC2304	F-2	S701	B-1				
D2107	E-3	IC751	A-5	IC2305	G-2	S2100	F-1				
D2108	E-3	IC752	C-5	IC2500	J-3	S2101	E-1				
D2109	G-1	IC753	B-6	IC2501	J-3						
✱D2110	E-2	IC754	C-6	IC2502	J-3	SL300	N-6				
✱D2300	F-2	IC755	C-6	IC2503	J-2	SL601	K-2				
✱D2302	F-2	✱IC756	C-7	IC2504	J-1						
✱D2500	J-2	✱IC757	C-7	IC2505	J-2	TP100	R-1				
✱D2501	K-2	IC758	A-5	IC2506	J-2	TP101	R-1				
✱D2502	J-2	IC759	B-7	IC2507	J-1	TP102	N-3				
✱D2503	J-2	IC760	C-7	IC2508	J-2	TP504	K-6				
✱D2700	H-2	IC761	A-6	IC2700	H-1	TP505	K-6				
✱D2701	H-2	IC762	A-4	IC2701	G-1	TP506	K-6				
✱D2702	G-2	✱IC763	C-6	IC2702	G-2	TP507	M-7				
		✱IC764	C-6	IC2703	H-2	TP509	K-5				
E501	M-5	IC765	E-6	IC2704	G-2	TP601	L-3				
E700	B-7	✱IC766	E-6	IC2705	H-2	TP602	L-3				
E701	B-4	✱IC767	E-6			TP603	L-3				
E1101	K-6	IC768	D-6	Q200	N-5	TP604	K-3				
E2100	E-3	IC769	E-6	Q500	M-6	TP605	L-4				
E2101	G-1	IC770	D-6	Q700	L-7	TP701	A-5				
		✱IC771	D-6	Q701	K-7	TP702	A-5				
IC1	N-3	IC772	E-6	✱Q702	C-6	TP800	D-2				
✱IC2	N-2	✱IC773	F-6	Q1103	J-6	TP801	E-4				
✱IC3	N-3	IC774	D-5	✱Q1105	K-7	TP802	F-6				
IC5	P-2	IC775	E-6	✱Q1106	K-5	TP803	E-6				
IC6	N-2	✱IC776	F-6			TP808	C-4				
IC7	N-4	✱IC777	F-6	✱RB100	P-1	TP810	D-5				
✱IC8	N-4	✱IC778	H-7	✱RB101	R-2	TP812	D-4				
IC10	N-2	✱IC779	G-7	RB103	R-3	TP813	E-6				
IC11	P-3	IC780	F-7	✱RB105	P-1	TP814	D-4				
IC12	P-4	IC781	E-7	✱RB106	P-2	TP815	H-1				
IC13	P-5	IC782	G-5	✱RB107	R-1	TP817	H-1				
IC15	P-5	IC783	E-4	✱RB109	R-1	TP819	J-1				
IC16	N-5	IC800	H-4	✱RB110	N-4	TP820	F-6				
✱IC17	M-5	IC801	G-4	✱RB300	P-5	TP1000	F-7				
✱IC18	N-5	IC802	H-4	RB301	P-6	TP1100	H-6				
IC19	P-7	✱IC1001	J-7	✱RB302	P-6	TP1104	H-6				

✱ : B SIDE

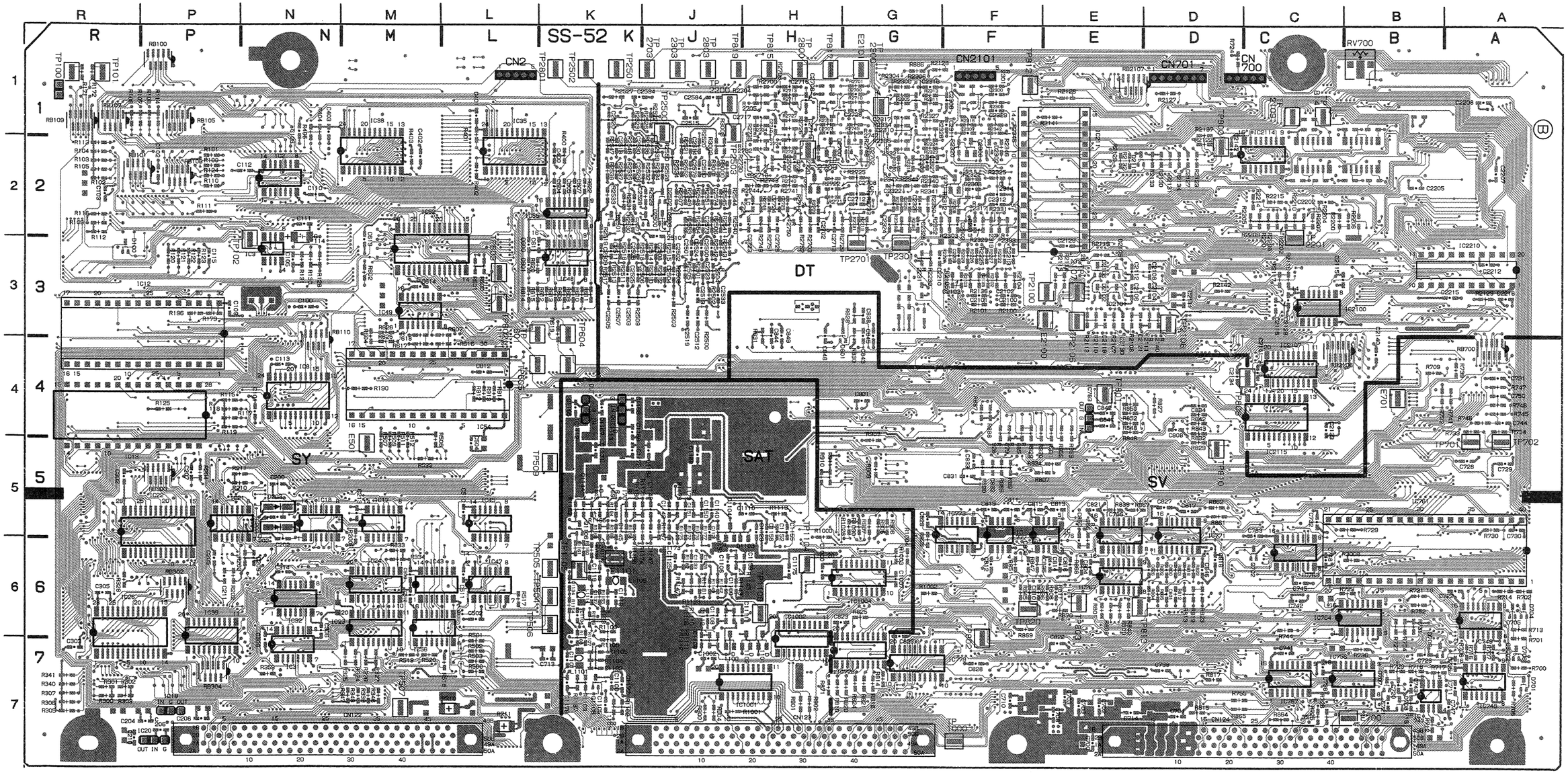
LOT NO. A-1



SS-52 BOARD -A SIDE-

1-648-535-23 (LOT No. 410 - 508)

DVW-500(J)	; SS-52	MCB
DVW-500(UC)	; SS-52	MCB
DVW-500P(EK)	; SS-52P	MCB
DVW-500P(UC)	; SS-52P	MCB



SS-52 BOARD -B SIDE-

1-648-535-23 (LOT No. 410 - **508**)

DVW-500(J)	; SS-52	MCB
DVW-500(UC)	; SS-52	MCB
DVW-500P(EK)	; SS-52P	MCB
DVW-500P(UC)	; SS-52P	MCB

SS-52 ; System, Servo, Digital DT control

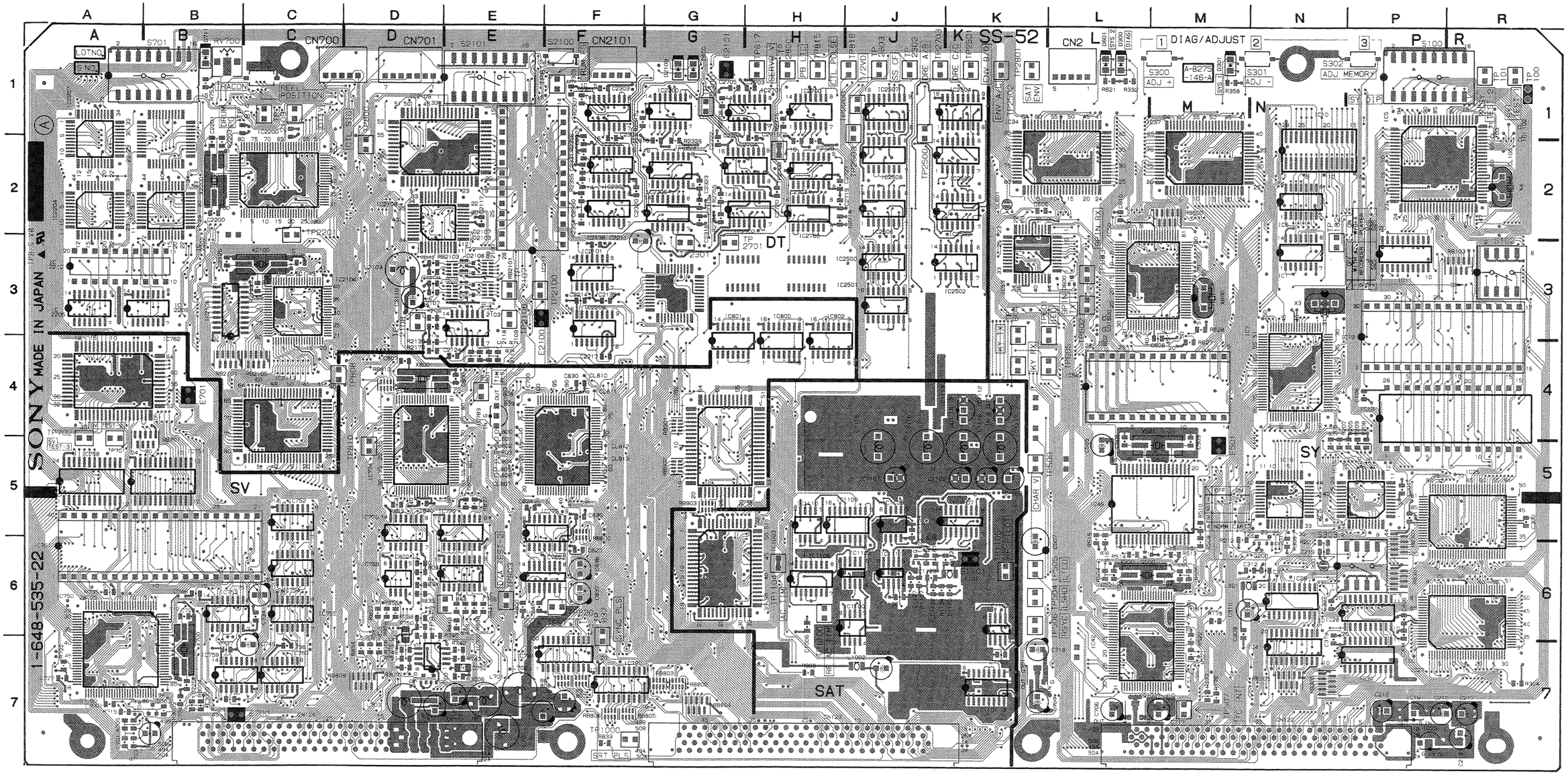
(Board's Lot No. 306 through 409)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-500P(UC)

SS-52(1-648-535-22)

CN2	L-1	IC20	R-7	✱IC1002	H-7	✱RB304	P-7	TP1105	K-6
CN122	N-7	✱IC21	P-5	IC1003	G-6	RB305	N-7	TP2100	E-3
CN123	H-7	✱IC22	R-6	✱IC1004	G-6	RB306	N-7	TP2106	E-3
CN124	C-7	✱IC23	M-7	IC1100	J-6	RB307	P-6	TP2107	E-3
CN700	C-1	✱IC24	M-6	IC1101	K-7	RB600	M-2	TP2108	D-3
CN701	D-1	IC25	R-5	IC1102	K-7	✱RB700	A-4	TP2109	C-1
CN2101	F-1	✱IC26	R-7	IC1105	J-6	RB701	B-5	TP2200	J-1
		IC27	R-6	IC1106	H-6	RB800	F-5	TP2201	C-2
✱D100	R-3	IC28	P-6	IC1107	K-5	RB802	G-7	TP2300	G-1
D201	N-5	IC29	N-6	IC1108	J-5	RB803	G-7	TP2301	G-3
✱D202	N-5	IC30	P-7	IC1109	H-6	RB804	G-7	TP2303	J-1
✱D203	N-5	✱IC31	N-7	IC1110	H-6	RB805	F-7	TP2500	J-1
D300	L-1	✱IC32	N-6	IC1111	J-6	RB806	F-7	TP2501	K-1
D301	M-1	IC34	L-2	IC1112	K-4	RB807	F-7	TP2502	K-1
D600	L-3	✱IC35	L-2	IC1113	K-4	RB808	F-7	TP2503	J-1
D601	L-1	IC37	M-2	✱IC2100	C-3	RB809	D-7	TP2700	H-2
✱D701	A-7	✱IC38	M-2	IC2101	F-3	RB810	D-4	TP2701	G-3
D703	B-7	✱IC39	P-7	IC2103	E-4	RB901	G-4	TP2703	J-1
✱D704	A-6	IC41	N-7	IC2104	C-3	RB902	G-5	TP2800	H-1
✱D705	A-6	IC42	M-7	IC2106	B-3	RB903	G-5	TP2801	K-1
✱D706	A-7	✱IC43	M-6	✱IC2107	C-4	RB2100	E-3	TP2803	J-1
✱D707	B-7	✱IC45	L-5	IC2108	D-2	RB2101	E-3		
✱D708	B-7	IC46	L-5	IC2109	D-2	RB2102	E-3	X3	N-3
✱D709	B-7	✱IC47	L-6	IC2113	C-4	RB2103	E-3	X4	R-2
D710	D-7	✱IC48	K-3	✱IC2114	C-2	RB2104	B-4	X500	M-6
D711	B-1	✱IC49	M-3	✱IC2115	C-4	RB2105	C-4	X501	M-5
D800	G-1	IC50	M-3	IC2200	C-2	✱RB2106	C-4	X600	M-3
✱D801	G-4	✱IC52	M-3	IC2202	B-2	✱RB2107	E-1	X700	B-7
✱D1100	J-7	IC53	K-3	IC2204	A-2			X800	D-4
✱D1101	H-7	IC54	L-4	IC2205	A-3	RV700	B-1	X2100	C-3
✱D1102	H-7	✱IC55	K-2	IC2207	A-2			X2200	B-2
✱D1103	H-5	✱IC56	M-7	IC2208	F-4	S100	P-1		
✱D1104	J-5	IC211	F-3	IC2209	A-3	S102	R-3		
✱D2101	E-3	IC700	F-5	IC2210	A-3	S300	M-1		
✱D2102	E-3	IC702	E-7	IC2300	G-1	S301	N-1		
D2103	E-3	✱IC747	B-7	IC2301	F-1	S302	P-1		
D2104	E-3	✱IC748	A-7	IC2302	F-2	S303	P-6		
✱D2105	E-3	✱IC749	A-6	IC2303	G-2	S700	C-1		
✱D2106	E-3	IC750	A-7	IC2304	F-2	S701	B-1		
D2107	E-3	IC751	A-5	IC2305	G-2	S2100	F-1		
D2108	E-3	IC752	C-5	IC2500	J-3	S2101	E-1		
D2109	G-1	IC753	B-6	IC2501	J-3				
✱D2110	E-2	IC754	C-6	IC2502	J-3	SL300	N-6		
✱D2300	F-2	IC755	C-6	IC2503	J-2	SL601	K-2		
✱D2302	F-2	✱IC756	C-7	IC2504	J-1				
✱D2500	J-2	✱IC757	C-7	IC2505	J-2	TP100	R-1		
✱D2501	K-2	IC758	A-5	IC2506	J-2	TP101	R-1		
✱D2502	J-2	IC759	B-7	IC2507	J-1	TP102	N-3		
✱D2503	J-2	IC760	C-7	IC2508	J-2	TP504	K-6		
✱D2700	H-2	IC761	A-6	IC2700	H-1	TP505	K-6		
✱D2701	H-2	IC762	A-4	IC2701	G-1	TP506	K-6		
✱D2702	G-2	✱IC763	C-6	IC2702	G-2	TP507	M-7		
		✱IC764	C-6	IC2703	H-2	TP509	K-5		
E501	M-5	IC765	E-6	IC2704	G-2	TP601	L-3		
E700	B-7	✱IC766	E-6	IC2705	H-2	TP602	L-3		
E701	B-4	✱IC767	E-6			TP603	L-3		
E1101	K-6	IC768	D-6	Q200	N-5	TP604	K-3		
E2100	E-3	IC769	E-6	Q500	M-6	TP605	L-4		
E2101	G-1	IC770	D-6	Q700	L-7	TP701	A-5		
		✱IC771	D-6	Q701	K-7	TP702	A-5		
IC1	N-3	IC772	E-6	✱Q702	C-6	TP800	D-2		
✱IC2	N-2	✱IC773	F-6	Q1103	J-6	TP801	E-4		
✱IC3	N-3	IC774	D-5	✱Q1105	K-7	TP802	F-6		
IC5	P-2	IC775	E-6	✱Q1106	K-5	TP803	E-6		
IC6	N-2	✱IC776	F-6			TP808	C-4		
IC7	N-4	✱IC777	F-6	✱RB100	P-1	TP810	D-5		
✱IC8	N-4	✱IC778	H-7	✱RB101	R-2	TP812	D-4		
IC10	N-2	✱IC779	G-7	RB103	R-3	TP813	E-6		
IC11	P-3	IC780	F-7	✱RB105	P-1	TP814	D-4		
IC12	P-4	IC781	E-7	✱RB106	P-2	TP815	H-1		
IC13	P-5	IC782	G-5	✱RB107	R-1	TP817	H-1		
IC15	P-5	IC783	E-4	✱RB109	R-1	TP819	J-1		
IC16	N-5	IC800	H-4	✱RB110	N-4	TP820	F-6		
✱IC17	M-5	IC801	G-4	✱RB300	P-5	TP1000	F-7		
✱IC18	N-5	IC802	H-4	RB301	P-6	TP1100	H-6		
IC19	P-7	✱IC1001	J-7	✱RB302	P-6	TP1104	H-6		

✱ : B SIDE

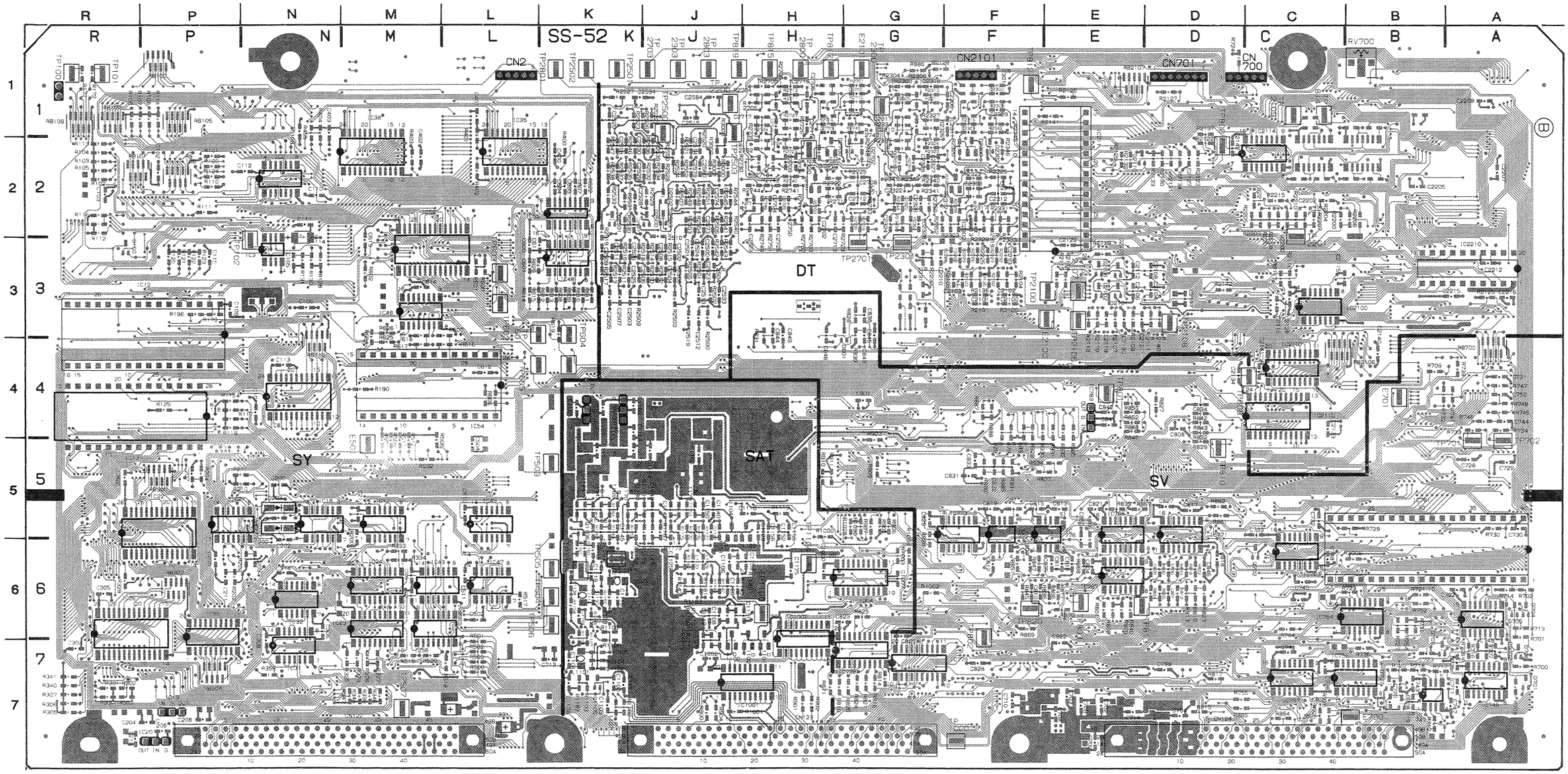
LOT NO. A-1



SS-52 BOARD -A SIDE-

1-648-535-22 (LOT No. 306 - 409)

DVW-500(J)	; SS-52	MCB
DVW-500(UC)	; SS-52	MCB
DVW-500P(EK)	; SS-52P	MCB
DVW-500P(UC)	; SS-52P	MCB


SS-52
SAT
SY
SV
DT
CN2
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CN701
CN 700
RV700
TP2701
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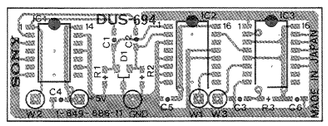
TP2533
TP2534
TP2535
TP2536
TP2537
TP2538
TP2539
TP2540
TP2541

SS-52, DUS-687/694

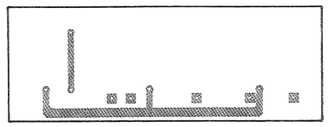
SS-52 ; System, Servo, Digital DT control
DUS-687/694

(Board's Lot No. 303 through 306)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

DUS-687 BOARD -A SIDE-
1-649-491-11



DUS-694 BOARD -A SIDE-
1-649-686-11



DUS-694 BOARD -B SIDE-
1-649-686-11

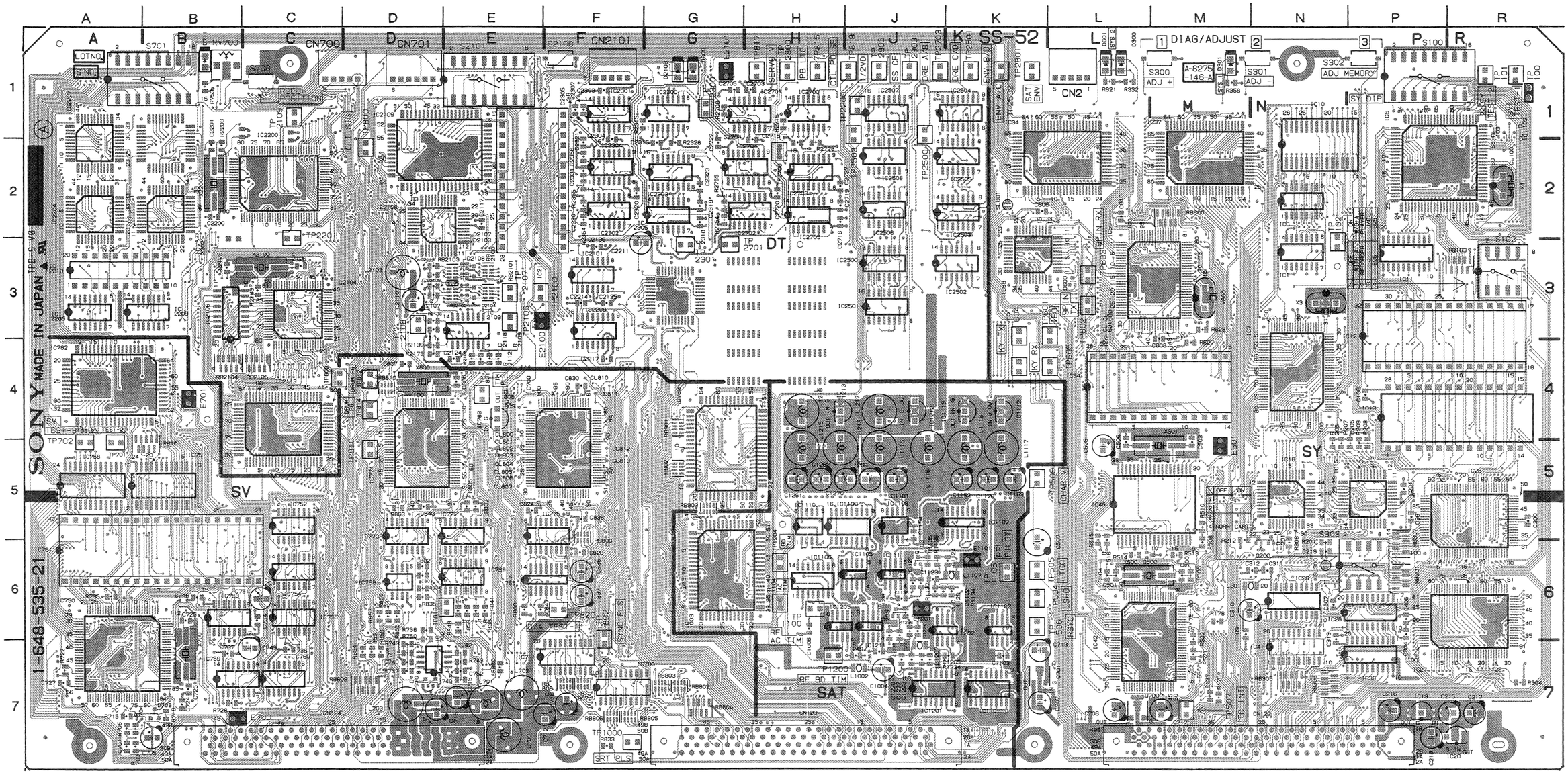
SS-52(1-648-535-21)

CN2	L-1	✱IC23	M-7	IC1108	J-5	✱RB302	P-6	TP1105	K-6		
CN122	N-7	✱IC24	M-6	IC1109	H-6	✱RB304	P-7	TP1200	H-7		
CN123	H-7	IC25	R-5	IC1110	H-6	RB305	N-7	TP1204	H-6		
CN124	C-7	✱IC26	R-7	IC1111	J-6	RB306	N-7	TP2100	E-3		
CN700	C-1	IC27	R-6	IC1112	K-4	RB307	P-6	TP2106	E-3		
CN701	D-1	IC28	P-6	IC1113	K-4	RB600	M-2	TP2107	E-3		
CN2101	F-1	IC29	N-6	IC1201	J-7	✱RB700	A-4	TP2108	D-3		
		IC30	P-7	IC1202	J-7	RB701	B-5	TP2109	C-1		
✱D100	R-3	✱IC31	N-7	IC1205	H-6	RB800	F-5	TP2200	J-1		
D201	N-5	✱IC32	N-6	IC1211	J-6	RB802	G-7	TP2201	C-2		
✱D202	N-5	IC34	L-2	IC1212	J-4	RB803	G-7	TP2300	G-1		
✱D203	N-5	✱IC35	L-2	IC1213	H-4	RB804	G-7	TP2301	G-3		
D300	L-1	IC37	M-2	✱IC2100	C-3	RB805	F-7	TP2303	J-1		
D301	M-1	✱IC38	M-2	IC2101	F-3	RB806	F-7	TP2500	J-1		
D600	L-3	✱IC39	P-7	IC2103	E-4	RB807	F-7	TP2501	K-1		
D601	L-1	IC41	N-7	IC2104	C-3	RB808	F-7	TP2502	K-1		
✱D701	A-7	IC42	M-7	IC2106	B-3	RB809	D-7	TP2503	J-1		
D703	B-7	✱IC43	M-6	✱IC2107	C-4	RB810	D-4	TP2700	H-2		
✱D704	A-6	✱IC45	L-5	IC2108	D-2	RB901	G-4	TP2701	G-3		
✱D705	A-6	IC46	L-5	IC2109	D-2	RB902	G-5	TP2703	J-1		
✱D706	A-7	✱IC47	L-6	IC2110	F-3	RB903	G-5	TP2800	H-1		
✱D707	B-7	✱IC48	K-3	IC2113	C-4	RB2100	E-3	TP2801	K-1		
✱D708	B-7	✱IC49	M-3	✱IC2114	C-2	RB2101	E-3	TP2803	J-1		
✱D709	B-7	IC50	M-3	✱IC2115	C-4	RB2102	E-3				
D710	D-7	✱IC52	M-3	IC2200	C-2	RB2103	E-3	X3	N-3		
D711	B-1	IC53	K-3	IC2202	B-2	RB2104	B-4	X4	R-2		
D800	G-1	IC54	L-4	IC2204	A-2	RB2105	C-4	X500	M-6		
✱D1103	H-5	✱IC55	K-2	IC2205	A-3	✱RB2106	C-4	X501	M-5		
✱D1104	J-5	✱IC56	M-7	IC2207	A-2	✱RB2107	E-1	X600	M-3		
✱D2101	E-3	IC700	F-5	IC2208	F-4			X700	B-7		
✱D2102	E-3	IC702	E-7	IC2209	A-3	RV700	B-1	X800	D-4		
D2103	E-3	✱IC747	B-7	IC2210	A-3			X2100	C-3		
D2104	E-3	✱IC748	A-7	IC2300	G-1	S100	P-1	X2200	B-2		
✱D2105	E-3	✱IC749	A-6	IC2301	F-1	S102	R-3				
✱D2106	E-3	IC750	A-7	IC2302	F-2	S300	M-1				
D2107	E-3	IC751	A-5	IC2303	G-2	S301	N-1				
D2108	E-3	IC752	C-5	IC2304	F-2	S302	P-1				
D2109	G-1	IC753	B-6	IC2305	G-2	S303	P-6				
✱D2110	E-2	IC754	C-6	IC2401	G-3	S700	C-1				
✱D2300	F-2	IC755	C-6	IC2500	J-3	S701	B-1				
✱D2302	F-2	✱IC756	C-7	IC2501	J-3	S2100	F-1				
✱D2500	J-2	✱IC757	C-7	IC2502	J-3	S2101	E-1				
✱D2501	K-2	IC758	A-5	IC2503	J-2						
✱D2502	J-2	IC759	B-7	IC2504	J-1	SL300	N-6				
✱D2503	J-2	IC760	C-7	IC2505	J-2	SL601	K-2				
✱D2700	H-2	IC761	A-6	IC2506	J-2						
✱D2701	H-2	IC762	A-4	IC2507	J-1	TP100	R-1				
✱D2702	G-2	✱IC763	C-6	IC2508	J-2	TP101	R-1				
		✱IC764	C-6	IC2700	H-1	TP102	N-3				
E501	M-5	IC765	E-6	IC2701	G-1	TP504	K-6				
E700	B-7	✱IC766	E-6	IC2702	G-2	TP505	K-6				
E701	B-4	✱IC767	E-6	IC2703	H-2	TP506	K-6				
E1101	K-6	IC768	D-6	IC2704	G-2	TP507	M-7				
E1201	J-6	IC769	E-6	IC2705	H-2	TP509	K-5				
E2100	E-3	IC770	D-6			TP601	L-3				
E2101	G-1	✱IC771	D-6	Q200	N-5	TP602	L-3				
		IC772	E-6	Q500	M-6	TP603	L-3				
IC1	N-3	✱IC773	F-6	Q700	L-7	TP604	K-3				
✱IC2	N-2	IC774	D-5	Q701	K-7	TP605	L-4				
✱IC3	N-3	IC775	E-6	✱Q702	C-6	TP701	A-5				
IC5	P-2	✱IC776	F-6	Q1103	J-6	TP702	A-5				
IC6	N-2	✱IC777	F-6	✱Q1105	K-7	TP800	D-2				
IC7	N-4	✱IC778	H-7	✱Q1106	K-5	TP801	E-4				
✱IC8	N-4	✱IC779	G-7	Q1203	J-6	TP802	F-6				
IC10	N-2	IC780	F-7	✱Q1205	J-7	TP808	C-4				
IC11	P-3	IC781	E-7			TP810	D-5				
IC12	P-4	IC782	G-5	✱RB100	P-1	TP812	D-4				
IC13	P-5	IC783	E-4	✱RB101	R-2	TP813	E-6				
IC15	P-5	✱IC1001	J-7	RB103	R-3	TP814	D-4				
IC16	N-5	✱IC1002	H-7	✱RB105	P-1	TP815	H-1				
✱IC17	M-5	IC1003	G-6	✱RB106	P-2	TP817	H-1				
✱IC18	N-5	IC1101	K-7	✱RB107	R-1	TP819	J-1				
IC19	P-7	IC1102	K-7	✱RB109	R-1	TP820	F-6				
IC20	R-7	IC1105	J-6	✱RB110	N-4	TP1000	F-7				
✱IC21	P-5	IC1106	H-6	✱RB300	P-5	TP1100	H-6				
✱IC22	R-6	IC1107	K-5	RB301	P-6	TP1104	H-6				

✱ : B SIDE

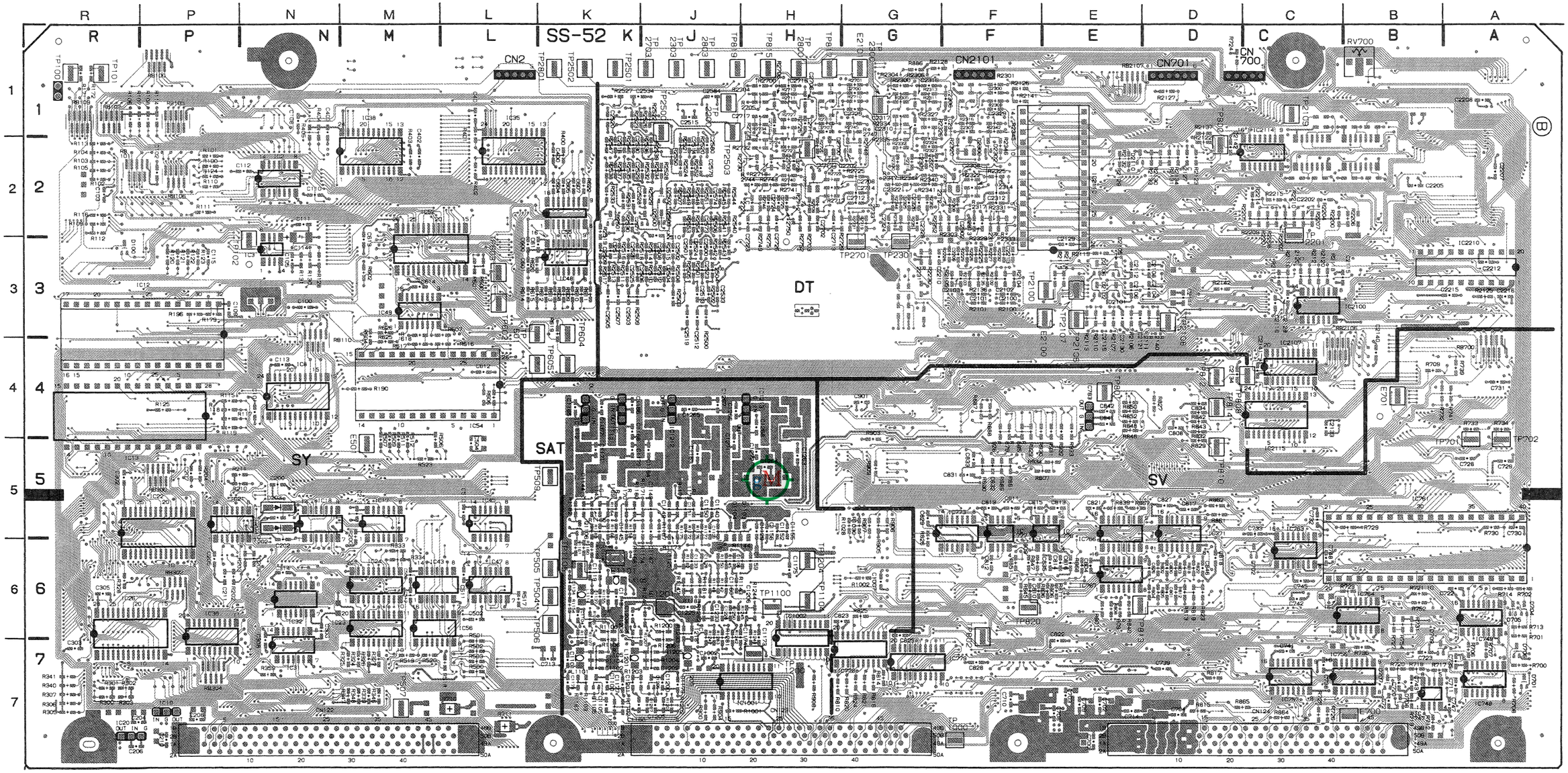
LOT NO. A-1

1-71 (a)



SS-52 BOARD -A SIDE-

1-648-535-21 (LOT No. 303 - 306)
DVW-500(J) ; SS-52 MCB
DVW-500(UC) ; SS-52 MCB
DVW-500P(EK) ; SS-52P MCB



SS-52 BOARD -B SIDE-

1-648-535-21 (LOT No. 303 - 306)

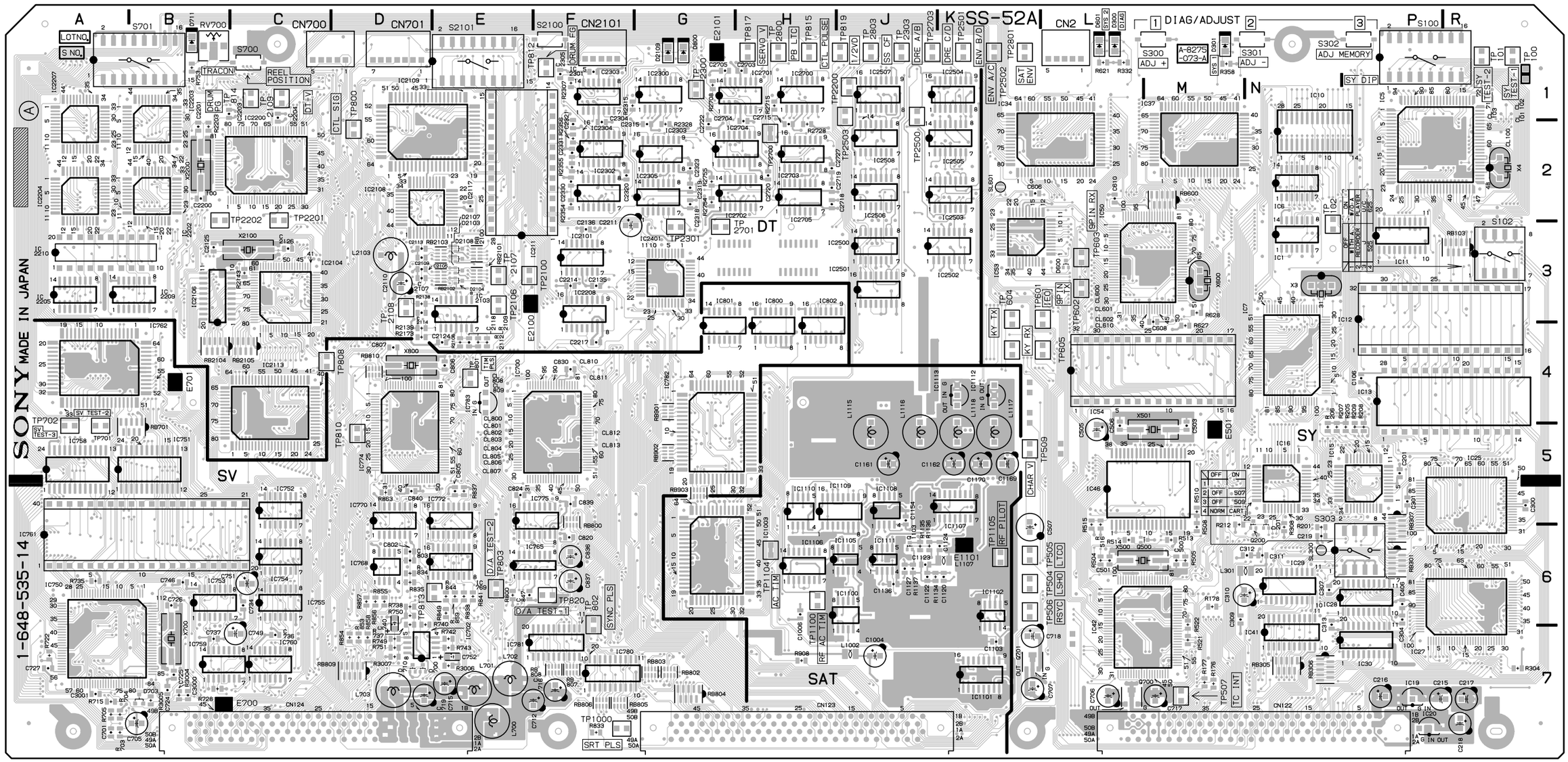
DVW-500(J) ; SS-52 MCB
DVW-500(UC) ; SS-52 MCB
DVW-500P(EK) ; SS-52P MCB

SS-52A ; System, Servo, Analog/Digital DT control

(Board's Lot No. 511 and higher)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)

SS-52A (1-648-535-14)

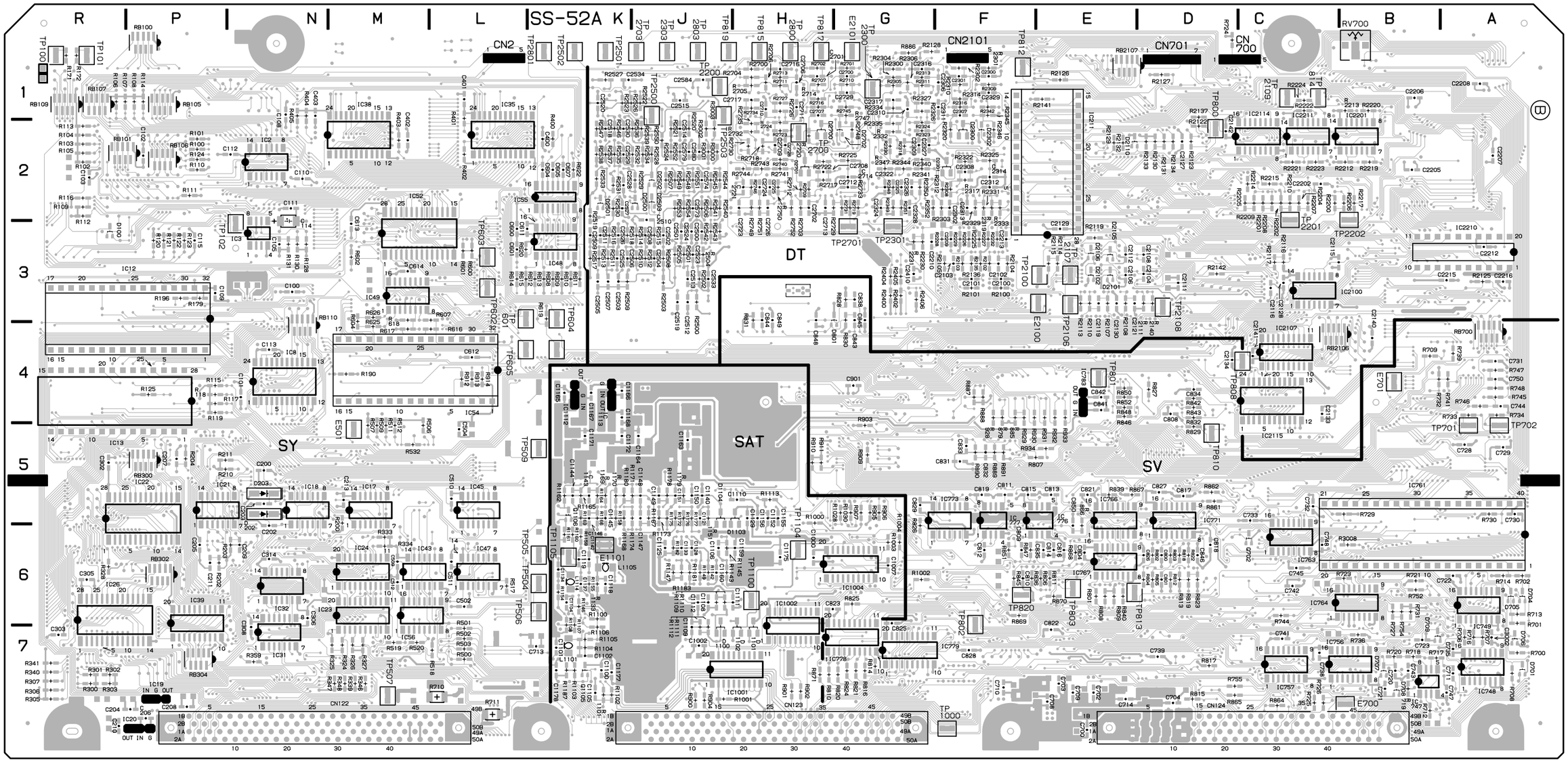
CNI12	P4	IC29	N6	IC2115	*C4	S700	C1
CNI54	L4	IC30	P7	IC2200	C2	S701	B1
CNI211	F3	IC31	*N7	IC2201	*B2	S2100	F1
CNI761	A6	IC32	*N6	IC2202	B2	S2101	E1
		IC34	L2	IC2203	B2		
CN2	L1	IC35	*L2	IC2204	A2	TP100	R1
CN122	N7	IC37	M2	IC2205	A3	TP101	R1
CN123	H7	IC38	*M2	IC2207	A2	TP504	K6
CN124	C7	IC39	*P7	IC2208	F4	TP505	K6
CN700	C1	IC41	N7	IC2209	A3	TP506	K6
CN701	D1	IC42	M7	IC2210	A3	TP507	M7
CN2101	F1	IC43	*M6	IC2211	*C2	TP509	K5
		IC45	*L5	IC2300	G1	TP601	L3
D100	*R3	IC46	L5	IC2301	F1	TP602	L3
D201	N5	IC47	*L6	IC2302	F2	TP603	L3
D202	*N5	IC48	*K3	IC2303	G2	TP604	K3
D203	*N5	IC49	*M3	IC2304	F2	TP605	L4
D300	L1	IC50	M3	IC2305	G2	TP701	A5
D301	M1	IC52	*M3	IC2401	G3	TP702	A5
D600	L3	IC53	K3	IC2500	J3	TP800	D2
D601	L1	IC54	L4	IC2501	J3	TP801	E4
D700	D7	IC55	*K2	IC2502	J3	TP802	F6
D701	*A7	IC56	*M7	IC2503	J2	TP803	E6
D703	B7	IC211	F3	IC2504	J1	TP808	C4
D704	*A6	IC700	F5	IC2505	J2	TP810	D5
D705	*A6	IC702	E7	IC2506	J2	TP812	F1
D706	*A7	IC747	*B7	IC2507	J1	TP813	E6
D707	*B7	IC748	*A7	IC2508	J2	TP814	C1
D708	*B7	IC749	*A6	IC2700	H1	TP815	H1
D709	*B7	IC750	A7	IC2701	G1	TP817	H1
D710	D7	IC751	A5	IC2702	G2	TP819	J1
D711	B1	IC752	C5	IC2703	H2	TP820	F6
D800	G1	IC753	B6	IC2704	G2	TP1000	F7
D801	*G3	IC754	C6	IC2705	H2	TP1100	H6
D1100	*J7	IC755	C6			TP1104	H6
D1101	*H7	IC756	*C7	Q200	N5	TP1105	K6
D1102	*H7	IC757	*C7	Q500	M6	TP2100	E3
D1103	*H5	IC758	A5	Q700	L7	TP2106	E3
D1104	*J5	IC759	B7	Q701	K7	TP2107	E3
D2101	*E3	IC760	C7	Q702	*C6	TP2108	D3
D2102	*E3	IC761	A6	Q1103	J6	TP2109	C1
D2103	E3	IC762	A4	Q1105	*K7	TP2200	J1
D2104	E3	IC763	*C6	Q1106	*K5	TP2201	C2
D2105	*E3	IC764	*B6			TP2202	B2
D2106	*E3	IC765	E6	RB100	*P1	TP2300	G1
D2107	E3	IC766	*E6	RB101	*R2	TP2301	G3
D2108	E3	IC767	*E6	RB103	R3	TP2303	J1
D2109	G1	IC768	D6	RB105	*P1	TP2500	J1
D2110	*E2	IC769	E6	RB106	*P2	TP2501	K1
D2300	*F2	IC770	D6	RB107	*R1	TP2502	K1
D2301	*F2	IC771	*D6	RB109	*R1	TP2503	J1
D2302	*F2	IC772	E6	RB110	*N4	TP2700	H2
D2500	*J2	IC773	*F6	RB300	*P5	TP2701	G3
D2501	*K2	IC774	D5	RB301	P6	TP2703	J1
D2502	*J2	IC775	E6	RB302	*P6	TP2800	H1
D2503	*J2	IC776	*F6	RB304	*P7	TP2801	K1
D2700	*H2	IC777	*F6	RB305	N7	TP2803	J1
D2701	*H2	IC778	*H7	RB306	N7		
D2702	*G2	IC779	*G7	RB307	P6	X3	N3
		IC780	F7	RB600	M2	X4	R2
E501	M5	IC781	E7	RB700	*A4	X500	M6
E700	B7	IC782	G5	RB701	B5	X501	M5
E701	B4	IC783	E4	RB800	F5	X600	M3
E1101	K6	IC800	H4	RB802	G7	X700	B7
E2100	E3	IC801	G4	RB803	G7	X800	D4
E2101	G1	IC802	H4	RB804	G7	X2100	C3
		IC1001	*J7	RB805	F7	X2200	B2
IC1	N3	IC1002	*H7	RB806	F7		
IC2	*N2	IC1003	G6	RB807	F7	*:B SIDE	
IC3	*N3	IC1004	*H6	RB808	F7		
IC5	P2	IC1100	J7	RB809	D7		
IC6	N2	IC1101	K7	RB810	D4		
IC7	N4	IC1102	K7	RB901	G4		
IC8	*N4	IC1105	J6	RB902	G5		
IC10	N2	IC1106	H6	RB903	G5		
IC11	P3	IC1107	K5	RB2100	E3		
IC12	P4	IC1108	J5	RB2101	E3		
IC13	P5	IC1109	H6	RB2102	E3		
IC15	P5	IC1110	H6	RB2103	E3		
IC16	N5	IC1111	J6	RB2104	B4		
IC17	*M5	IC1112	K4	RB2105	C4		
IC18	*N5	IC1113	K4	RB2106	*C4		
IC19	P7	IC2100	*C3	RB2107	*E1		
IC20	P7	IC2101	F3				
IC21	*P5	IC2103	E4	RV700	B1		
IC22	*R6	IC2104	C3				
IC23	*M7	IC2106	C3	S100	P1		
IC24	*M6	IC2107	*C4	S102	R3		
IC25	R5	IC2108	D2	S300	M1		
IC26	*R7	IC2109	D2	S301	N1		
IC27	R6	IC2113	C4	S302	P1		
IC28	P6	IC2114	*C2	S303	P6		



SS-52A BOARD -A SIDE-

1-648-535-14 (LOT No. 511 -)

DVW-A500(J)	; SS-52A	MCB
DVW-A500(UC)	; SS-52A	MCB
DVW-A500P(EK)	; SS-52AP	MCB
DVW-A500P(UC)	; SS-52AP	MCB



SS-52A BOARD -B SIDE-

1-648-535-14 (LOT No. 511 -)

DVW-A500(J)	; SS-52A	MCB
DVW-A500(UC)	; SS-52A	MCB
DVW-A500P(EK)	; SS-52AP	MCB
DVW-A500P(UC)	; SS-52AP	MCB

SS-52A ; System, Servo, Analog/Digital DT control

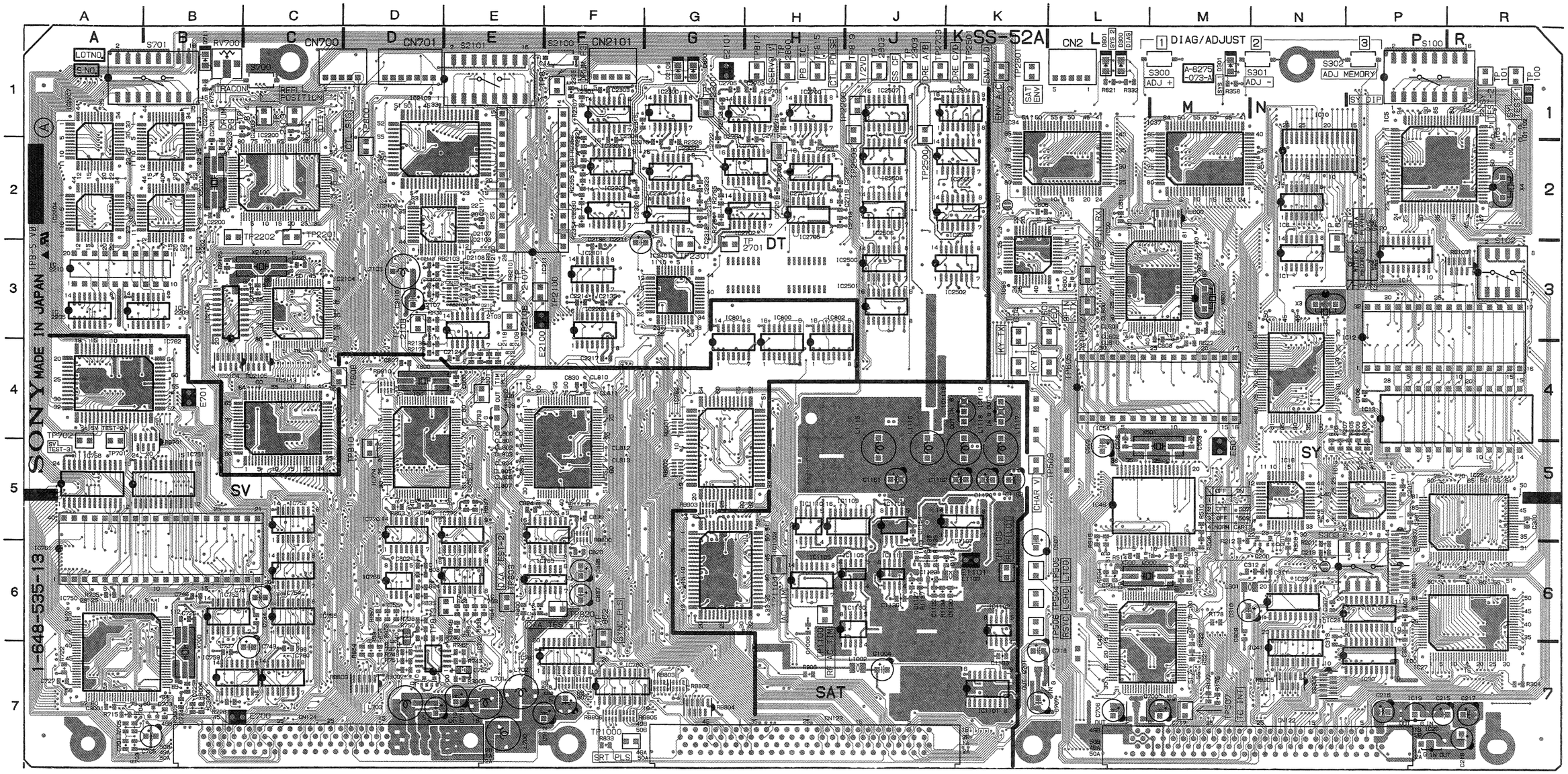
(Board's Lot No. 410 through 510)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)

SS-52A(1-648-535-13)

CN2	L-1	✱IC18	N-5	IC802	H-4	✱RB107	R-1	TP817	H-1		
CN122	N-7	IC19	P-7	✱IC1001	J-7	✱RB109	R-1	TP819	J-1		
CN123	H-7	IC20	R-7	✱IC1002	H-7	✱RB110	N-4	TP820	F-6		
CN124	C-7	✱IC21	P-5	IC1003	G-6	✱RB300	P-5	TP1000	F-7		
CN700	C-1	✱IC22	R-6	✱IC1004	G-6	RB301	P-6	TP1100	H-6		
CN701	D-1	✱IC23	M-7	IC1100	J-6	✱RB302	P-6	TP1104	H-6		
CN2101	F-1	✱IC24	M-6	IC1101	K-7	✱RB304	P-7	TP1105	K-6		
		IC25	R-5	IC1102	K-7	RB305	N-7	TP2100	E-3		
✱D100	R-3	✱IC26	R-7	IC1105	J-6	RB306	N-7	TP2106	E-3		
D201	N-5	IC27	R-6	IC1106	H-6	RB307	P-6	TP2107	E-3		
✱D202	N-5	IC28	P-6	IC1107	K-5	RB600	M-2	TP2108	D-3		
✱D203	N-5	IC29	N-6	IC1108	J-5	✱RB700	A-4	TP2109	C-1		
D300	L-1	IC30	P-7	IC1109	H-6	RB701	B-5	TP2200	J-1		
D301	M-1	✱IC31	N-7	IC1110	H-6	RB800	F-5	TP2201	C-2		
D600	L-3	✱IC32	N-6	IC1111	J-6	RB802	G-7	TP2202	B-2		
D601	L-1	IC34	L-2	IC1112	K-4	RB803	G-7	TP2300	G-1		
D700	D-7	✱IC35	L-2	IC1113	K-4	RB804	G-7	TP2301	G-3		
✱D701	A-7	IC37	M-2	✱IC2100	C-3	RB805	F-7	TP2303	J-1		
D703	B-7	✱IC38	M-2	IC2101	F-3	RB806	F-7	TP2500	J-1		
✱D704	A-6	✱IC39	P-7	IC2103	E-4	RB807	F-7	TP2501	K-1		
✱D705	A-6	IC41	N-7	IC2104	C-3	RB808	F-7	TP2502	K-1		
✱D706	A-7	IC42	M-7	IC2106	B-3	RB809	D-7	TP2503	J-1		
✱D707	B-7	✱IC43	M-6	✱IC2107	C-4	RB810	D-4	TP2700	H-2		
✱D708	B-7	✱IC45	L-5	IC2108	D-2	RB901	G-4	TP2701	G-3		
✱D709	B-7	IC46	L-5	IC2109	D-2	RB902	G-5	TP2703	J-1		
D710	D-7	✱IC47	L-6	IC2113	C-4	RB903	G-5	TP2800	H-1		
D711	B-1	✱IC48	K-3	✱IC2114	C-2	RB2100	E-3	TP2801	K-1		
D800	G-1	✱IC49	M-3	✱IC2115	C-4	RB2101	E-3	TP2803	J-1		
✱D801	G-4	IC50	M-3	IC2200	C-2	RB2102	E-3				
✱D1100	J-7	✱IC52	M-3	✱IC2201	B-2	RB2103	E-3	X3	N-3		
✱D1101	H-7	IC53	K-3	IC2202	B-2	RB2104	B-4	X4	R-2		
✱D1102	H-7	IC54	L-4	IC2203	B-2	RB2105	C-4	X500	M-6		
✱D1103	H-5	✱IC55	K-2	IC2204	A-2	✱RB2106	C-4	X501	M-5		
✱D1104	J-5	✱IC56	M-7	IC2205	A-3	✱RB2107	E-1	X600	M-3		
✱D2101	E-3	IC211	F-3	IC2207	A-2			X700	B-7		
✱D2102	E-3	IC700	F-5	IC2208	F-4	RV700	B-1	X800	D-4		
D2103	E-3	IC702	E-7	IC2209	A-3			X2100	C-3		
D2104	E-3	✱IC747	B-7	IC2210	A-3	S100	P-1	X2200	B-2		
✱D2105	E-3	✱IC748	A-7	✱IC2211	C-2	S102	R-3				
✱D2106	E-3	✱IC749	A-6	IC2300	G-1	S300	M-1				
D2107	E-3	IC750	A-7	IC2301	F-1	S301	N-1				
D2108	E-3	IC751	A-5	IC2302	F-2	S302	P-1				
D2109	G-1	IC752	C-5	IC2303	G-2	S303	P-6				
✱D2110	E-2	IC753	B-6	IC2304	F-2	S700	C-1				
✱D2300	F-2	IC754	C-6	IC2305	G-2	S701	B-1				
✱D2301	F-2	IC755	C-6	IC2401	G-3	S2100	F-1				
✱D2302	F-2	✱IC756	C-7	IC2500	J-3	S2101	E-1				
✱D2500	J-2	✱IC757	C-7	IC2501	J-3						
✱D2501	K-2	IC758	A-5	IC2502	J-3	SL300	N-6				
✱D2502	J-2	IC759	B-7	IC2503	J-2	SL601	K-2				
✱D2503	J-2	IC760	C-7	IC2504	J-1						
✱D2700	H-2	IC761	A-6	IC2505	J-2	TP100	R-1				
✱D2701	H-2	IC762	A-4	IC2506	J-2	TP101	R-1				
✱D2702	G-2	✱IC763	C-6	IC2507	J-1	TP102	N-3				
		✱IC764	C-6	IC2508	J-2	TP504	K-6				
E501	M-5	IC765	E-6	IC2700	H-1	TP505	K-6				
E700	B-7	✱IC766	E-6	IC2701	G-1	TP506	K-6				
E701	B-4	✱IC767	E-6	IC2702	G-2	TP507	M-7				
E1101	K-6	IC768	D-6	IC2703	H-2	TP509	K-5				
E2100	E-3	IC769	E-6	IC2704	G-2	TP601	L-3				
E2101	G-1	IC770	D-6	IC2705	H-2	TP602	L-3				
		✱IC771	D-6			TP603	L-3				
IC1	N-3	IC772	E-6	Q200	N-5	TP604	K-3				
✱IC2	N-2	✱IC773	F-6	Q500	M-6	TP605	L-4				
✱IC3	N-3	IC774	D-5	Q700	L-7	TP701	A-5				
IC5	P-2	IC775	E-6	Q701	K-7	TP702	A-5				
IC6	N-2	✱IC776	F-6	✱Q702	C-6	TP800	D-2				
IC7	N-4	✱IC777	F-6	Q1103	J-6	TP801	E-4				
✱IC8	N-4	✱IC778	H-7	✱Q1105	K-7	TP802	F-6				
IC10	N-2	✱IC779	G-7	✱Q1106	K-5	TP803	E-6				
IC11	P-3	IC780	F-7			TP808	C-4				
IC12	P-4	IC781	E-7	✱RB100	P-1	TP810	D-5				
IC13	P-5	IC782	G-5	✱RB101	R-2	TP812	D-4				
IC15	P-5	IC783	E-4	RB103	R-3	TP813	E-6				
IC16	N-5	IC800	H-4	✱RB105	P-1	TP814	D-4				
✱IC17	M-5	IC801	G-4	✱RB106	P-2	TP815	H-1				

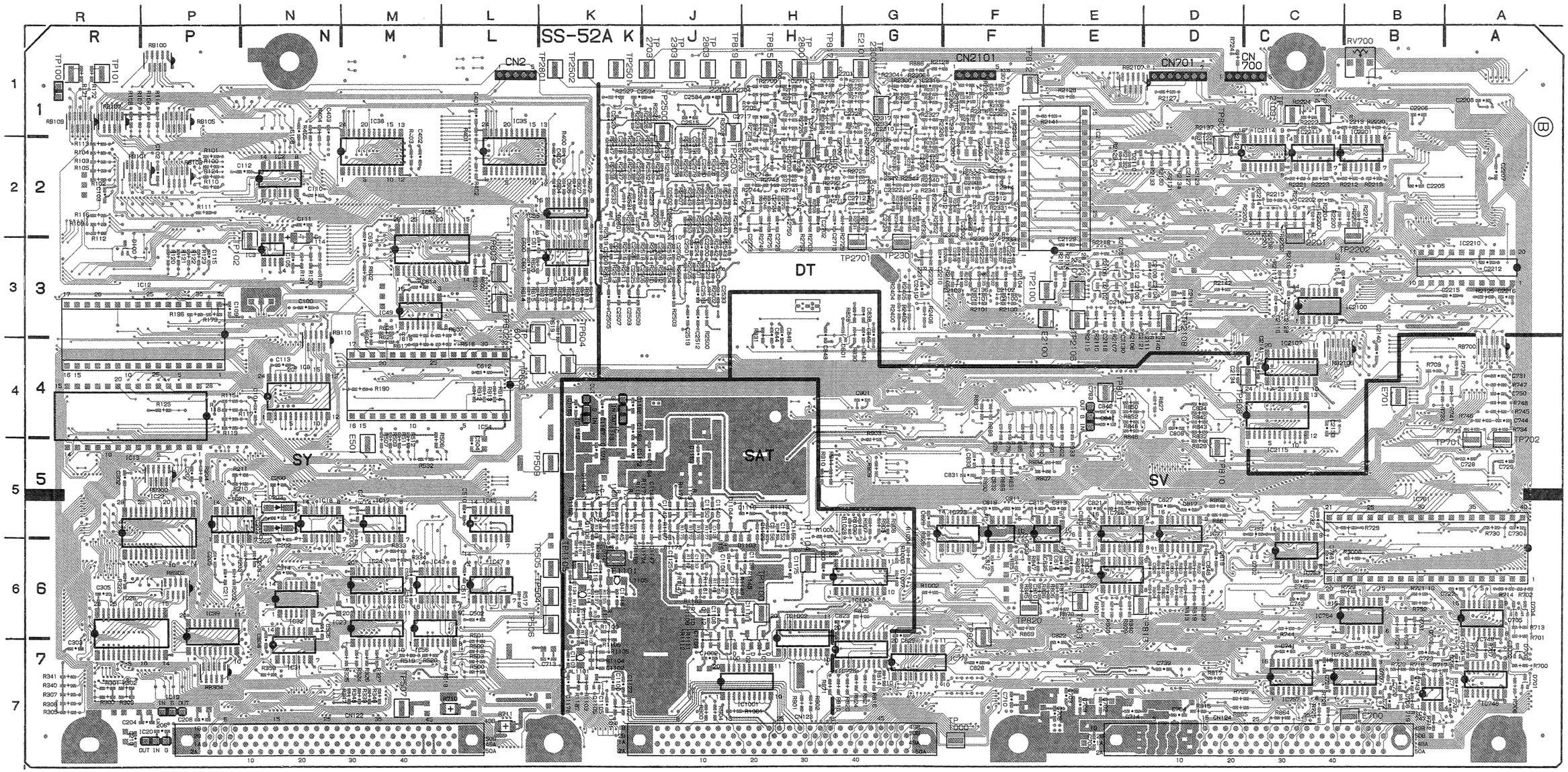
✱ : B SIDE

LOT NO. A-1



SS-52A BOARD -A SIDE-

1-648-535-13 (LOT No. 410 - 510)
DVW-A500(J) ; SS-52A MCB
DVW-A500(UC) ; SS-52A MCB
DVW-A500P(EK) ; SS-52AP MCB
DVW-A500P(UC) ; SS-52AP MCB


SS-52A K
DT
SAT
SY
SV
CN2
CN2101
CN701
CN 700
RV700
TP2701
TP2301
TP2202
TP701
TP702
TP2100
TP2503
TP2502
TP2501
TP2801
TP2803
TP2819
TP2815
TP2800
TP2703
TP2809
TP2813
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TP2856
TP2857
TP2858
TP2859
TP2860
TP2861

SS-52A ; System, Servo, Analog/Digital DT control

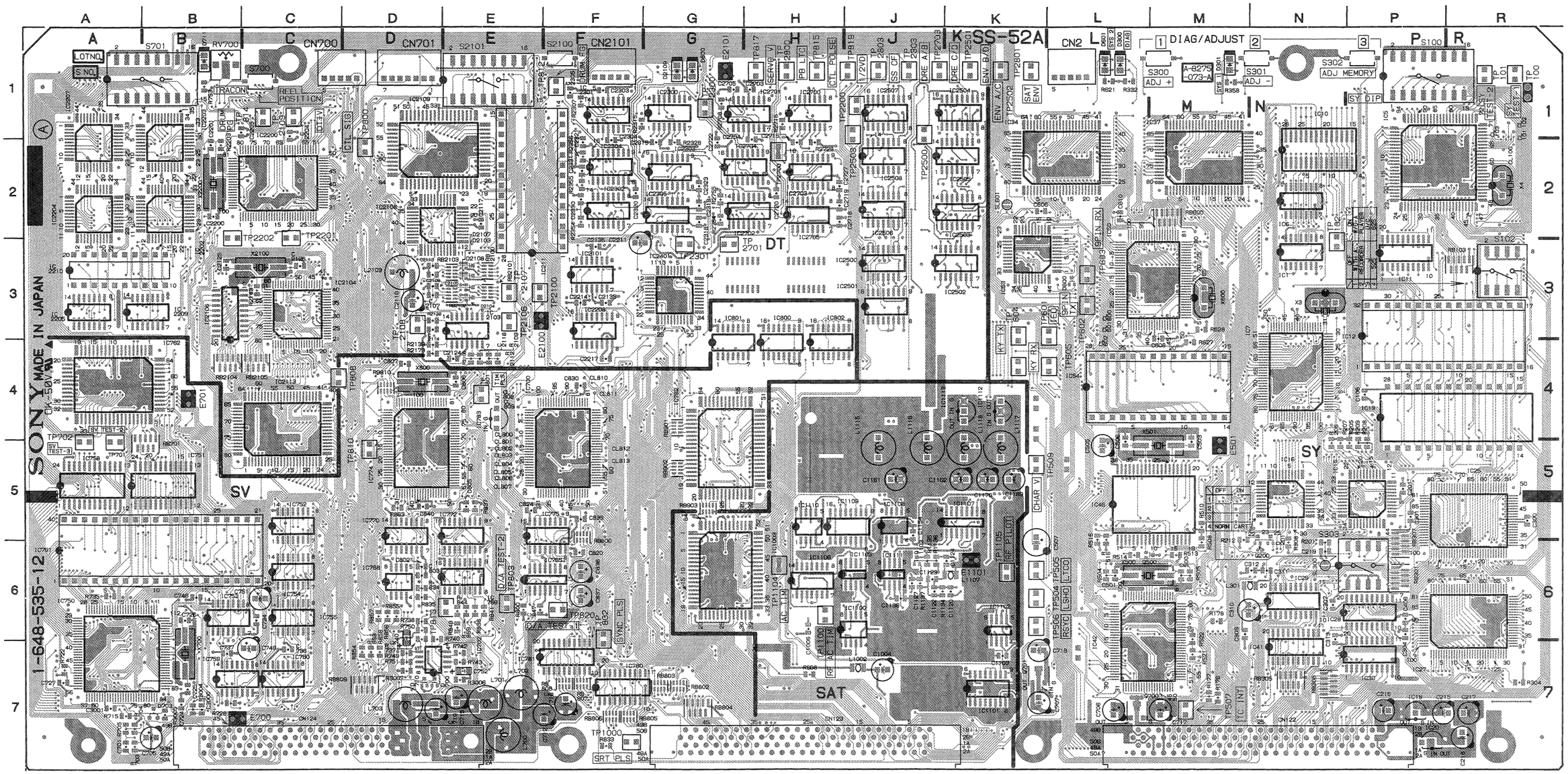
(Board's Lot No. 306 through 409)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)

SS-52A(1-648-535-12)

CN2	L-1	✱IC18	N-5	IC802	H-4	✱RB107	R-1	TP817	H-1		
CN122	N-7	IC19	P-7	✱IC1001	J-7	✱RB109	R-1	TP819	J-1		
CN123	H-7	IC20	R-7	✱IC1002	H-7	✱RB110	N-4	TP820	F-6		
CN124	C-7	✱IC21	P-5	IC1003	G-6	✱RB300	P-5	TP1000	F-7		
CN700	C-1	✱IC22	R-6	✱IC1004	G-6	RB301	P-6	TP1100	H-6		
CN701	D-1	✱IC23	M-7	IC1100	J-6	✱RB302	P-6	TP1104	H-6		
CN2101	F-1	✱IC24	M-6	IC1101	K-7	✱RB304	P-7	TP1105	K-6		
		IC25	R-5	IC1102	K-7	RB305	N-7	TP2100	E-3		
✱D100	R-3	✱IC26	R-7	IC1105	J-6	RB306	N-7	TP2106	E-3		
D201	N-5	IC27	R-6	IC1106	H-6	RB307	P-6	TP2107	E-3		
✱D202	N-5	IC28	P-6	IC1107	K-5	RB600	M-2	TP2108	D-3		
✱D203	N-5	IC29	N-6	IC1108	J-5	✱RB700	A-4	TP2109	C-1		
D300	L-1	IC30	P-7	IC1109	H-6	RB701	B-5	TP2200	J-1		
D301	M-1	✱IC31	N-7	IC1110	H-6	RB800	F-5	TP2201	C-2		
D600	L-3	✱IC32	N-6	IC1111	J-6	RB802	G-7	TP2202	B-2		
D601	L-1	IC34	L-2	IC1112	K-4	RB803	G-7	TP2300	G-1		
D700	D-7	✱IC35	L-2	IC1113	K-4	RB804	G-7	TP2301	G-3		
✱D701	A-7	IC37	M-2	✱IC2100	C-3	RB805	F-7	TP2303	J-1		
D703	B-7	✱IC38	M-2	IC2101	F-3	RB806	F-7	TP2500	J-1		
✱D704	A-6	✱IC39	P-7	IC2103	E-4	RB807	F-7	TP2501	K-1		
✱D705	A-6	IC41	N-7	IC2104	C-3	RB808	F-7	TP2502	K-1		
✱D706	A-7	IC42	M-7	IC2106	B-3	RB809	D-7	TP2503	J-1		
✱D707	B-7	✱IC43	M-6	✱IC2107	C-4	RB810	D-4	TP2700	H-2		
✱D708	B-7	✱IC45	L-5	IC2108	D-2	RB901	G-4	TP2701	G-3		
✱D709	B-7	IC46	L-5	IC2109	D-2	RB902	G-5	TP2703	J-1		
D710	D-7	✱IC47	L-6	IC2113	C-4	RB903	G-5	TP2800	H-1		
D711	B-1	✱IC48	K-3	✱IC2114	C-2	RB2100	E-3	TP2801	K-1		
D800	G-1	✱IC49	M-3	✱IC2115	C-4	RB2101	E-3	TP2803	J-1		
✱D801	G-4	IC50	M-3	IC2200	C-2	RB2102	E-3				
✱D1100	J-7	✱IC52	M-3	✱IC2201	B-2	RB2103	E-3	X3	N-3		
✱D1101	H-7	IC53	K-3	IC2202	B-2	RB2104	B-4	X4	R-2		
✱D1102	H-7	IC54	L-4	IC2203	B-2	RB2105	C-4	X500	M-6		
✱D1103	H-5	✱IC55	K-2	IC2204	A-2	✱RB2106	C-4	X501	M-5		
✱D1104	J-5	✱IC56	M-7	IC2205	A-3	✱RB2107	E-1	X600	M-3		
✱D2101	E-3	IC211	F-3	IC2207	A-2			X700	B-7		
✱D2102	E-3	IC700	F-5	IC2208	F-4	RV700	B-1	X800	D-4		
D2103	E-3	IC702	E-7	IC2209	A-3			X2100	C-3		
D2104	E-3	✱IC747	B-7	IC2210	A-3	S100	P-1	X2200	B-2		
✱D2105	E-3	✱IC748	A-7	✱IC2211	C-2	S102	R-3				
✱D2106	E-3	✱IC749	A-6	IC2300	G-1	S300	M-1				
D2107	E-3	IC750	A-7	IC2301	F-1	S301	N-1				
D2108	E-3	IC751	A-5	IC2302	F-2	S302	P-1				
D2109	G-1	IC752	C-5	IC2303	G-2	S303	P-6				
✱D2110	E-2	IC753	B-6	IC2304	F-2	S700	C-1				
✱D2300	F-2	IC754	C-6	IC2305	G-2	S701	B-1				
✱D2301	F-2	IC755	C-6	IC2401	G-3	S2100	F-1				
✱D2302	F-2	✱IC756	C-7	IC2500	J-3	S2101	E-1				
✱D2500	J-2	✱IC757	C-7	IC2501	J-3						
✱D2501	K-2	IC758	A-5	IC2502	J-3	SL300	N-6				
✱D2502	J-2	IC759	B-7	IC2503	J-2	SL601	K-2				
✱D2503	J-2	IC760	C-7	IC2504	J-1						
✱D2700	H-2	IC761	A-6	IC2505	J-2	TP100	R-1				
✱D2701	H-2	IC762	A-4	IC2506	J-2	TP101	R-1				
✱D2702	G-2	✱IC763	C-6	IC2507	J-1	TP102	N-3				
		✱IC764	C-6	IC2508	J-2	TP504	K-6				
E501	M-5	IC765	E-6	IC2700	H-1	TP505	K-6				
E700	B-7	✱IC766	E-6	IC2701	G-1	TP506	K-6				
E701	B-4	✱IC767	E-6	IC2702	G-2	TP507	M-7				
E1101	K-6	IC768	D-6	IC2703	H-2	TP509	K-5				
E2100	E-3	IC769	E-6	IC2704	G-2	TP601	L-3				
E2101	G-1	IC770	D-6	IC2705	H-2	TP602	L-3				
		✱IC771	D-6			TP603	L-3				
IC1	N-3	IC772	E-6	Q200	N-5	TP604	K-3				
✱IC2	N-2	✱IC773	F-6	Q500	M-6	TP605	L-4				
✱IC3	N-3	IC774	D-5	Q700	L-7	TP701	A-5				
IC5	P-2	IC775	E-6	Q701	K-7	TP702	A-5				
IC6	N-2	✱IC776	F-6	✱Q702	C-6	TP800	D-2				
IC7	N-4	✱IC777	F-6	Q1103	J-6	TP801	E-4				
✱IC8	N-4	✱IC778	H-7	✱Q1105	K-7	TP802	F-6				
IC10	N-2	✱IC779	G-7	✱Q1106	K-5	TP803	E-6				
IC11	P-3	IC780	F-7			TP808	C-4				
IC12	P-4	IC781	E-7	✱RB100	P-1	TP810	D-5				
IC13	P-5	IC782	G-5	✱RB101	R-2	TP812	D-4				
IC15	P-5	IC783	E-4	RB103	R-3	TP813	E-6				
IC16	N-5	IC800	H-4	✱RB105	P-1	TP814	D-4				
✱IC17	M-5	IC801	G-4	✱RB106	P-2	TP815	H-1				

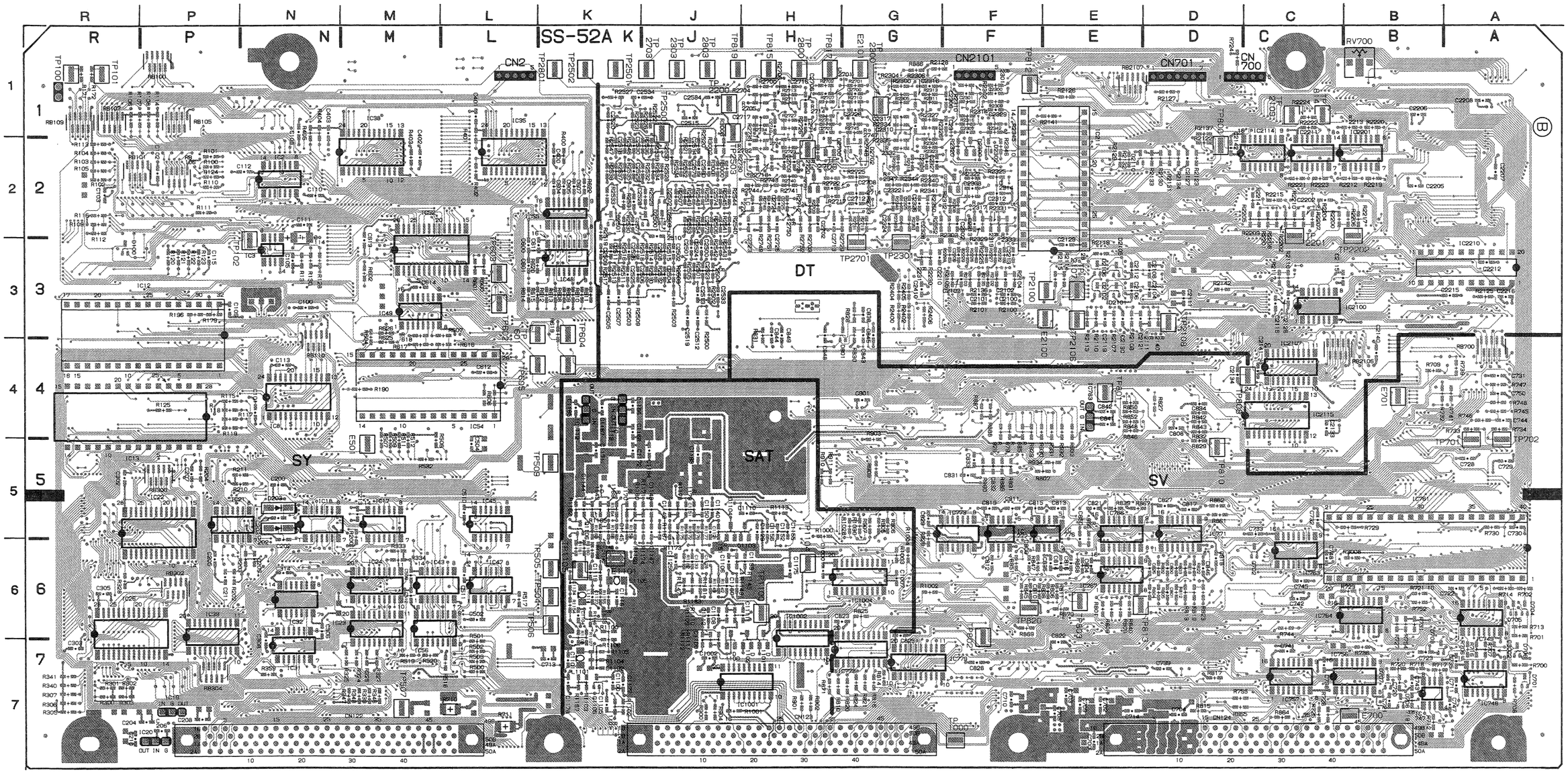
✱ : B SIDE

LOT NO. A-1



SS-52A BOARD -A SIDE-

1-648-535-12 (LOT No. 306 - 409)
DVW-A500(J) ; SS-52A MCB
DVW-A500(UC) ; SS-52A MCB
DVW-A500P(EK) ; SS-52AP MCB
DVW-A500P(UC) ; SS-52AP MCB


SS-52A K
CN2
CN2101
CN701
CN 700
RV700
DT
SAT
SY
SV
TP2701
TP2301
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TP702
TP2100
TP2105
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TP2107
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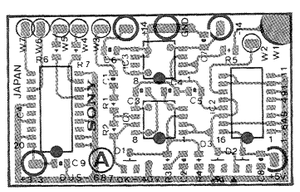
TP2141
TP2142
TP2143
TP2144

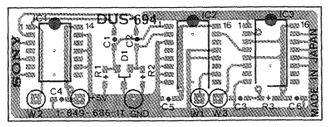
SS-52A, DUS-687/694

SS-52A ; System, Servo, Analog/Digital DT control
DUS-687/694

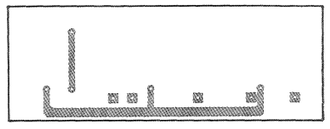
(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)



DUS-687 BOARD -A SIDE-
1-649-491-11



DUS-694 BOARD -A SIDE-
1-649-686-11



DUS-694 BOARD -B SIDE-
1-649-686-11

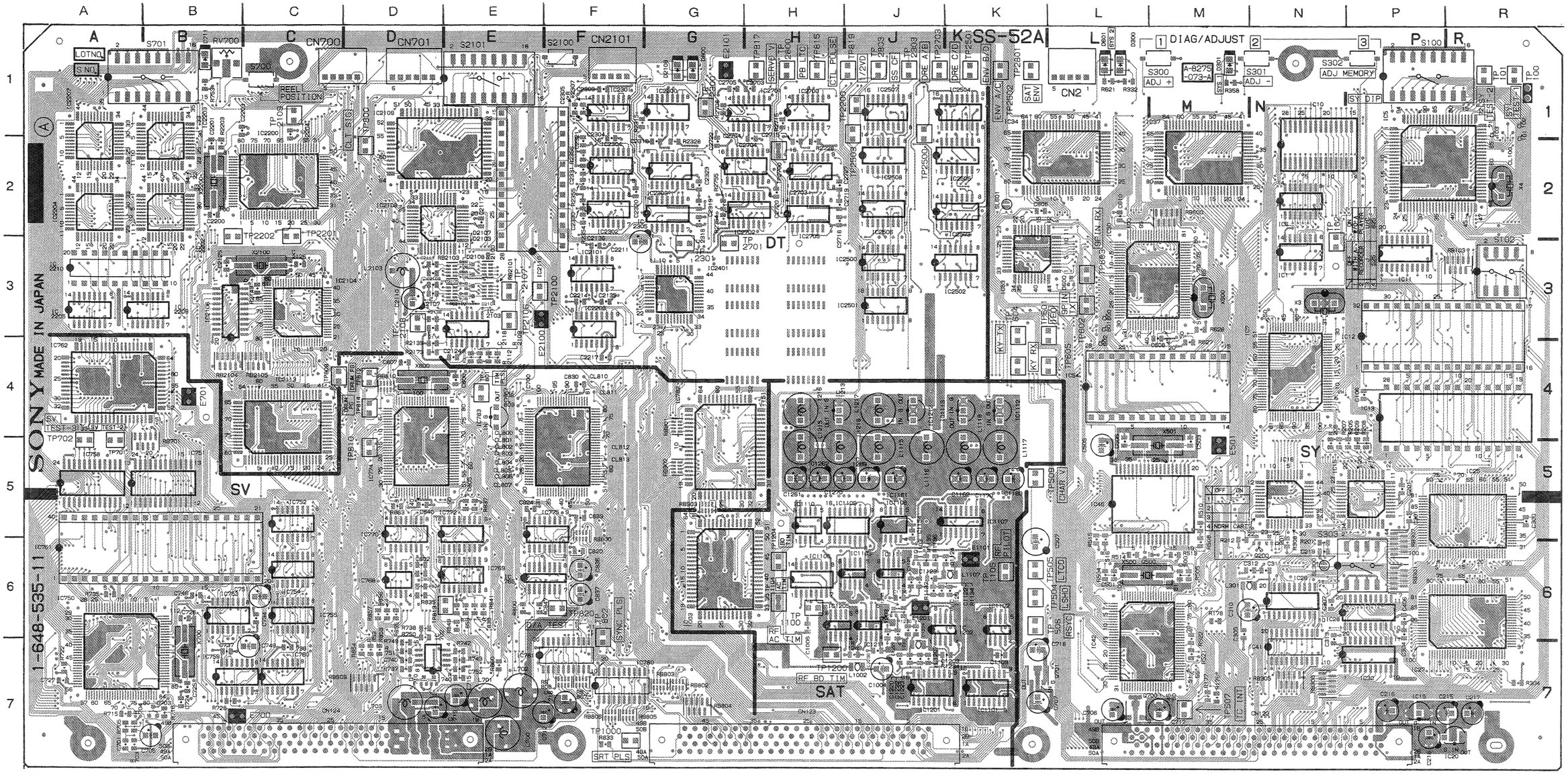
SS-52A(1-648-535-11)

CN2	L-1	✱IC21	P-5	IC1106	H-6	✱RB107	R-1	TP819	J-1
CN122	N-7	✱IC22	R-6	IC1107	K-5	✱RB109	R-1	TP820	F-6
CN123	H-7	✱IC23	M-7	IC1108	J-5	✱RB110	N-4	TP1000	F-7
CN124	C-7	✱IC24	M-6	IC1109	H-6	✱RB300	P-5	TP1100	H-6
CN700	C-1	IC25	R-5	IC1110	H-6	RB301	P-6	TP1104	H-6
CN701	D-1	✱IC26	R-7	IC1111	J-6	✱RB302	P-6	TP1105	K-6
CN2101	F-1	IC27	R-6	IC1112	K-4	✱RB304	P-7	TP1200	H-7
		IC28	P-6	IC1113	K-4	RB305	N-7	TP1204	H-6
✱D100	R-3	IC29	N-6	IC1201	J-7	RB306	N-7	TP2100	E-3
D201	N-5	IC30	P-7	IC1202	J-7	RB307	P-6	TP2106	E-3
✱D202	N-5	✱IC31	N-7	IC1205	H-6	RB600	M-2	TP2107	E-3
✱D203	N-5	✱IC32	N-6	IC1211	J-6	✱RB700	A-4	TP2108	D-3
D300	L-1	IC34	L-2	IC1212	J-4	RB701	B-5	TP2109	C-1
D301	M-1	✱IC35	L-2	IC1213	H-4	RB800	F-5	TP2200	J-1
D600	L-3	IC37	M-2	✱IC2100	C-3	RB802	G-7	TP2201	C-2
D601	L-1	✱IC38	M-2	IC2101	F-3	RB803	G-7	TP2202	B-2
D700	D-7	✱IC39	P-7	IC2103	E-4	RB804	G-7	TP2300	G-1
✱D701	A-7	IC41	N-7	IC2104	C-3	RB805	F-7	TP2301	G-3
D703	B-7	IC42	M-7	IC2106	B-3	RB806	F-7	TP2303	J-1
✱D704	A-6	✱IC43	M-6	✱IC2107	C-4	RB807	F-7	TP2500	J-1
✱D705	A-6	✱IC45	L-5	IC2108	D-2	RB808	F-7	TP2501	K-1
✱D706	A-7	IC46	L-5	IC2109	D-2	RB809	D-7	TP2502	K-1
✱D707	B-7	✱IC47	L-6	IC2110	F-3	RB810	D-4	TP2503	J-1
✱D708	B-7	✱IC48	K-3	IC2113	C-4	RB901	G-4	TP2700	H-2
✱D709	B-7	✱IC49	M-3	✱IC2114	C-2	RB902	G-5	TP2701	G-3
D710	D-7	IC50	M-3	✱IC2115	C-4	RB903	G-5	TP2703	J-1
D711	B-1	✱IC52	M-3	IC2200	C-2	RB2100	E-3	TP2800	H-1
D800	G-1	IC53	K-3	✱IC2201	B-2	RB2101	E-3	TP2801	K-1
✱D1103	H-5	IC54	L-4	IC2202	B-2	RB2102	E-3	TP2803	J-1
✱D1104	J-5	✱IC55	K-2	IC2203	B-2	RB2103	E-3		
✱D2101	E-3	✱IC56	M-7	IC2204	A-2	RB2104	B-4	X3	N-3
✱D2102	E-3	IC700	F-5	IC2205	A-3	RB2105	C-4	X4	R-2
D2103	E-3	IC702	E-7	IC2207	A-2	✱RB2106	C-4	X500	M-6
D2104	E-3	✱IC747	B-7	IC2208	F-4	✱RB2107	E-1	X501	M-5
✱D2105	E-3	✱IC748	A-7	IC2209	A-3			X600	M-3
✱D2106	E-3	✱IC749	A-6	IC2210	A-3	RV700	B-1	X700	B-7
D2107	E-3	IC750	A-7	✱IC2211	C-2			X800	D-4
D2108	E-3	IC751	A-5	IC2300	G-1	S100	P-1	X2100	C-3
D2109	G-1	IC752	C-5	IC2301	F-1	S102	R-3	X2200	B-2
✱D2110	E-2	IC753	B-6	IC2302	F-2	S300	M-1		
✱D2300	F-2	IC754	C-6	IC2303	G-2	S301	N-1		
✱D2301	F-2	IC755	C-6	IC2304	F-2	S302	P-1		
✱D2302	F-2	✱IC756	C-7	IC2305	G-2	S303	P-6		
✱D2500	J-2	✱IC757	C-7	IC2401	G-3	S700	C-1		
✱D2501	K-2	IC758	A-5	IC2500	J-3	S701	B-1		
✱D2502	J-2	IC759	B-7	IC2501	J-3	S2100	F-1		
✱D2503	J-2	IC760	C-7	IC2502	J-3	S2101	E-1		
✱D2700	H-2	IC761	A-6	IC2503	J-2				
✱D2701	H-2	IC762	A-4	IC2504	J-1	SL300	N-6		
✱D2702	G-2	✱IC763	C-6	IC2505	J-2	SL601	K-2		
		✱IC764	C-6	IC2506	J-2				
E501	M-5	IC765	E-6	IC2507	J-1	TP100	R-1		
E700	B-7	✱IC766	E-6	IC2508	J-2	TP101	R-1		
E701	B-4	✱IC767	E-6	IC2700	H-1	TP102	N-3		
E1101	K-6	IC768	D-6	IC2701	G-1	TP504	K-6		
E1201	J-6	IC769	E-6	IC2702	G-2	TP505	K-6		
E2100	E-3	IC770	D-6	IC2703	H-2	TP506	K-6		
E2101	G-1	✱IC771	D-6	IC2704	G-2	TP507	M-7		
		IC772	E-6	IC2705	H-2	TP509	K-5		
IC1	N-3	✱IC773	F-6			TP601	L-3		
✱IC2	N-2	IC774	D-5	Q200	N-5	TP602	L-3		
✱IC3	N-3	IC775	E-6	Q500	M-6	TP603	L-3		
IC5	P-2	✱IC776	F-6	Q700	L-7	TP604	K-3		
IC6	N-2	✱IC777	F-6	Q701	K-7	TP605	L-4		
IC7	N-4	✱IC778	H-7	✱Q702	C-6	TP701	A-5		
✱IC8	N-4	✱IC779	G-7	Q1103	J-6	TP702	A-5		
IC10	N-2	IC780	F-7	✱Q1105	K-7	TP800	D-2		
IC11	P-3	IC781	E-7	✱Q1106	K-5	TP801	E-4		
IC12	P-4	IC782	G-5	Q1203	J-6	TP802	F-6		
IC13	P-5	IC783	E-4	✱Q1205	J-7	TP808	C-4		
IC15	P-5	✱IC1001	J-7			TP810	D-5		
IC16	N-5	✱IC1002	H-7	✱RB100	P-1	TP812	D-4		
✱IC17	M-5	IC1003	G-6	✱RB101	R-2	TP813	E-6		
✱IC18	N-5	IC1101	K-7	RB103	R-3	TP814	D-4		
IC19	P-7	IC1102	K-7	✱RB105	P-1	TP815	H-1		
IC20	R-7	IC1105	J-6	✱RB106	P-2	TP817	H-1		

✱ : B SIDE

LOT NO. A-1

1-75 (a)


SS-52A
SONY MADE IN JAPAN
1-648-535-11
DIAG/ADJUST
SV
SY
DT
SAT
CN2
CN700
CN701
CN2101
S2100
S2101
S701
RV700
S700
S300
S301
S302
ADJ MEMORY
S100
SY DIP
TP2701
TP2100
TP2200
TP2202
TP2201
TP2603
TP2602
TP2801
TP2803
TP2809
TP2807
TP2503
TP2501
TP2502
TP2504
TP2505
TP2506
TP2507
TP2508
TP2509
TP2510
TP2511
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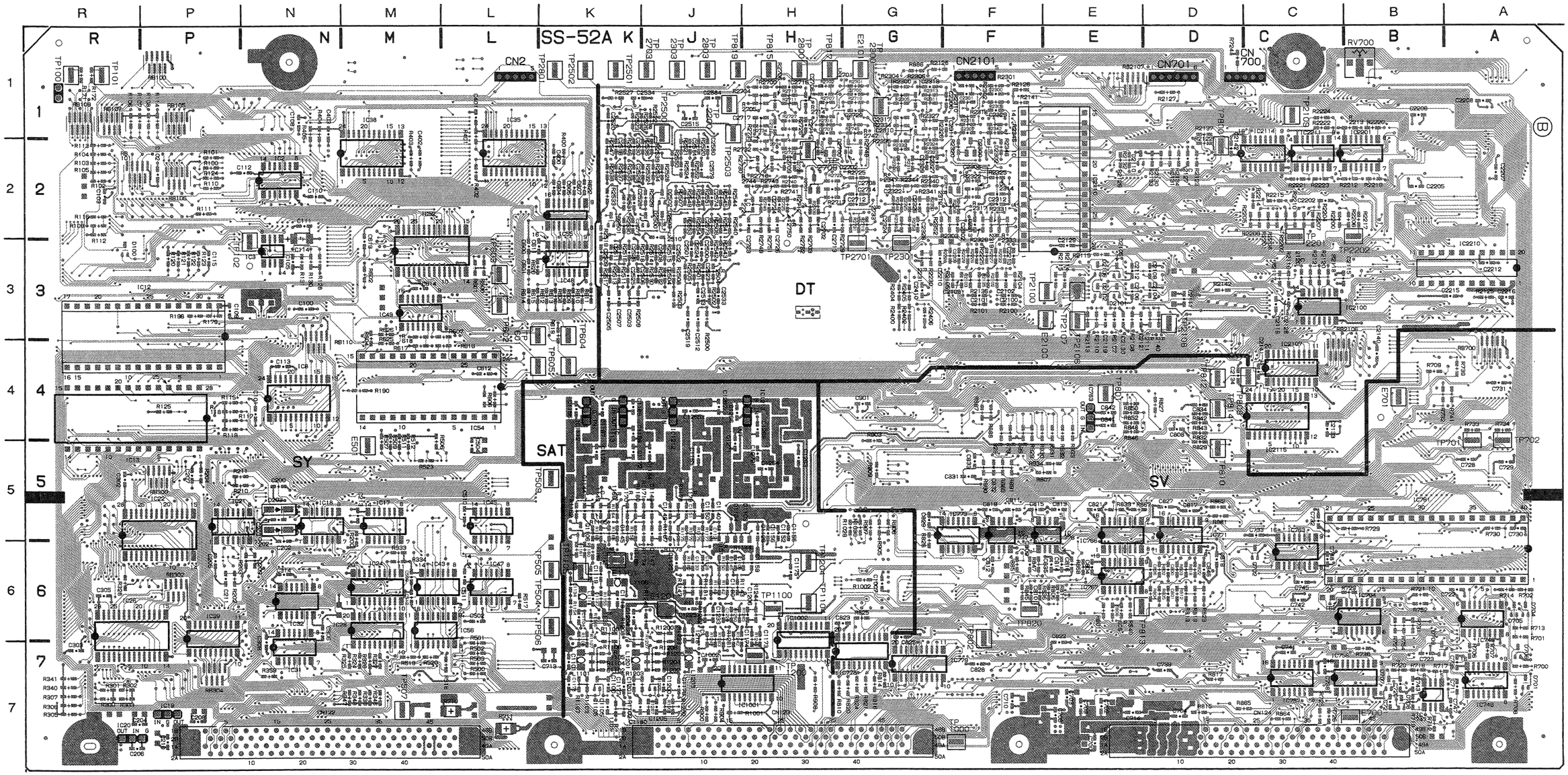
TP2541
TP2542
TP2543


SS-52A K
CN2
CN2101
CN701
CN700
RV700
DT
SAT
SY
SV
TP1100
TP2701
TP230
TP2100
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TP2202
TP701
TP702
TP505
TP504
TP506
TP507
TP604
TP605
TP1204
TP1101
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TP1000
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IC1002
IC2210
IC2100
IC2115
IC2114
IC701
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IC766
IC768
IC771
IC773
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IC1231
IC1232
IC1233
IC1234
IC1235
IC1236
IC1237
IC1238
IC1239
IC1240
IC1241
IC1242
IC1243

SS-52B ; System, Servo, Digital DT control for Player

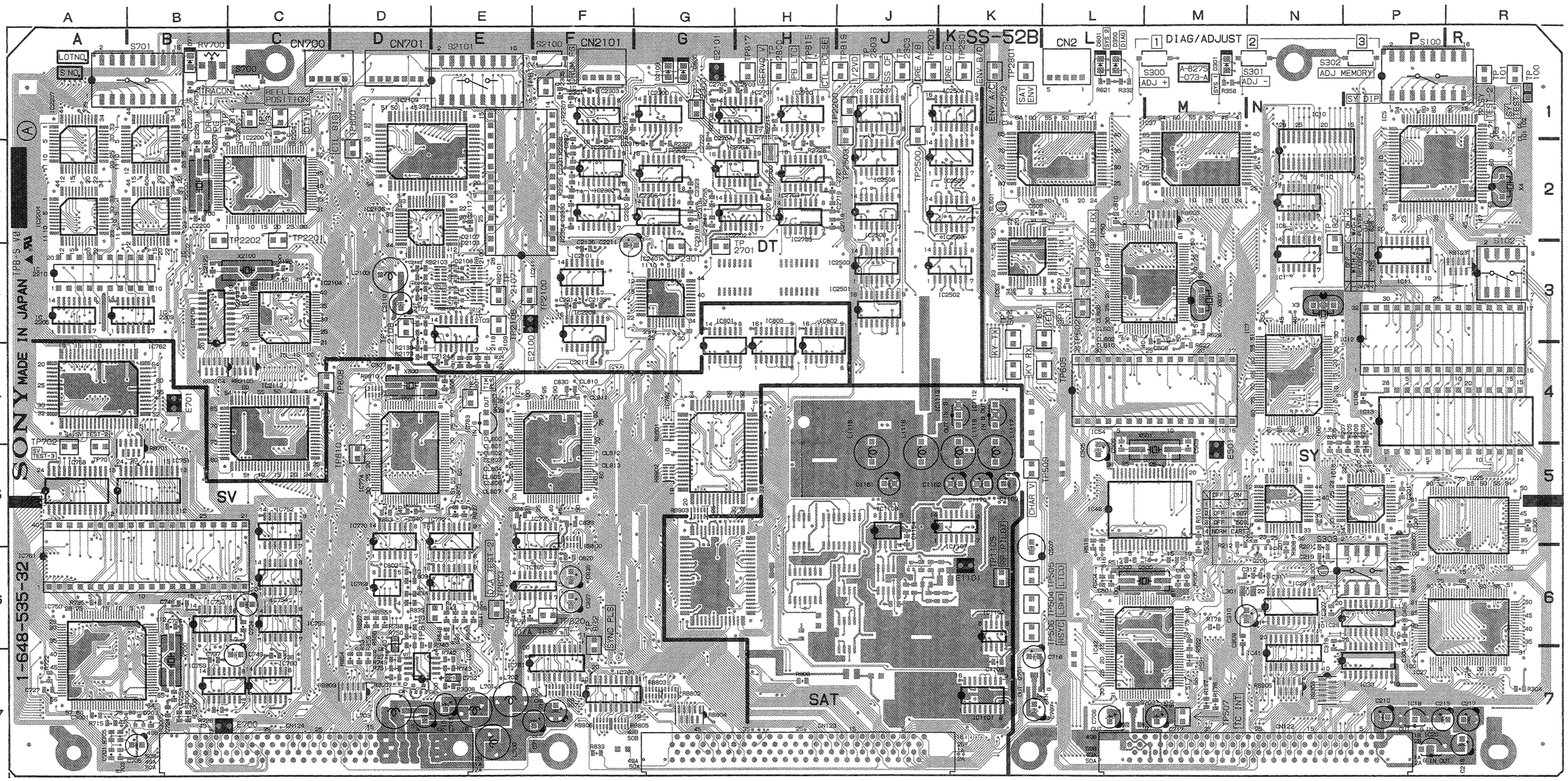
(Board's Lot No. 410 and higher)
All player models

SS-52B(1-648-535-32)

CN2	L-1	✱IC23	M-7	IC1108	J-5	RB803	G-7	TP2303	J-1
CN122	N-7	✱IC24	M-6	IC1112	K-4	RB804	G-7	TP2500	J-1
CN123	H-7	IC25	R-5	IC1113	K-4	RB805	F-7	TP2501	K-1
CN124	C-7	✱IC26	R-7	✱IC2100	C-3	RB806	F-7	TP2502	K-1
CN700	C-1	IC27	R-6	IC2101	F-3	RB807	F-7	TP2503	J-1
CN701	D-1	IC28	P-6	IC2103	E-4	RB808	F-7	TP2700	H-2
CN2101	F-1	IC29	N-6	IC2104	C-3	RB809	D-7	TP2701	G-3
		IC30	P-7	IC2106	B-3	RB810	D-4	TP2703	J-1
✱D100	R-3	✱IC31	N-7	✱IC2107	C-4	RB901	G-4	TP2800	H-1
D201	N-5	✱IC32	N-6	IC2108	D-2	RB902	G-5	TP2801	K-1
✱D202	N-5	IC34	L-2	IC2109	D-2	RB903	G-5	TP2803	J-1
✱D203	N-5	✱IC35	L-2	IC2113	C-4	RB2100	E-3		
D300	L-1	IC37	M-2	✱IC2114	C-2	RB2101	E-3	X3	N-3
D301	M-1	✱IC38	M-2	✱IC2115	C-4	RB2102	E-3	X4	R-2
D600	L-3	✱IC39	P-7	IC2200	C-2	RB2103	E-3	X500	M-6
D601	L-1	IC41	N-7	✱IC2201	B-1	RB2104	B-4	X501	M-5
✱D701	A-7	IC42	M-7	IC2202	B-2	RB2105	C-4	X600	M-3
D703	B-7	✱IC43	M-6	IC2203	B-2	✱RB2106	C-4	X700	B-7
✱D704	A-6	✱IC45	L-5	IC2204	A-2	✱RB2107	E-1	X800	D-4
✱D705	A-6	IC46	L-5	IC2205	A-3			X2100	C-3
✱D706	A-7	✱IC47	L-6	IC2207	A-2	RV700	B-1	X2200	B-2
✱D707	B-7	✱IC48	K-3	IC2208	F-4				
✱D708	B-7	✱IC49	M-3	IC2209	A-3	S100	P-1		
✱D709	B-7	IC50	M-3	IC2210	A-3	S102	R-3		
D710	D-7	✱IC52	M-3	✱IC2211	C-2	S300	M-1		
D711	B-1	IC53	K-3	IC2300	G-1	S301	N-1		
D800	G-1	IC54	L-4	IC2301	F-1	S302	P-1		
✱D801	G-4	✱IC55	K-2	IC2302	F-2	S303	P-6		
✱D1103	H-5	✱IC56	M-7	IC2303	G-2	S700	C-1		
✱D1104	J-5	IC211	F-3	IC2304	F-2	S701	B-1		
✱D2101	E-3	IC700	F-5	IC2305	G-2	S2100	F-1		
✱D2102	E-3	IC702	E-7	IC2401	G-3	S2101	E-1		
D2103	E-3	✱IC747	B-7	IC2500	J-3				
D2104	E-3	✱IC748	A-7	IC2501	J-3	SL300	N-6		
✱D2105	E-3	✱IC749	A-6	IC2502	J-3	SL601	K-2		
✱D2106	E-3	IC750	A-7	IC2503	J-2				
D2107	E-3	IC751	A-5	IC2504	J-1	TP100	R-1		
D2108	E-3	IC752	C-5	IC2505	J-2	TP101	R-1		
D2109	G-1	IC753	B-6	IC2506	J-2	TP102	N-3		
✱D2110	E-2	IC754	C-6	IC2507	J-1	TP504	K-6		
✱D2300	F-2	IC755	C-6	IC2508	J-2	TP505	K-6		
✱D2302	F-2	✱IC756	C-7	IC2700	H-1	TP506	K-6		
✱D2500	J-2	✱IC757	C-7	IC2701	G-1	TP507	M-7		
✱D2501	K-2	IC758	A-5	IC2702	G-2	TP509	K-5		
✱D2502	J-2	IC759	B-7	IC2703	H-2	TP601	L-3		
✱D2503	J-2	IC760	C-7	IC2704	G-2	TP602	L-3		
✱D2700	H-2	IC761	A-6	IC2705	H-2	TP603	L-3		
✱D2701	H-2	IC762	A-4			TP604	K-3		
✱D2702	G-2	✱IC763	C-6	Q200	N-5	TP605	L-4		
		✱IC764	C-6	Q500	M-6	TP701	A-5		
E501	M-5	IC765	E-6	Q700	L-7	TP702	A-5		
E700	B-7	✱IC766	E-6	Q701	K-7	TP800	D-2		
E701	B-4	✱IC767	E-6	✱Q702	C-6	TP801	E-4		
E1101	K-6	IC768	D-6	✱Q1105	K-7	TP802	F-6		
E2100	E-3	IC769	E-6	✱Q1106	K-5	TP803	E-6		
E2101	G-1	IC770	D-6			TP808	C-4		
		✱IC771	D-6	✱RB100	P-1	TP810	D-5		
IC1	N-3	IC772	E-6	✱RB101	R-2	TP812	D-4		
✱IC2	N-2	✱IC773	F-6	RB103	R-3	TP813	E-6		
✱IC3	N-3	IC774	D-5	✱RB105	P-1	TP814	D-4		
IC5	P-2	IC775	E-6	✱RB106	P-2	TP815	H-1		
IC6	N-2	✱IC776	F-6	✱RB107	R-1	TP817	H-1		
IC7	N-4	✱IC777	F-6	✱RB109	R-1	TP819	J-1		
✱IC8	N-4	✱IC778	H-7	✱RB110	N-4	TP820	F-6		
IC10	N-2	✱IC779	G-7	✱RB300	P-5	TP1000	F-7		
IC11	P-3	IC780	F-7	RB301	P-6	TP1105	K-6		
IC12	P-4	IC781	E-7	✱RB302	P-6	TP2100	E-3		
IC13	P-5	IC782	G-5	✱RB304	P-7	TP2106	E-3		
IC15	P-5	IC783	E-4	RB305	N-7	TP2107	E-3		
IC16	N-5	IC800	H-4	RB306	N-7	TP2108	D-3		
✱IC17	M-5	IC801	G-4	RB307	P-6	TP2109	C-1		
✱IC18	N-5	IC802	H-4	RB600	M-2	TP2200	J-1		
IC19	P-7	✱IC1004	G-6	✱RB700	A-4	TP2201	C-2		
IC20	R-7	IC1101	K-7	RB701	B-5	TP2202	B-6		
✱IC21	P-5	IC1102	K-7	RB800	F-5	TP2300	G-1		
✱IC22	R-6	IC1107	K-5	RB802	G-7	TP2301	G-3		

✱ : B SIDE

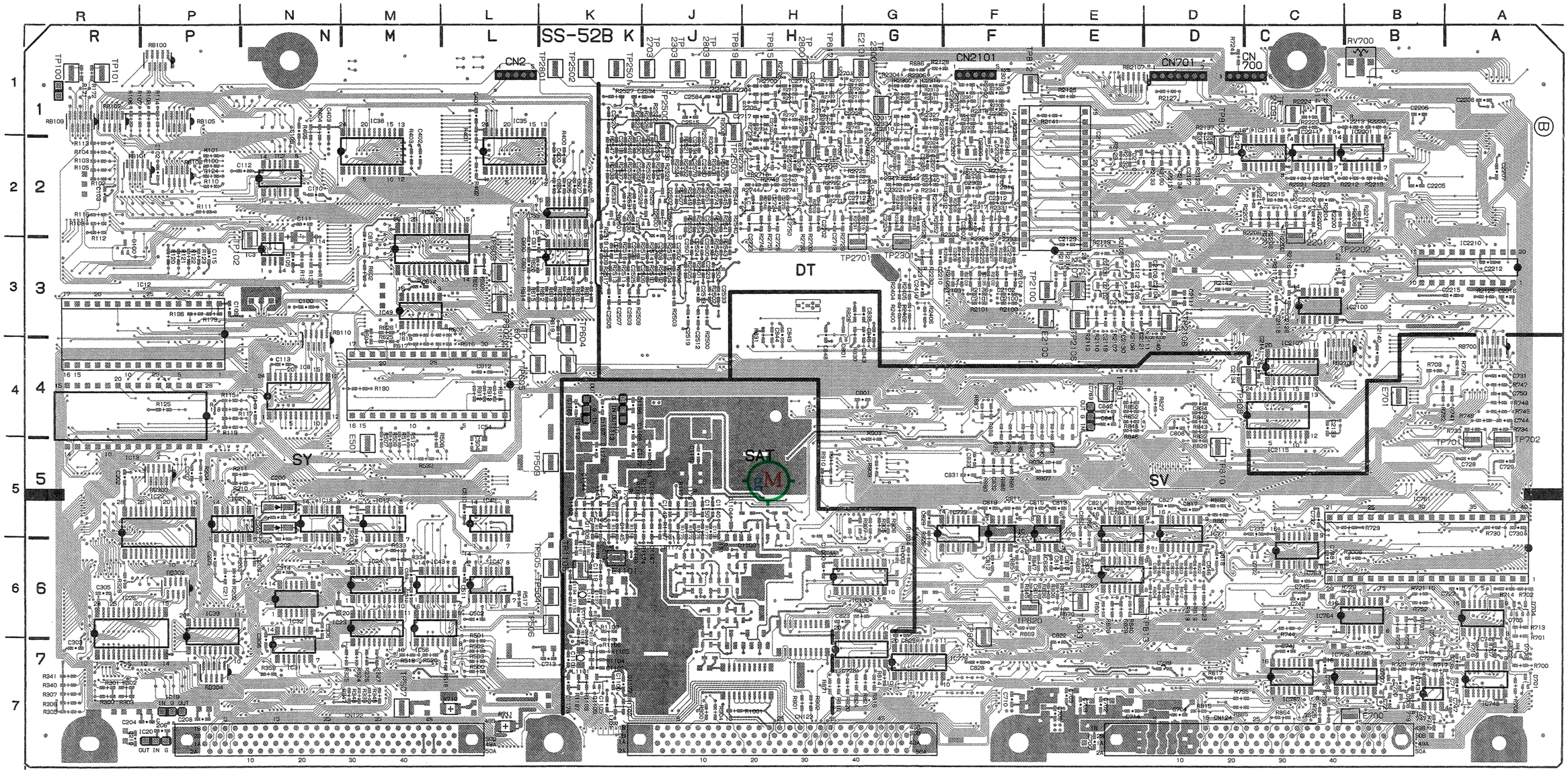
LOT NO. A-1



SS-52B BOARD -A SIDE-

1-648-535-32 (LOT No. 410 -)

DVW-A510(J)	; SS-52BA	MCB
DVW-A510(UC)	; SS-52BA	MCB
DVW-A510P(EK)	; SS-52BAP	MCB
DVW-510(J)	; SS-52B	MCB
DVW-510(UC)	; SS-52B	MCB
DVW-510P(EK)	; SS-52BP	MCB
DVW-CA510(J)	; SS-52BA	MCB
DVW-CA510(UC)	; SS-52BA	MCB
DVW-CA510P(EK)	; SS-52BAP	MCB


SS-52B K
SAT
SY
DT
SV
CN2
CN2101
CN701
CN 700
RV700
TP2701
TP2302
TP2002
TP701
TP702
IC2100
IC2210
IC2115
IC764
IC758
IC748
E780
E701
RB700
RB100
RB109
RB105
RB110
RB2100
RB2101
RB2102
RB2103
RB2104
RB2105
RB2106
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RB2125
RB2126
RB2127
RB2128
RB2129
RB2130
RB2131
RB2132
RB2133
RB2134
RB2135
RB2136
RB2137
RB2138
RB2139

SS-52B ; System, Servo, Digital DT control for Player

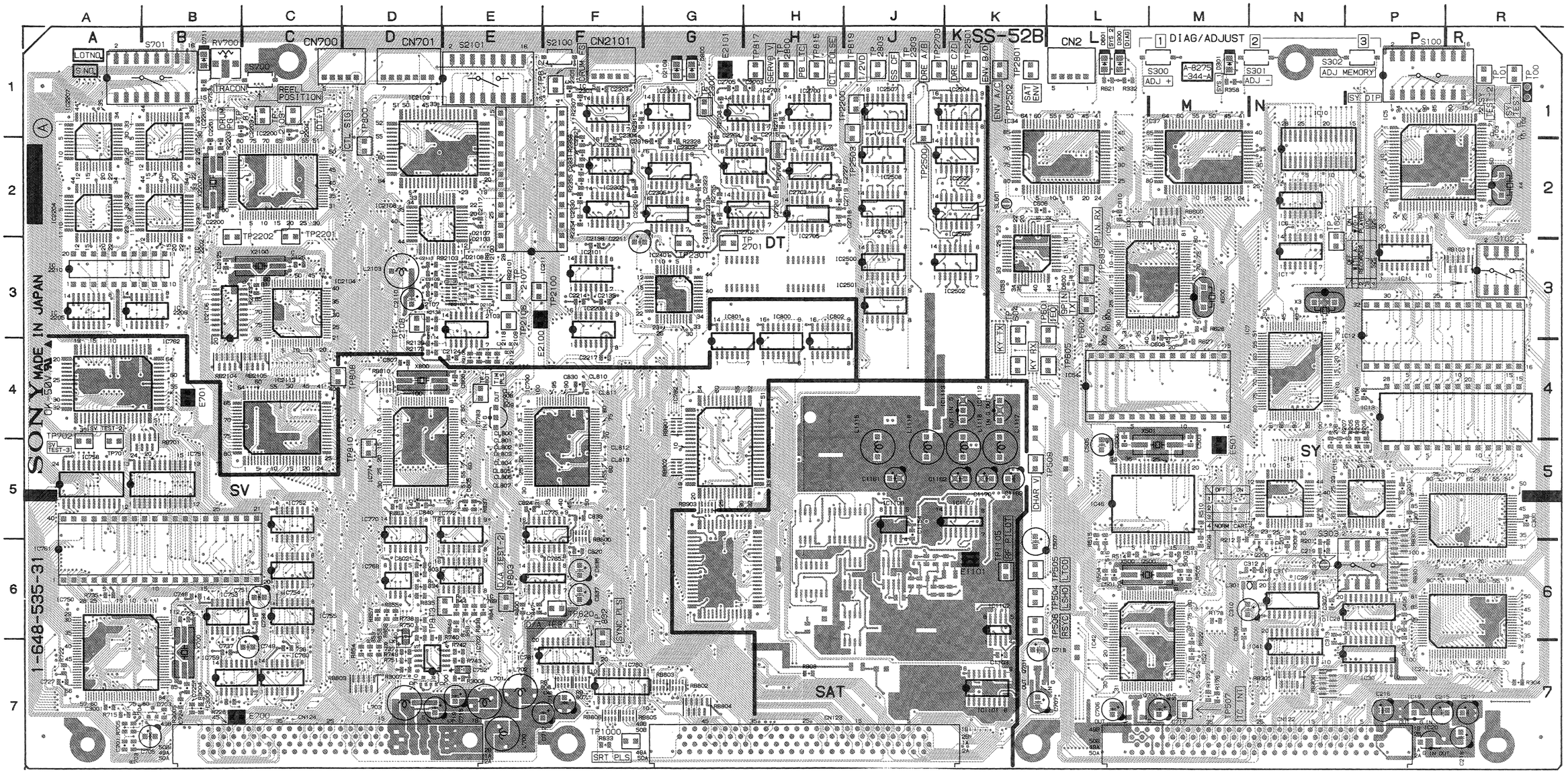
(Board's Lot No. 307 through 409)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

SS-52B(1-648-535-31)

CN2	L-1	✱IC23	M-7	IC1108	J-5	RB803	G-7	TP2303	J-1		
CN122	N-7	✱IC24	M-6	IC1112	K-4	RB804	G-7	TP2500	J-1		
CN123	H-7	IC25	R-5	IC1113	K-4	RB805	F-7	TP2501	K-1		
CN124	C-7	✱IC26	R-7	✱IC2100	C-3	RB806	F-7	TP2502	K-1		
CN700	C-1	IC27	R-6	IC2101	F-3	RB807	F-7	TP2503	J-1		
CN701	D-1	IC28	P-6	IC2103	E-4	RB808	F-7	TP2700	H-2		
CN2101	F-1	IC29	N-6	IC2104	C-3	RB809	D-7	TP2701	G-3		
		IC30	P-7	IC2106	B-3	RB810	D-4	TP2703	J-1		
✱D100	R-3	✱IC31	N-7	✱IC2107	C-4	RB901	G-4	TP2800	H-1		
D201	N-5	✱IC32	N-6	IC2108	D-2	RB902	G-5	TP2801	K-1		
✱D202	N-5	IC34	L-2	IC2109	D-2	RB903	G-5	TP2803	J-1		
✱D203	N-5	✱IC35	L-2	IC2113	C-4	RB2100	E-3				
D300	L-1	IC37	M-2	✱IC2114	C-2	RB2101	E-3	X3	N-3		
D301	M-1	✱IC38	M-2	✱IC2115	C-4	RB2102	E-3	X4	R-2		
D600	L-3	✱IC39	P-7	IC2200	C-2	RB2103	E-3	X500	M-6		
D601	L-1	IC41	N-7	✱IC2201	B-1	RB2104	B-4	X501	M-5		
✱D701	A-7	IC42	M-7	IC2202	B-2	RB2105	C-4	X600	M-3		
D703	B-7	✱IC43	M-6	IC2203	B-2	✱RB2106	C-4	X700	B-7		
✱D704	A-6	✱IC45	L-5	IC2204	A-2	✱RB2107	E-1	X800	D-4		
✱D705	A-6	IC46	L-5	IC2205	A-3			X2100	C-3		
✱D706	A-7	✱IC47	L-6	IC2207	A-2	RV700	B-1	X2200	B-2		
✱D707	B-7	✱IC48	K-3	IC2208	F-4						
✱D708	B-7	✱IC49	M-3	IC2209	A-3	S100	P-1				
✱D709	B-7	IC50	M-3	IC2210	A-3	S102	R-3				
D710	D-7	✱IC52	M-3	✱IC2211	C-2	S300	M-1				
D711	B-1	IC53	K-3	IC2300	G-1	S301	N-1				
D800	G-1	IC54	L-4	IC2301	F-1	S302	P-1				
✱D801	G-4	✱IC55	K-2	IC2302	F-2	S303	P-6				
✱D1103	H-5	✱IC56	M-7	IC2303	G-2	S700	C-1				
✱D1104	J-5	IC211	F-3	IC2304	F-2	S701	B-1				
✱D2101	E-3	IC700	F-5	IC2305	G-2	S2100	F-1				
✱D2102	E-3	IC702	E-7	IC2401	G-3	S2101	E-1				
D2103	E-3	✱IC747	B-7	IC2500	J-3						
D2104	E-3	✱IC748	A-7	IC2501	J-3	SL300	N-6				
✱D2105	E-3	✱IC749	A-6	IC2502	J-3	SL601	K-2				
✱D2106	E-3	IC750	A-7	IC2503	J-2						
D2107	E-3	IC751	A-5	IC2504	J-1	TP100	R-1				
D2108	E-3	IC752	C-5	IC2505	J-2	TP101	R-1				
D2109	G-1	IC753	B-6	IC2506	J-2	TP102	N-3				
✱D2110	E-2	IC754	C-6	IC2507	J-1	TP504	K-6				
✱D2300	F-2	IC755	C-6	IC2508	J-2	TP505	K-6				
✱D2302	F-2	✱IC756	C-7	IC2700	H-1	TP506	K-6				
✱D2500	J-2	✱IC757	C-7	IC2701	G-1	TP507	M-7				
✱D2501	K-2	IC758	A-5	IC2702	G-2	TP509	K-5				
✱D2502	J-2	IC759	B-7	IC2703	H-2	TP601	L-3				
✱D2503	J-2	IC760	C-7	IC2704	G-2	TP602	L-3				
✱D2700	H-2	IC761	A-6	IC2705	H-2	TP603	L-3				
✱D2701	H-2	IC762	A-4			TP604	K-3				
✱D2702	G-2	✱IC763	C-6	Q200	N-5	TP605	L-4				
		✱IC764	C-6	Q500	M-6	TP701	A-5				
E501	M-5	IC765	E-6	Q700	L-7	TP702	A-5				
E700	B-7	✱IC766	E-6	Q701	K-7	TP800	D-2				
E701	B-4	✱IC767	E-6	✱Q702	C-6	TP801	E-4				
E1101	K-6	IC768	D-6	✱Q1105	K-7	TP802	F-6				
E2100	E-3	IC769	E-6	✱Q1106	K-5	TP803	E-6				
E2101	G-1	IC770	D-6			TP808	C-4				
		✱IC771	D-6	✱RB100	P-1	TP810	D-5				
IC1	N-3	IC772	E-6	✱RB101	R-2	TP812	D-4				
✱IC2	N-2	✱IC773	F-6	RB103	R-3	TP813	E-6				
✱IC3	N-3	IC774	D-5	✱RB105	P-1	TP814	D-4				
IC5	P-2	IC775	E-6	✱RB106	P-2	TP815	H-1				
IC6	N-2	✱IC776	F-6	✱RB107	R-1	TP817	H-1				
IC7	N-4	✱IC777	F-6	✱RB109	R-1	TP819	J-1				
✱IC8	N-4	✱IC778	H-7	✱RB110	N-4	TP820	F-6				
IC10	N-2	✱IC779	G-7	✱RB300	P-5	TP1000	F-7				
IC11	P-3	IC780	F-7	RB301	P-6	TP1105	K-6				
IC12	P-4	IC781	E-7	✱RB302	P-6	TP2100	E-3				
IC13	P-5	IC782	G-5	✱RB304	P-7	TP2106	E-3				
IC15	P-5	IC783	E-4	RB305	N-7	TP2107	E-3				
IC16	N-5	IC800	H-4	RB306	N-7	TP2108	D-3				
✱IC17	M-5	IC801	G-4	RB307	P-6	TP2109	C-1				
✱IC18	N-5	IC802	H-4	RB600	M-2	TP2200	J-1				
IC19	P-7	✱IC1004	G-6	✱RB700	A-4	TP2201	C-2				
IC20	R-7	IC1101	K-7	RB701	B-5	TP2202	B-6				
✱IC21	P-5	IC1102	K-7	RB800	F-5	TP2300	G-1				
✱IC22	R-6	IC1107	K-5	RB802	G-7	TP2301	G-3				

✱ : B SIDE

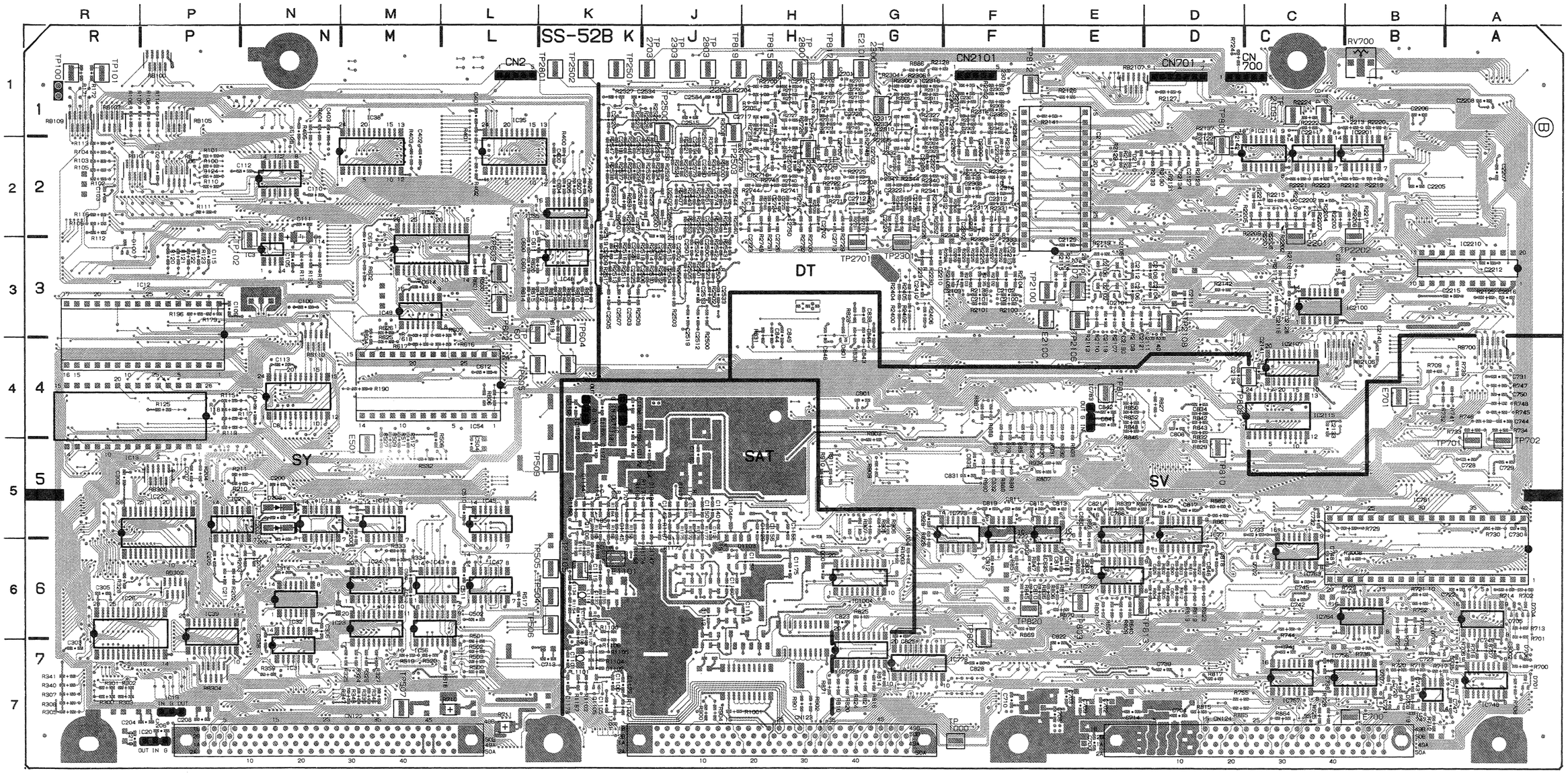
LOT NO. A-1



SS-52B BOARD -A SIDE-

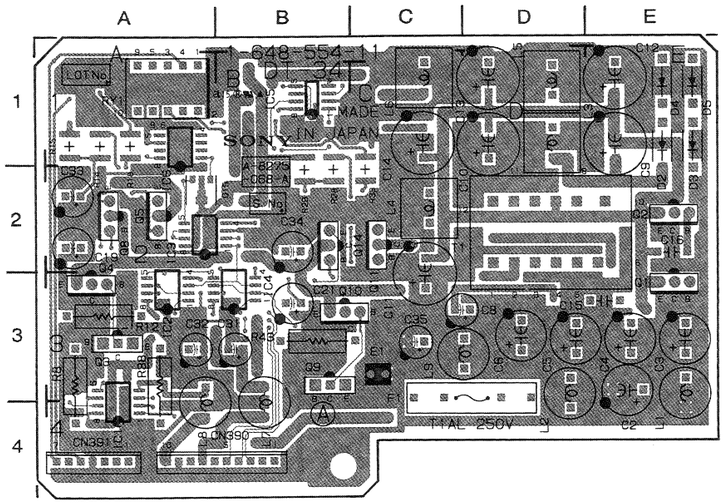
1-648-535-31 (LOT No. 307 - 409)

DVW-A510(J)	; SS-52BA	MCB
DVW-A510(UC)	; SS-52BA	MCB
DVW-A510P(EK)	; SS-52BAP	MCB
DVW-510(J)	; SS-52B	MCB
DVW-510(UC)	; SS-52B	MCB
DVW-510P(EK)	; SS-52BP	MCB
DVW-CA510(UC)	; SS-52BA	MCB
DVW-CA510P(EK)	; SS-52BAP	MCB


SS-52B K
SAT
DT
SY
SV
CN2
CN2101
CN701
CN 700
RV700
TP2701
TP2301
TP2202
TP2201
TP2100
TP2106
TP2107
TP2108
TP2109
TP2110
TP2111
TP2112
TP2113
TP2114
TP2115
TP2116
TP2117
TP2118
TP2119
TP2120
TP2121
TP2122
TP2123
TP2124
TP2125
TP2126
TP2127
TP2128
TP2129
TP2130
TP2131
TP2132
TP2133
TP2134
TP2135
TP2136
TP2137
TP2138
TP2139
TP2140
TP2141
TP2142
TP2143
TP2144
TP2145

DT-34/34B ; DT driver

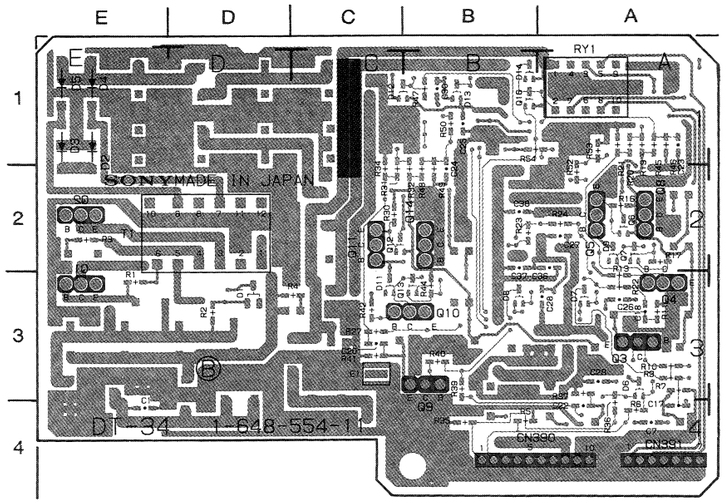
(Board's Lot No. 302 and higher)
All DVWs



DT-34 BOARD -A SIDE-

1-648-554-11 (LOT No. 302 - 306)

DVW-A500(J)	; DT-34	MCB
DVW-A500(UC)	; DT-34	MCB
DVW-A500P(EK)	; DT-34P	MCB
DVW-A500P(UC)	; DT-34PG	MCB
DVW-500(J)	; DT-34	MCB
DVW-500(UC)	; DT-34	MCB
DVW-500P(EK)	; DT-34P	MCB



DT-34 BOARD -B SIDE-

1-648-554-11 (LOT No. 302 - 306)

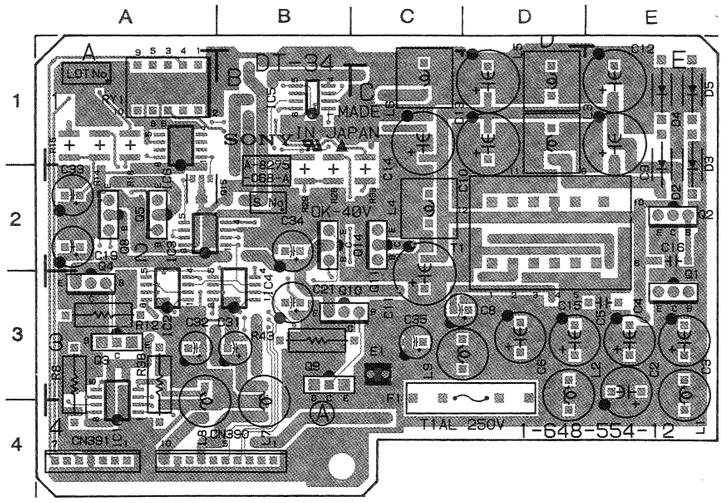
DVW-A500(J)	; DT-34	MCB
DVW-A500(UC)	; DT-34	MCB
DVW-A500P(EK)	; DT-34P	MCB
DVW-A500P(UC)	; DT-34PG	MCB
DVW-500(J)	; DT-34	MCB
DVW-500(UC)	; DT-34	MCB
DVW-500P(EK)	; DT-34P	MCB

DT-34(1-648-554-11)

CN390	A-4	✱D9	A-2	IC2	A-3	✱Q6	A-2	RY1	A-1
CN391	A-4	✱D11	C-3	IC3	A-2	✱Q7	A-2		
		✱D12	C-1	IC4	B-3	Q8	A-2	T1	D-2
D1	D-3	✱D13	B-1	IC5	B-1	Q9	B-3		
D2	E-2	✱D14	B-1	IC6	A-2	Q10	B-3		
D3	E-2					Q11	C-3		
D4	E-1	E1	C-3	Q1	E-3	✱Q12	C-2		
D5	E-1			Q2	E-2	✱Q13	C-3		
✱D6	A-3	F1	C-3	Q3	A-3	Q14	B-2		
✱D7	A-3			Q4	A-3	Q15	A-2		
✱D8	B-3	IC1	A-4	Q5	A-2	✱Q16	B-1		

✱ : B SIDE

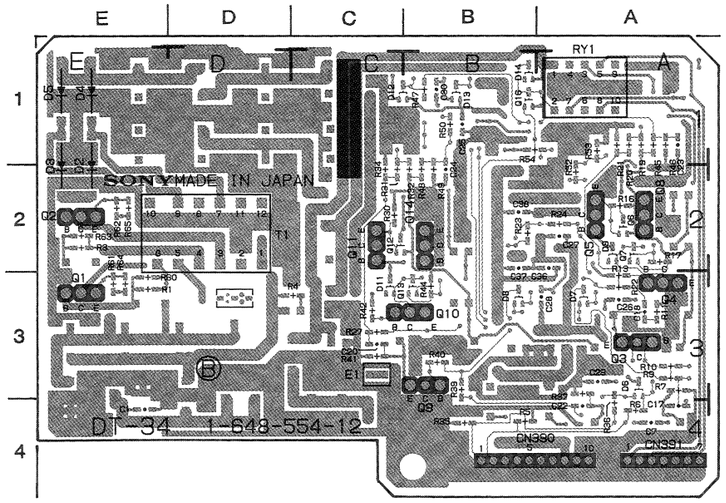
LOT NO. A-1



DT-34/34B BOARD -A SIDE-

1-648-554-12/22 (LOT No. 307 -)

DVW-A500(J)	; DT-34	MCB
DVW-A500(UC)	; DT-34	MCB
DVW-A500P(EK)	; DT-34P	MCB
DVW-A500P(UC)	; DT-34PG	MCB
DVW-500(J)	; DT-34	MCB
DVW-500(UC)	; DT-34	MCB
DVW-500P(EK)	; DT-34P	MCB
DVW-500P(UC)	; DT-34PG	MCB
DVW-A510(J)	; DT-34B	MCB
DVW-A510(UC)	; DT-34B	MCB
DVW-A510P(EK)	; DT-34BP	MCB
DVW-510(J)	; DT-34B	MCB
DVW-510(UC)	; DT-34B	MCB
DVW-510P(EK)	; DT-34BP	MCB
DVW-CA510(J)	; DT-34B	MCB
DVW-CA510(UC)	; DT-34B	MCB
DVW-CA510P(EK)	; DT-34BP	MCB



DT-34/34B BOARD -B SIDE-

1-648-554-12/22 (LOT No. 307 -)

DVW-A500(J)	; DT-34	MCB
DVW-A500(UC)	; DT-34	MCB
DVW-A500P(EK)	; DT-34P	MCB
DVW-A500P(UC)	; DT-34PG	MCB
DVW-500(J)	; DT-34	MCB
DVW-500(UC)	; DT-34	MCB
DVW-500P(EK)	; DT-34P	MCB
DVW-500P(UC)	; DT-34PG	MCB
DVW-A510(J)	; DT-34B	MCB
DVW-A510(UC)	; DT-34B	MCB
DVW-A510P(EK)	; DT-34BP	MCB
DVW-510(J)	; DT-34B	MCB
DVW-510(UC)	; DT-34B	MCB
DVW-510P(EK)	; DT-34BP	MCB
DVW-CA510(J)	; DT-34B	MCB
DVW-CA510(UC)	; DT-34B	MCB
DVW-CA510P(EK)	; DT-34BP	MCB

DT-34/34B(1-648-554-12/22)

CN390	A-4	✱D11	C-3	IC3	A-2	✱Q6	A-2	RY1	A-1
CN391	A-4	✱D12	C-1	IC4	B-3	✱Q7	A-2		
		✱D13	B-1			Q8	A-2	T1	C-2
D2	E-2	✱D14	B-1	IC5	B-1	Q9	B-3		
D3	E-2			IC6	A-2	Q10	B-3		
D4	E-1	E1	C-3			Q11	C-3		
D5	E-1			Q1	E-2	✱Q12	C-2		
✱D6	A-3	F1	C-3	Q2	E-2	✱Q13	C-3		
✱D7	A-3			Q3	A-3	Q14	C-2		
✱D8	B-3	IC1	A-4	Q4	A-2	Q15	B-2		
✱D9	A-2	IC2	A-3	Q5	A-2	✱Q16	B-1		

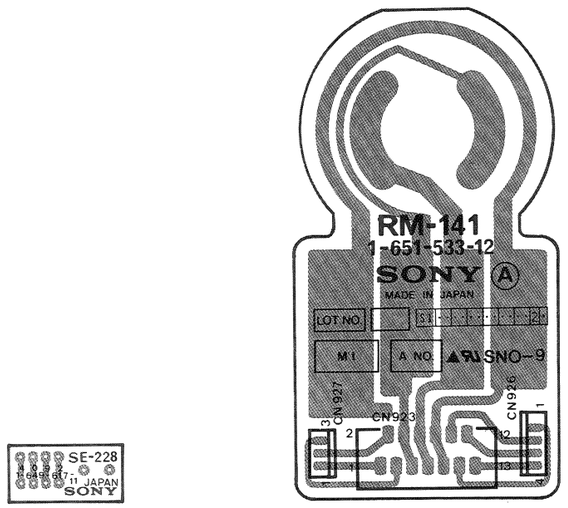
✱ : B SIDE

LOT NO. A-1

DR-307, RM-141, SE-228

DR-307 ; Motor driver (Drum, Capstan, T/S reels, Threading, Reel shift, Cassette up/down), Solenoids driver (Pinch, T/S brake, Cleaning), Degaussing head driver
RM-141 ; T reel motor
SE-228 ; T/S reel FG

(Board's Lot No. 912 and higher)
All DVWs



SE-228 BOARD -A SIDE-

1-649-617-11
All DVWs

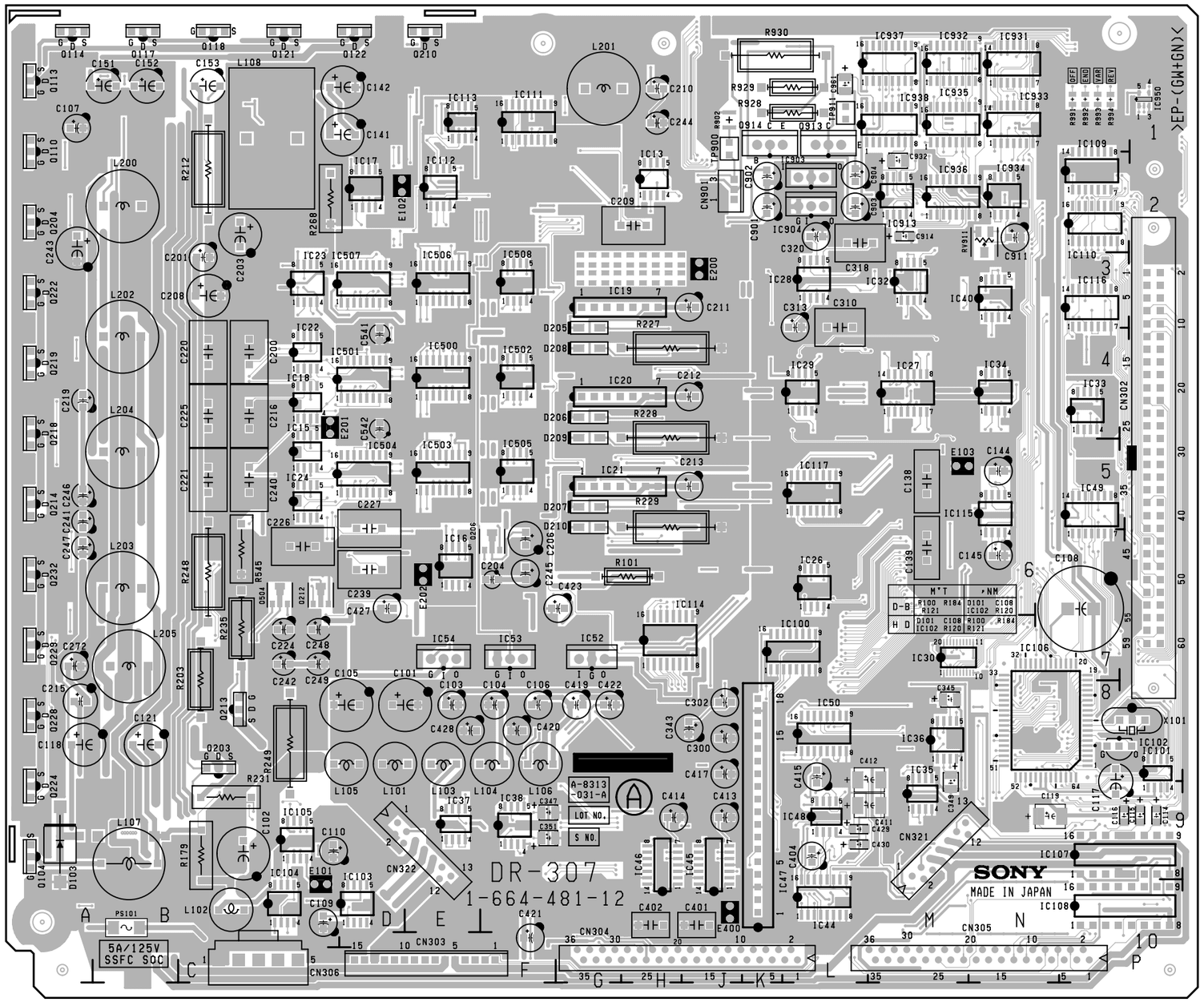
RM-141 BOARD -A SIDE-

1-651-533-12 (LOT No. 503 -)
DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P

DR-307 (1-664-481-12)

CN302	P5	IC106	N8
CN303	E10	IC107	P9
CN304	J10	IC108	P10
CN305	N10	IC109	P2
CN306	C10	IC110	P2
CN321	M9	IC111	F1
CN322	E9	IC112	E2
		IC113	E1
D101	*P7	IC114	H7
D102	*P9	IC115	N6
D103	A9	IC116	P3
D104	*B2	IC117	L5
D105	*N5	IC500	E4
D106	*N6	IC501	D4
D200	*A2	IC502	F4
D201	*E6	IC503	E5
D202	*B2	IC504	D5
D203	*E1	IC505	F5
D204	*E1	IC506	E3
D205	G3	IC507	D3
D206	G4	IC508	F3
D207	G5		
D208	G4	PS101	B10
D209	G4		
D210	G5	Q101	*B10
D211	*A5	Q102	*B10
D212	*A7	Q103	*C9
D213	*A5	Q104	A9
D214	*A6	Q105	*F2
D215	*A4	Q106	*D1
D216	*A3	Q107	*D1
D217	*A9	Q108	*A2
D218	*A8	Q109	*A2
D300	*L3	Q110	A2
D301	*L3	Q111	*A1
D400	*L8	Q112	*A1
D401	*L8	Q113	A1
D402	*P6	Q114	A1
D500	*D4	Q115	*B1
D501	*D5	Q116	*B1
D502	*D3	Q117	B1
D800	*K4	Q118	C1
D801	*L4	Q119	*C1
		Q120	*C1
E101	C10	Q121	C1
E102	D2	Q122	D1
E103	M5	Q202	*C6
E200	J3	Q203	C8
E201	C4	Q204	A2
E202	E6	Q206	F6
E400	J10	Q210	E1
		Q212	C6
IC13	H2	Q213	C8
IC15	C5	Q214	A5
IC16	E6	Q218	A4
IC17	D2	Q219	A4
IC18	C4	Q222	A3
IC19	G3	Q224	A9
IC20	G4	Q228	A8
IC21	G5	Q229	A7
IC22	C4	Q232	A6
IC23	C3	Q300	*J8
IC24	C5	Q400	*L8
IC26	L6	Q401	*L9
IC27	M4	Q402	*L9
IC28	L3	Q403	*N5
IC29	L4	Q404	*N5
IC30	M7	Q405	*L10
IC32	M3	Q406	*N6
IC33	P4	Q407	*P6
IC34	N4	Q500	*F4
IC35	M9	Q501	*F5
IC36	M8	Q504	C6
IC37	E9	Q505	*D4
IC38	F9	Q506	*D4
IC40	N3		
IC44	L10	X101	P8
IC45	J10		
IC46	H10	*:B SIDE	
IC47	K10		
IC48	L9		
IC49	P6		
IC50	L8		
IC52	G7		
IC53	F7		
IC54	E7		
IC100	K7		
IC101	P9		
IC102	P8		
IC103	D10		
IC104	C10		
IC105	C9		

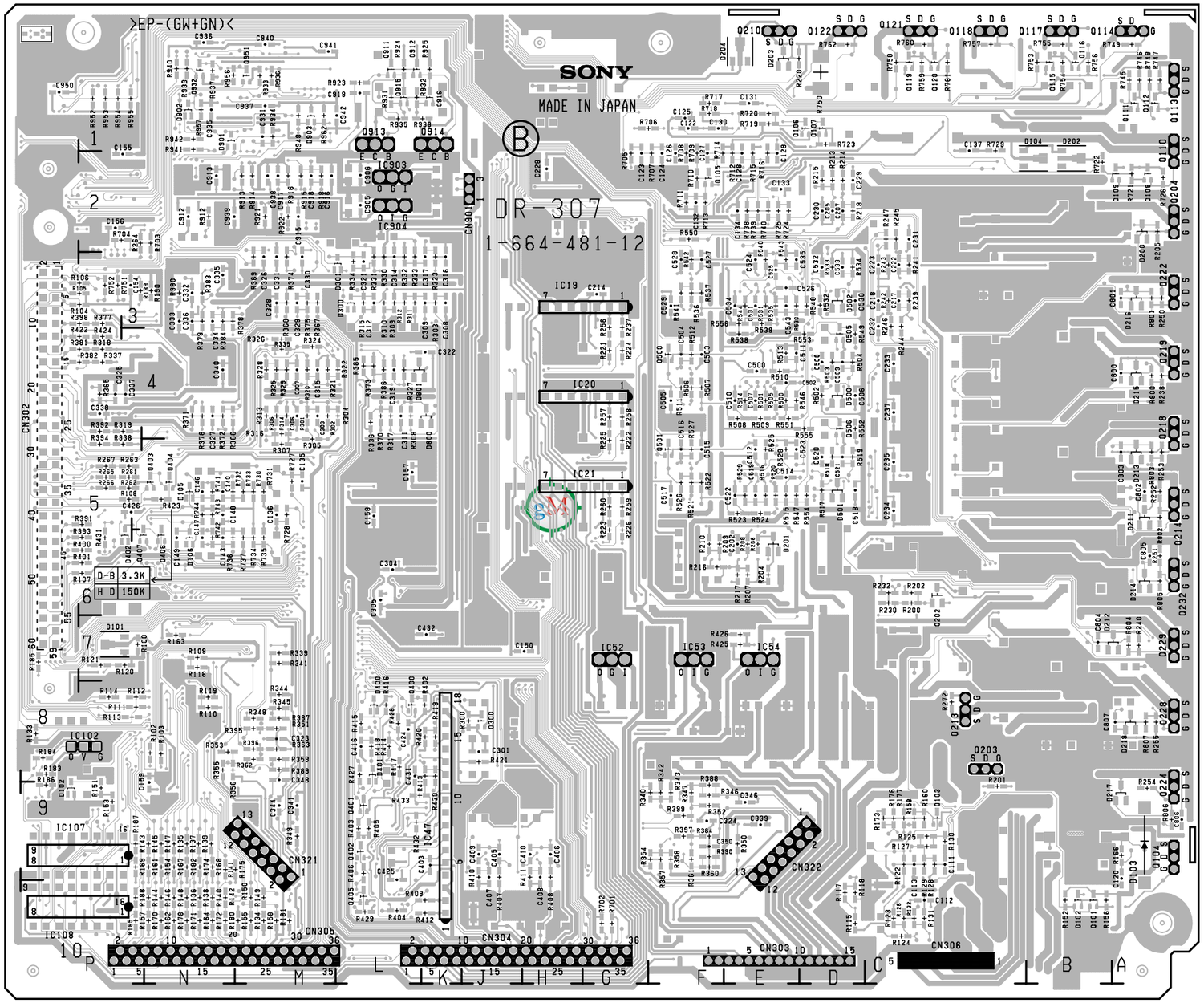
1-85 (d)



DR-307 BOARD -A SIDE-

1-664-481-12 (LOT No. 912 -)

DVW-A500(J)	; DR-307	MCB
DVW-A500(UC)	; DR-307	MCB
DVW-A500P(EK)	; DR-307	MCB
DVW-A500P(UC)	; DR-307	MCB
DVW-500(J)	; DR-307	MCB
DVW-500(UC)	; DR-307	MCB
DVW-500P(EK)	; DR-307	MCB
DVW-500P(UC)	; DR-307	MCB
DVW-A510(J)	; DR-307	MCB
DVW-A510(UC)	; DR-307	MCB
DVW-A510P(EK)	; DR-307	MCB
DVW-510(J)	; DR-307	MCB
DVW-510(UC)	; DR-307	MCB
DVW-510P(EK)	; DR-307	MCB
DVW-CA510(J)	; DR-307	MCB
DVW-CA510(UC)	; DR-307	MCB
DVW-CA510P(EK)	; DR-307	MCB



DR-307 BOARD -B SIDE-

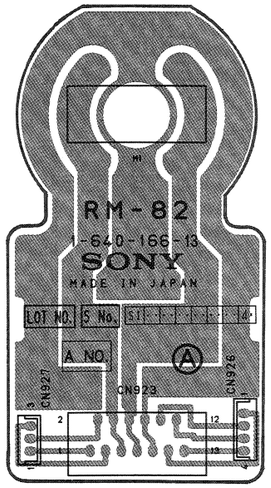
1-664-481-12 (LOT No. 912 -)

DVW-A500(J)	; DR-307	MCB
DVW-A500(UC)	; DR-307	MCB
DVW-A500P(EK)	; DR-307	MCB
DVW-A500P(UC)	; DR-307	MCB
DVW-500(J)	; DR-307	MCB
DVW-500(UC)	; DR-307	MCB
DVW-500P(EK)	; DR-307	MCB
DVW-500P(UC)	; DR-307	MCB
DVW-A510(J)	; DR-307	MCB
DVW-A510(UC)	; DR-307	MCB
DVW-A510P(EK)	; DR-307	MCB
DVW-510(J)	; DR-307	MCB
DVW-510(UC)	; DR-307	MCB
DVW-510P(EK)	; DR-307	MCB
DVW-CA510(J)	; DR-307	MCB
DVW-CA510(UC)	; DR-307	MCB
DVW-CA510P(EK)	; DR-307	MCB

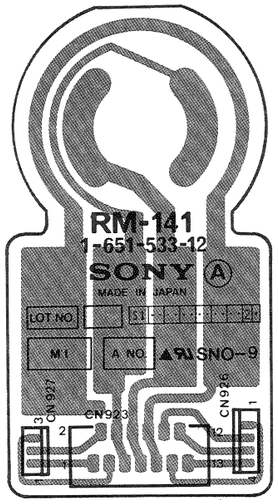
DR-200, RM-82/141, SE-228

DR-200 ; Motor driver (Drum, Capstan, T/S reels, Threading, Reel shift, Cassette up/down), Solenoids driver (Pinch, T/S brake, Cleaning), Degaussing head driver
RM-82 ; T/S reel motor
RM-141 ; T reel motor
SE-228 ; T/S reel FG

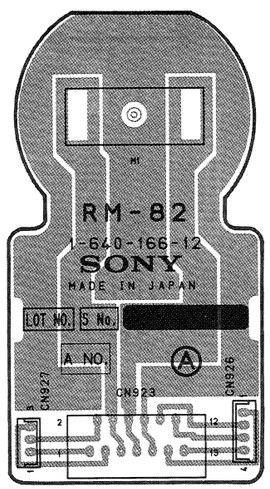
(Board's Lot No. 403 through 911)
All DVWs



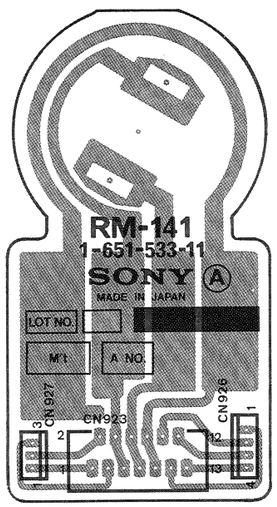
RM-82 BOARD -A SIDE-
1-640-166-13 (LOT No. 503 - 805)
All DVWs



RM-141 BOARD -A SIDE-
1-651-533-12 (LOT No. 503 -)
DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P



RM-82 BOARD -A SIDE-
1-640-166-12 (LOT No. 302 - 502)
All DVWs



RM-141 BOARD -A SIDE-
1-651-533-11 (LOT No. 308 - 502)
DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P

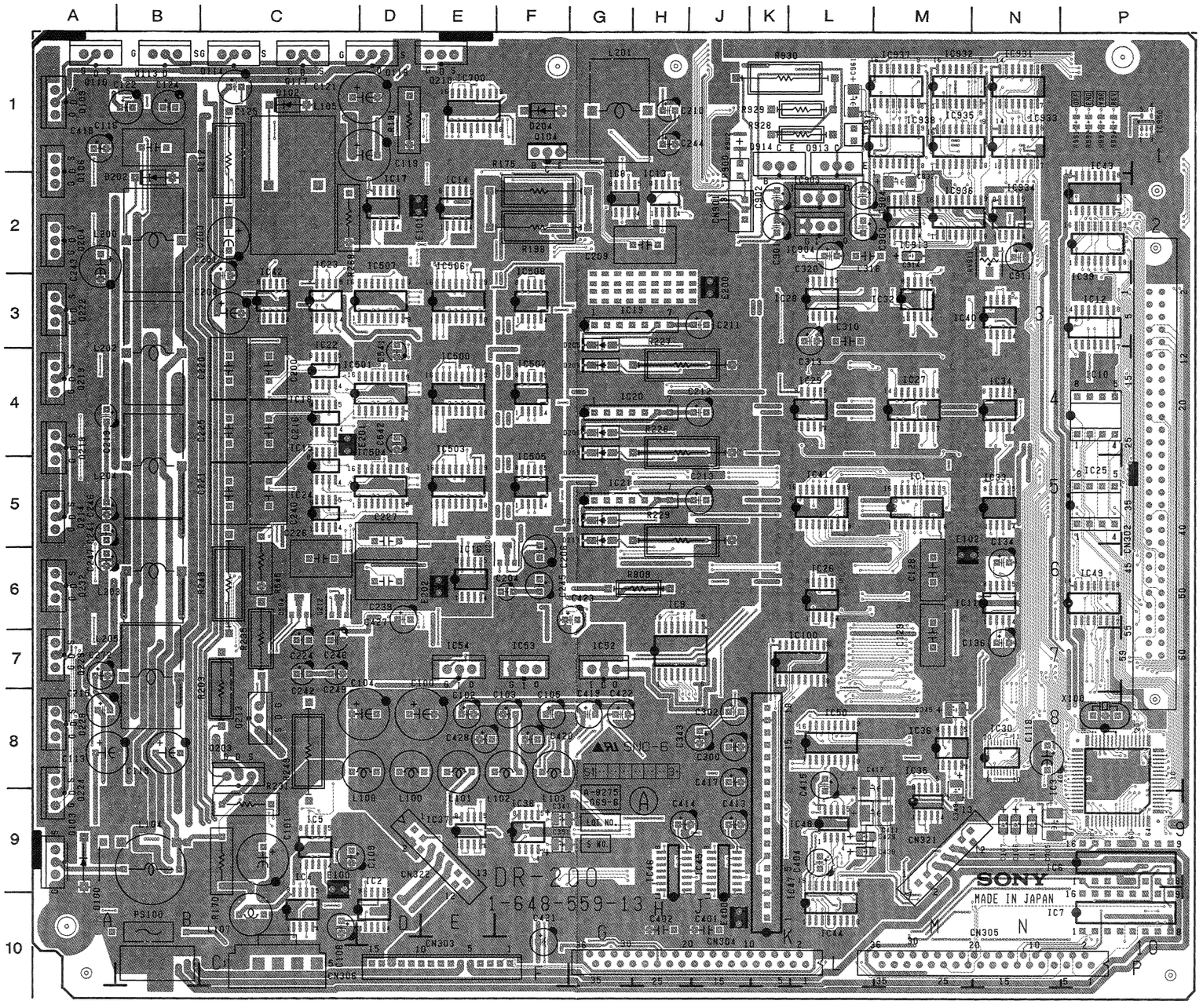
SE-228 BOARD -A SIDE-
1-649-617-11
All DVWs

DR-200(1-648-559-13)

CN302	P-5	IC18	C-4	✱Q116	C-1
CN303	E-10	IC19	G-3	Q117	C-1
CN304	J-10	IC20	G-4	Q118	D-1
CN305	N-10	IC21	G-5	✱Q202	C-6
CN306	C-10	IC22	C-4	Q203	C-8
CN321	M-9	IC23	C-3	Q204	A-2
CN322	E-9	IC24	C-5	Q206	F-6
CN901	J-1	IC25	P-5	Q210	E-1
		IC26	L-6	Q212	C-6
D100	A-9	IC27	M-4	Q213	C-8
✱D101	A-2	IC28	L-3	Q214	A-5
D102	C-1	IC29	L-4	Q218	A-4
✱D103	N-6	IC30	N-8	Q219	A-4
✱D104	N-6	IC32	M-3	Q222	A-3
✱D200	A-2	IC33	N-5	Q224	A-9
✱D201	E-6	IC34	N-4	Q228	A-8
D202	B-2	IC35	M-9	Q229	A-7
✱D203	E-1	IC36	M-8	Q232	A-6
D204	F-1	IC37	E-9	✱Q300	J-8
D205	G-3	IC38	F-9	✱Q400	L-8
D206	G-4	IC39	P-2	✱Q401	L-9
D207	G-5	IC40	N-3	✱Q402	L-9
D208	G-4	IC41	L-5	✱Q403	N-6
D209	G-4	IC42	C-3	✱Q404	N-6
D210	G-5	IC43	P-2	✱Q405	L-10
✱D211	A-5	IC44	L-10	✱Q406	N-6
✱D212	A-7	IC45	J-10	✱Q407	N-6
✱D213	A-5	IC46	H-10	✱Q500	F-4
✱D214	A-6	IC47	K-10	✱Q501	F-5
✱D215	A-4	IC48	L-9	Q504	C-6
✱D216	A-3	IC49	P-6	✱Q505	D-4
✱D217	A-9	IC50	L-8	✱Q506	D-4
✱D218	A-8	IC52	G-7	✱Q911	L-1
✱D219	C-2	IC53	F-7	✱Q912	L-1
✱D220	C-2	IC54	E-7	Q913	K-1
✱D300	L-3	IC100	L-7	Q914	L-1
✱D301	L-3	IC500	E-4	✱Q915	L-1
✱D400	L-8	IC501	D-4	✱Q916	K-1
✱D401	L-8	IC502	F-4	✱Q932	N-1
✱D402	P-6	IC503	E-5	✱Q951	M-1
✱D500	D-4	IC504	D-5		
✱D501	D-5	IC505	F-5	RV911	N-2
✱D502	D-3	IC506	E-3		
✱D700	E-1	IC507	D-3	TP900	J-2
✱D701	N-9	IC508	F-3	TP911	L-1
✱D800	K-4	IC700	E-1		
✱D801	L-4	IC903	L-2	X100	P-8
✱D901	N-1	IC904	L-2		
✱D902	N-1	IC913	M-2		
✱D903	M-1	IC931	N-1		
		IC932	M-1		
E100	C-10	IC933	N-1		
E101	D-2	IC934	N-2		
E102	M-6	IC935	M-1		
E200	J-3	IC936	M-2		
E201	C-4	IC937	M-1		
E202	E-6	IC938	M-1		
E400	J-10	IC950	P-1		
IC1	M-5	PS100	B-10		
IC2	D-10				
IC3	P-8	✱Q100	B-10		
IC4	C-10	✱Q101	B-10		
IC5	C-9	✱Q102	C-9		
IC6	P-9	Q103	A-9		
IC7	P-10	Q104	F-1		
IC8	G-2	Q106	A-2		
IC9	H-7	✱Q107	A-1		
IC10	P-4	✱Q108	A-1		
IC11	N-6	Q109	A-1		
IC12	P-3	Q110	A-1		
IC13	H-2	✱Q111	B-1		
IC14	E-2	✱Q112	B-1		
IC15	C-5	Q113	B-1		
IC16	E-6	Q114	C-1		
IC17	D-2	✱Q115	C-1		

✱ : B SIDE

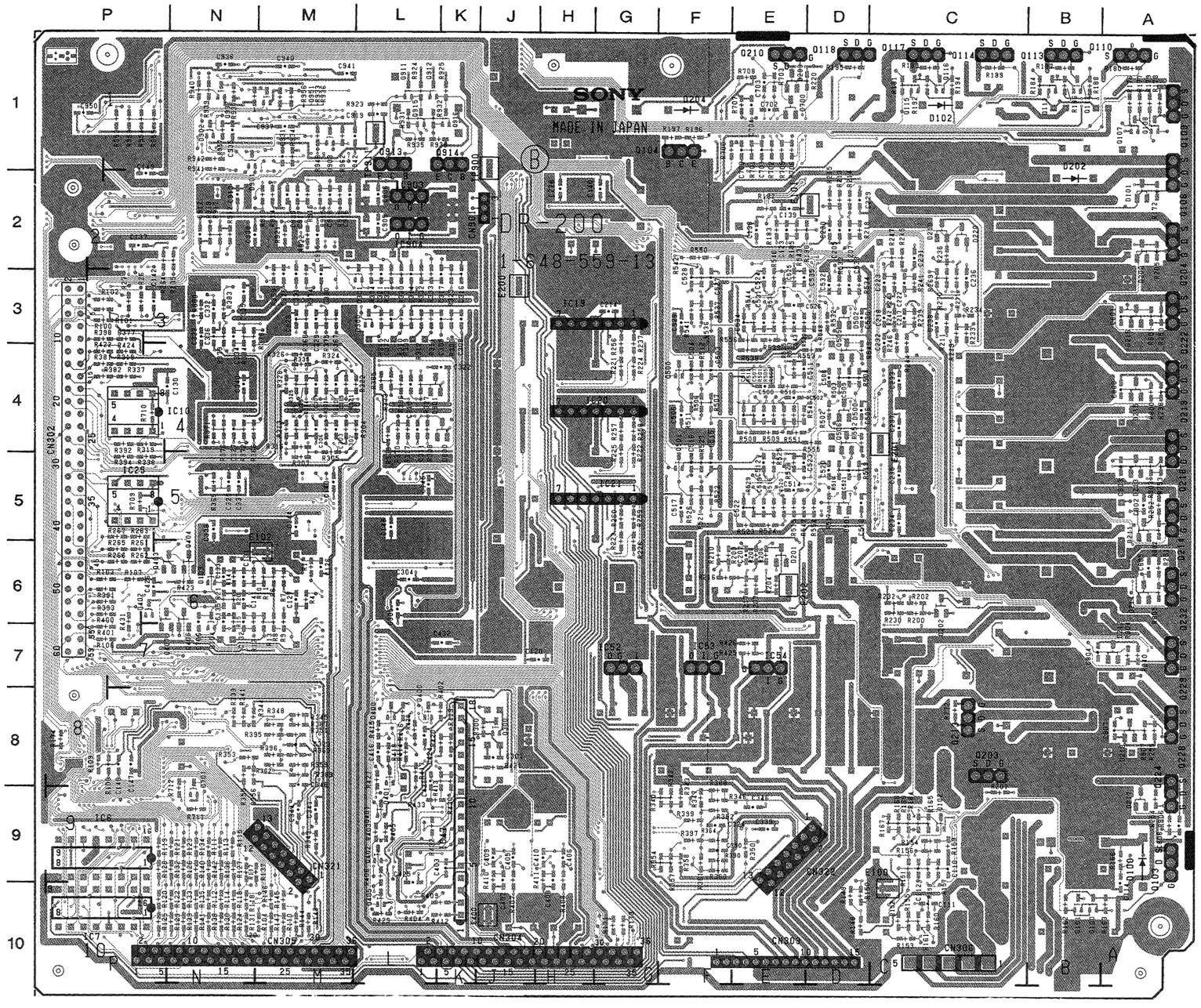
LOT NO. G-9



DR-200 BOARD -A SIDE-

1-648-559-13 (LOT No. 403 - 911)

DVW-A500(J)	; DR-200N	MCB
DVW-A500(UC)	; DR-200N	MCB
DVW-A500P(EK)	; DR-200P	MCB
DVW-A500P(UC)	; DR-200PG	MCB
DVW-500(J)	; DR-200N	MCB
DVW-500(UC)	; DR-200N	MCB
DVW-500P(EK)	; DR-200P	MCB
DVW-500P(UC)	; DR-200PG	MCB
DVW-A510(J)	; DR-200N	MCB
DVW-A510(UC)	; DR-200N	MCB
DVW-A510P(EK)	; DR-200P	MCB
DVW-510(J)	; DR-200N	MCB
DVW-510(UC)	; DR-200N	MCB
DVW-510P(EK)	; DR-200P	MCB
DVW-CA510(J)	; DR-200N	MCB
DVW-CA510(UC)	; DR-200N	MCB
DVW-CA510P(EK)	; DR-200P	MCB



DR-200 BOARD -B SIDE-

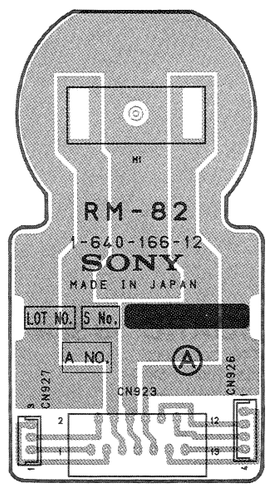
1-648-559-13 (LOT No. 403 - 911)

DVW-A500(J)	; DR-200N	MCB
DVW-A500(UC)	; DR-200N	MCB
DVW-A500P(EK)	; DR-200P	MCB
DVW-A500P(UC)	; DR-200PG	MCB
DVW-500(J)	; DR-200N	MCB
DVW-500(UC)	; DR-200N	MCB
DVW-500P(EK)	; DR-200P	MCB
DVW-500P(UC)	; DR-200PG	MCB
DVW-A510(J)	; DR-200N	MCB
DVW-A510(UC)	; DR-200N	MCB
DVW-A510P(EK)	; DR-200P	MCB
DVW-510(J)	; DR-200N	MCB
DVW-510(UC)	; DR-200N	MCB
DVW-510P(EK)	; DR-200P	MCB
DVW-CA510(J)	; DR-200N	MCB
DVW-CA510(UC)	; DR-200N	MCB
DVW-CA510P(EK)	; DR-200P	MCB

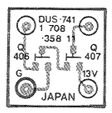
DR-200, RM-82/141, SE-228, DUS-741

DR-200 ; Motor driver (Drum, Capstan, T/S reels, Threading, Reel shift, Cassette up/down), Solenoids driver (Pinch, T/S brake, Cleaning)
DUS-741
RM-82 ; T/S reel motor
RM-141 ; T reel motor
SE-228 ; T/S reel FG

(Board's Lot No. 306 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

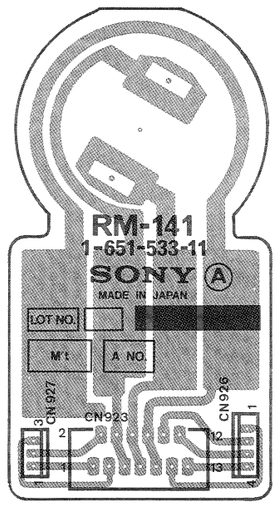


RM-82 BOARD -A SIDE-
1-640-166-12
All DVWs



DUS-741 BOARD -A SIDE-
1-708-358-11 (0-225-035-01)
for DR-200 (1-648-559-12) of LOT No. 307 through 402.

SE-228 BOARD -A SIDE-
1-649-617-11
All DVWs



RM-141 BOARD -A SIDE-
1-651-533-11(LOT No. 308 -)
DVW-A500/A500P
DVW-A510/A510P
DVW-CA510/CA510P

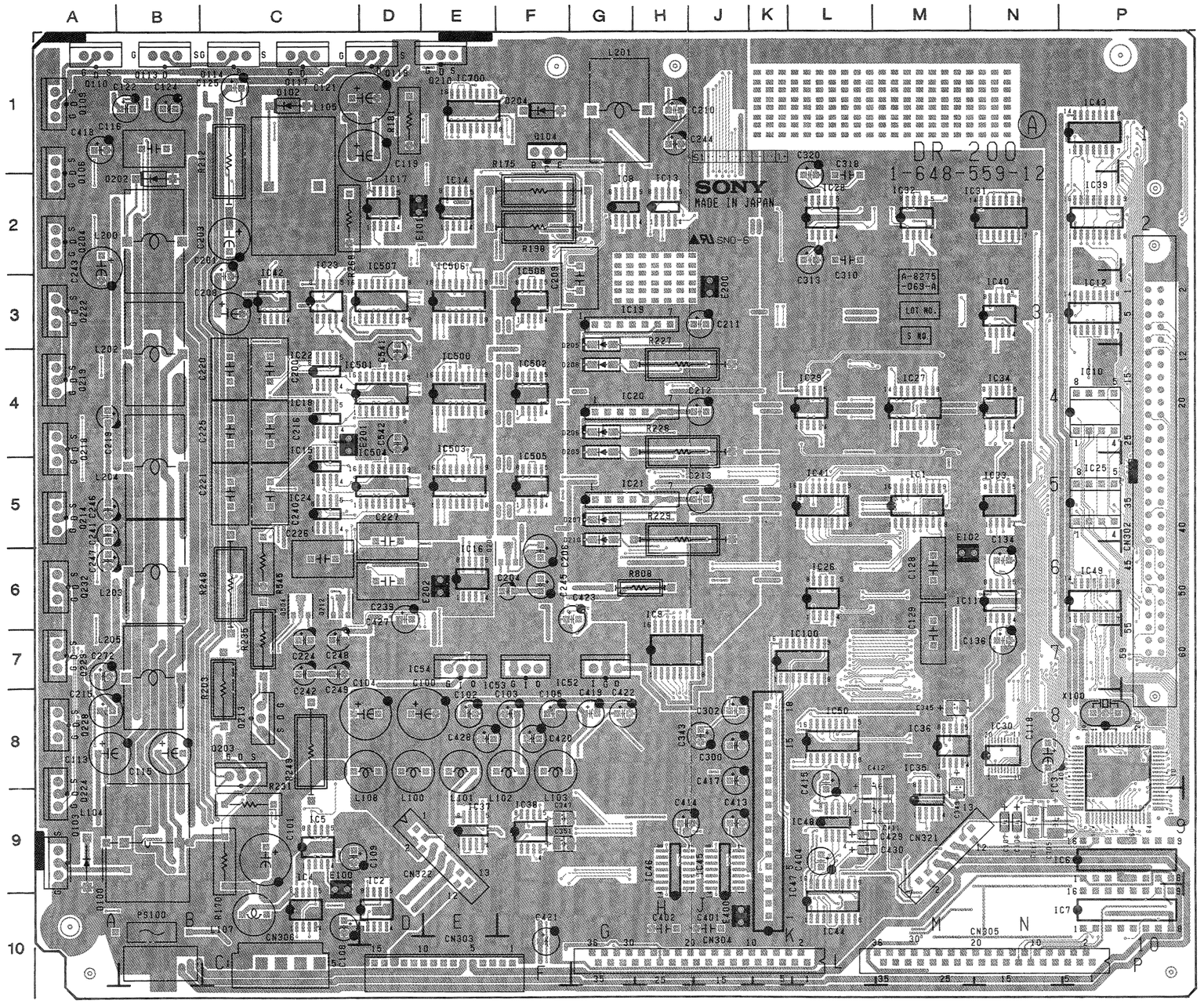
DR-200(1-648-559-12)

CN302	P-5	IC22	C-4	Q228	A-8
CN303	E-10	IC23	C-3	Q229	A-7
CN304	J-10	IC24	C-5	Q232	A-6
CN305	N-10	IC25	P-5	✱Q300	J-8
CN306	C-10	IC26	L-6	✱Q400	L-8
CN321	M-9	IC27	M-4	✱Q401	L-9
CN322	E-9	IC28	L-2	✱Q402	L-9
		IC29	L-4	✱Q403	N-6
D100	A-9	IC30	N-8	✱Q404	N-6
✱D101	A-2	IC31	N-2	✱Q405	L-10
D102	C-1	IC32	M-2	✱Q500	F-4
✱D103	N-6	IC33	N-5	✱Q501	F-5
✱D104	N-6	IC34	N-4	Q504	C-6
✱D200	A-2	IC35	M-9	✱Q505	D-4
✱D201	E-6	IC36	M-8	✱Q506	D-4
D202	B-2	IC37	E-9		
✱D203	E-1	IC38	F-9	X100	P-8
D204	F-1	IC39	P-2		
D205	G-3	IC40	N-3		
D206	G-4	IC41	L-5		
D207	G-5	IC42	C-3		
D208	G-4	IC43	P-1		
D209	G-4	IC44	L-10		
D210	G-5	IC45	J-10		
✱D211	A-5	IC46	H-10		
✱D212	A-7	IC47	K-10		
✱D213	A-5	IC48	L-9		
✱D214	A-6	IC49	P-6		
✱D215	A-4	IC50	L-8		
✱D216	A-3	IC52	G-7		
✱D217	A-9	IC53	F-7		
✱D218	A-8	IC54	E-7		
✱D219	C-2	IC100	L-7		
✱D220	C-2	IC500	E-4		
✱D300	L-2	IC501	D-4		
✱D301	L-2	IC502	F-4		
✱D400	L-8	IC503	E-5		
✱D401	L-8	IC504	D-5		
✱D402	P-6	IC505	F-5		
✱D500	D-4	IC506	E-3		
✱D501	D-5	IC507	D-3		
✱D502	D-3	IC508	F-3		
✱D700	E-1	IC700	E-1		
✱D701	N-9				
✱D800	K-4	PS100	B-10		
✱D801	L-4				
		✱Q100	B-10		
E100	C-10	✱Q101	B-10		
E101	D-2	✱Q102	C-9		
E102	M-6	Q103	A-9		
E200	J-3	Q104	F-1		
E201	C-4	Q106	A-2		
E202	E-6	✱Q107	A-1		
E400	J-10	✱Q108	A-1		
		Q109	A-1		
IC1	M-5	Q110	A-1		
IC2	D-10	✱Q111	B-1		
IC3	P-8	✱Q112	B-1		
IC4	C-10	Q113	B-1		
IC5	C-9	Q114	C-1		
IC6	P-9	✱Q115	C-1		
IC7	P-10	✱Q116	C-1		
IC8	G-2	Q117	C-1		
IC9	H-7	Q118	D-1		
IC10	P-4	✱Q202	C-6		
IC11	N-6	Q203	C-8		
IC12	P-3	Q204	A-2		
IC13	H-2	Q206	F-6		
IC14	E-2	Q210	E-1		
IC15	C-5	Q212	C-6		
IC16	E-6	Q213	C-8		
IC17	D-2	Q214	A-5		
IC18	C-4	Q218	A-4		
IC19	G-3	Q219	A-4		
IC20	G-4	Q222	A-3		
IC21	G-5	Q224	A-9		

✱ : B SIDE

LOT NO. M-3

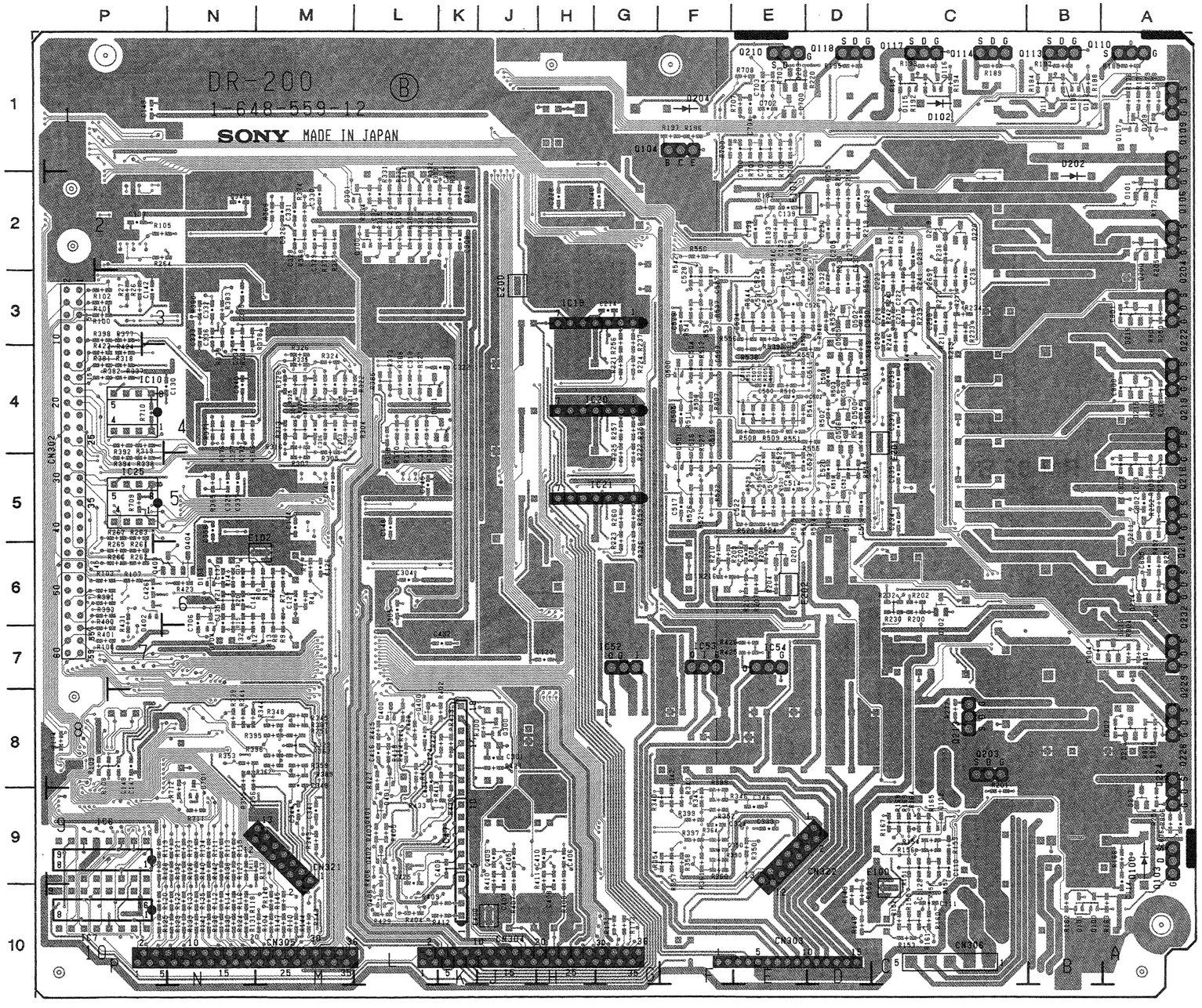
1-85 (b)



DR-200 BOARD -A SIDE-

1-648-559-12 (LOT No. 306 - 402)

DVW-A500(J)	; DR-200N	MCB
DVW-A500(UC)	; DR-200N	MCB
DVW-A500P(EK)	; DR-200P	MCB
DVW-500(J)	; DR-200N	MCB
DVW-500(UC)	; DR-200N	MCB
DVW-500P(EK)	; DR-200P	MCB
DVW-A510(J)	; DR-200N	MCB
DVW-A510(UC)	; DR-200N	MCB
DVW-A510P(EK)	; DR-200P	MCB
DVW-510(J)	; DR-200N	MCB
DVW-510(UC)	; DR-200N	MCB
DVW-510P(EK)	; DR-200P	MCB
DVW-CA510(UC)	; DR-200N	MCB
DVW-CA510P(EK)	; DR-200P	MCB



DR-200 BOARD -B SIDE-

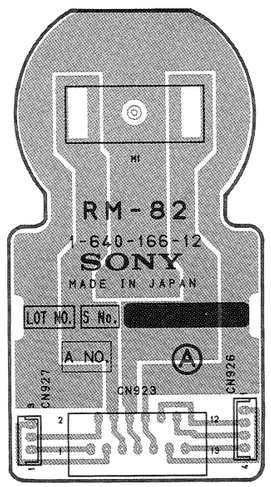
1-648-559-12 (LOT No. 306 - 402)

DVW-A500(J)	; DR-200N	MCB
DVW-A500(UC)	; DR-200N	MCB
DVW-A500P(EK)	; DR-200P	MCB
DVW-500(J)	; DR-200N	MCB
DVW-500(UC)	; DR-200N	MCB
DVW-500P(EK)	; DR-200P	MCB
DVW-A510(J)	; DR-200N	MCB
DVW-A510(UC)	; DR-200N	MCB
DVW-A510P(EK)	; DR-200P	MCB
DVW-510(J)	; DR-200N	MCB
DVW-510(UC)	; DR-200N	MCB
DVW-510P(EK)	; DR-200P	MCB
DVW-CA510(UC)	; DR-200N	MCB
DVW-CA510P(EK)	; DR-200P	MCB

DR-200, RM-82, SE-228

DR-200 ; Motor driver (Drum, Capstan, T/S reels, Threading, Reel shift, Cassette up/down), Solenoids driver (Pinch, T/S brake, Cleaning)
RM-82 ; T/S reel motor
SE-228 ; T/S reel FG

(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)



RM-82 BOARD -A SIDE-
1-640-166-12
All DVWs

SE-228 BOARD -A SIDE-
1-649-617-11
All DVWs

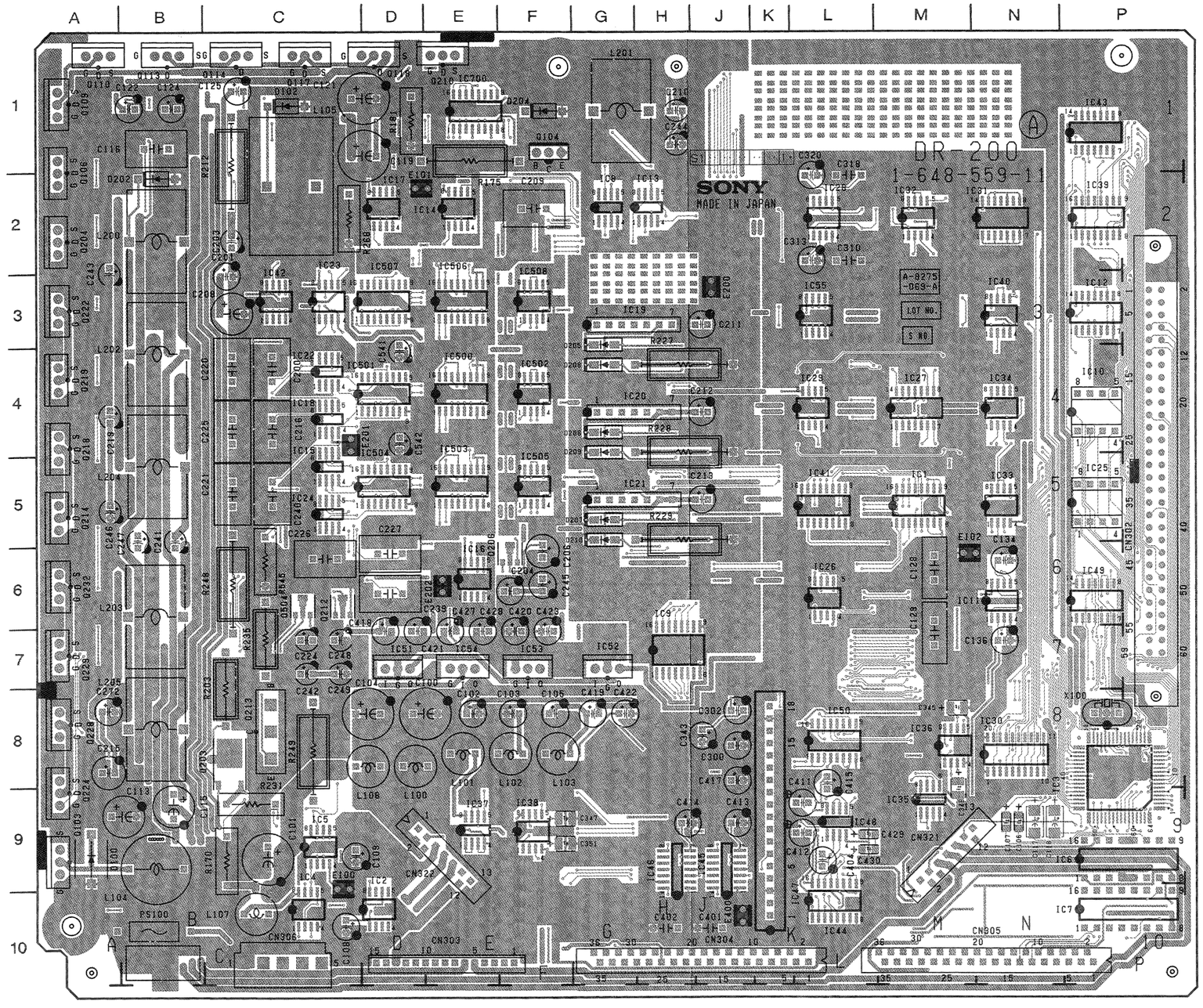
DR-200(1-648-559-11)

CN302	P-5	IC25	P-5	Q232	A-6
CN303	E-10	IC26	L-6	✱Q300	J-8
CN304	J-10	IC27	M-4	✱Q400	L-8
CN305	N-10	IC28	L-2	✱Q401	L-9
CN306	C-10	IC29	L-4	✱Q402	L-9
CN321	M-9	IC30	N-8	✱Q403	N-6
CN322	E-9	IC31	N-2	✱Q404	N-6
		IC32	M-2	✱Q405	L-10
D100	A-9	IC33	N-5	✱Q500	F-4
✱D101	A-2	IC34	N-4	✱Q501	F-5
D102	C-1	IC35	M-9	Q504	C-6
✱D103	N-6	IC36	M-8	✱Q505	D-4
✱D104	N-6	IC37	E-9	✱Q506	D-4
✱D200	A-2	IC38	F-9		
✱D201	E-6	IC39	P-2	X100	P-8
D202	B-2	IC40	N-3		
✱D203	E-1	IC41	L-5		
D204	F-1	IC42	C-3		
D205	G-3	IC43	P-1		
D206	G-4	IC44	L-10		
D207	G-5	IC45	J-10		
D208	G-4	IC46	H-10		
D209	G-4	IC47	K-10		
D210	G-5	IC48	L-9		
✱D211	A-5	IC49	P-6		
✱D212	A-7	IC50	L-8		
✱D213	A-5	IC51	D-7		
✱D214	A-6	IC52	G-7		
✱D215	A-4	IC53	F-7		
✱D216	A-3	IC54	E-7		
✱D217	A-9	IC55	L-3		
✱D218	A-8	IC500	E-4		
✱D219	C-2	IC501	D-4		
✱D220	C-2	IC502	F-4		
✱D300	L-2	IC503	E-5		
✱D301	L-2	IC504	D-5		
✱D400	L-8	IC505	F-5		
✱D401	L-8	IC506	E-3		
✱D402	P-6	IC507	D-3		
✱D500	D-4	IC508	F-3		
✱D501	D-5	IC700	E-1		
✱D502	D-3				
✱D700	E-1	PS100	B-10		
E100	C-10	✱Q100	B-10		
E101	D-2	✱Q101	B-10		
E102	M-6	✱Q102	C-9		
E200	J-3	Q103	A-9		
E201	C-4	Q104	F-1		
E202	E-6	Q106	A-2		
E400	J-10	✱Q107	A-1		
		✱Q108	A-1		
IC1	M-5	Q109	A-1		
IC2	D-10	Q110	A-1		
IC3	P-8	✱Q111	B-1		
IC4	C-10	✱Q112	B-1		
IC5	C-9	Q113	B-1		
IC6	P-9	Q114	C-1		
IC7	P-10	✱Q115	C-1		
IC8	G-2	✱Q116	C-1		
IC9	H-7	Q117	C-1		
IC10	P-4	Q118	D-1		
IC11	N-6	✱Q202	C-6		
IC12	P-3	Q203	C-8		
IC13	H-2	Q204	A-2		
IC14	E-2	Q206	F-6		
IC15	C-5	Q210	E-1		
IC16	E-6	Q212	C-6		
IC17	D-2	Q213	C-8		
IC18	C-4	Q214	A-5		
IC19	G-3	Q218	A-4		
IC20	G-4	Q219	A-4		
IC21	G-5	Q222	A-3		
IC22	C-4	Q224	A-9		
IC23	C-3	Q228	A-8		
IC24	C-5	Q229	A-7		

✱ : B SIDE

LOT NO. M-3

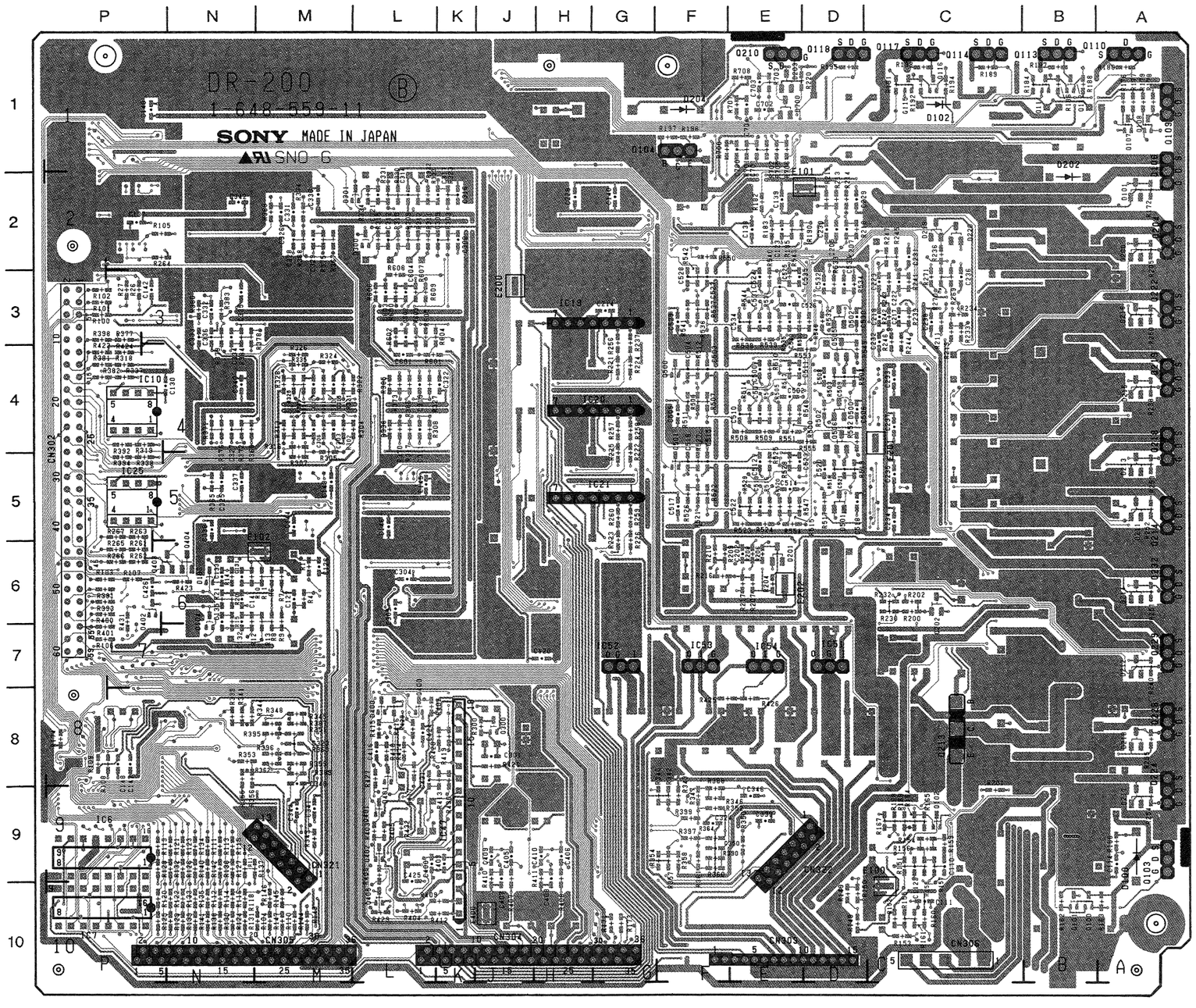
1-85 (a)



DR-200 BOARD -A SIDE-

1-648-559-11 (LOT No. 302 - 306)

DVW-A500(J)	; DR-200N	MCB
DVW-A500(UC)	; DR-200N	MCB
DVW-A500P(EK)	; DR-200P	MCB
DVW-A500P(UC)	; DR-200PG	MCB
DVW-500(J)	; DR-200N	MCB
DVW-500(UC)	; DR-200N	MCB
DVW-500P(EK)	; DR-200P	MCB



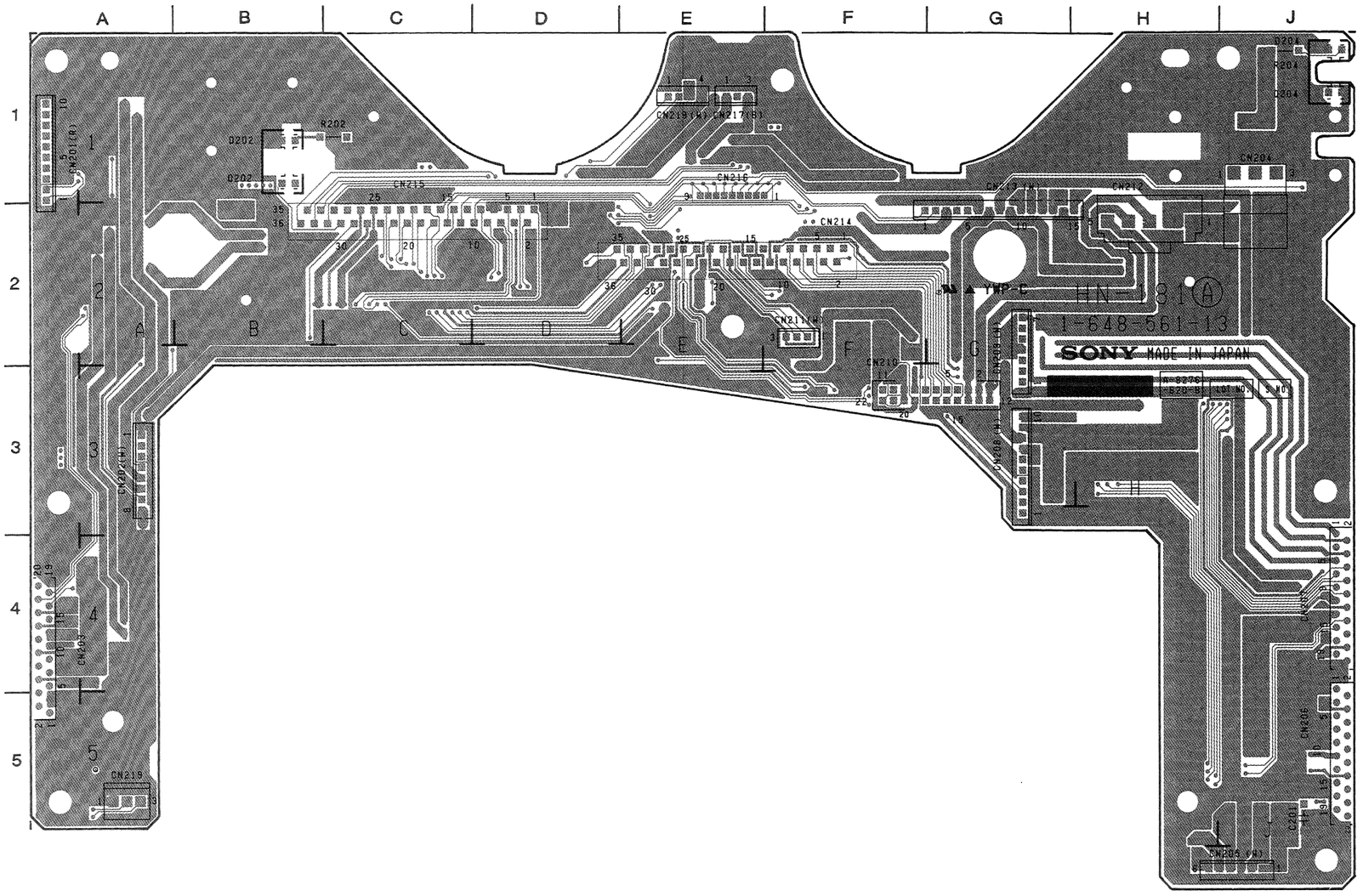
DR-200 BOARD -B SIDE-

1-648-559-11 (LOT No. 302 - 306)

DVW-A500(J)	; DR-200N	MCB
DVW-A500(UC)	; DR-200N	MCB
DVW-A500P(EK)	; DR-200P	MCB
DVW-A500P(UC)	; DR-200PG	MCB
DVW-500(J)	; DR-200N	MCB
DVW-500(UC)	; DR-200N	MCB
DVW-500P(EK)	; DR-200P	MCB

HN-181 ; Connection board with REC inhibit sensor (Drum/Capstan/Reel-shift motors, CTL head, DT-34/34B/HN-184/HN-185/PTC-59/PTC-71 boards)

(Board's Lot No. 403 and higher)
All DVWs



HN-181 BOARD -A SIDE-

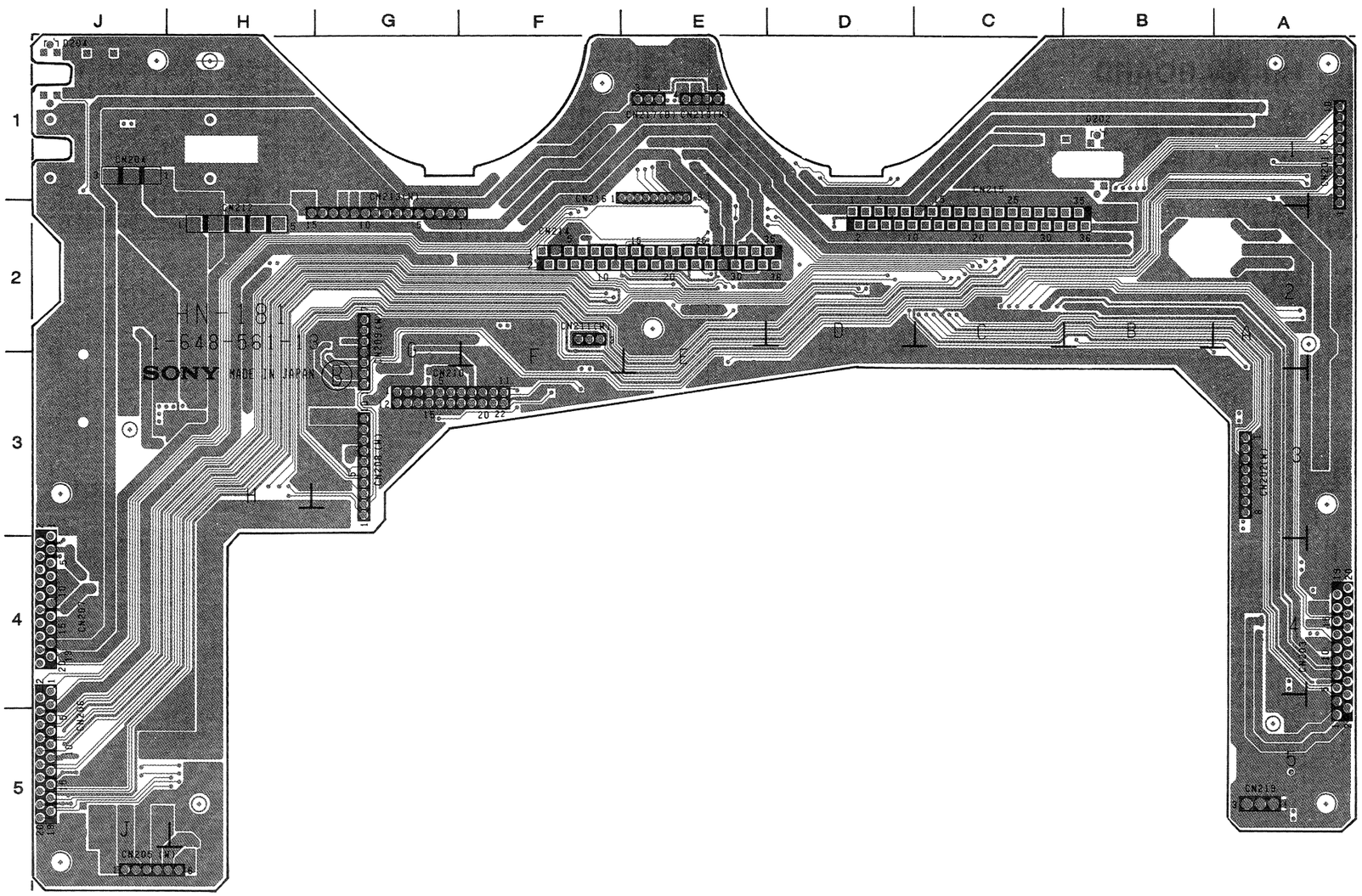
1-648-561-13 (LOT No. 403 -)

DVW-A500(J)	; HN-181	MCB
DVW-A500(UC)	; HN-181	MCB
DVW-A500P(EK)	; HN-181	MCB
DVW-A500P(UC)	; HN-181	MCB
DVW-500(J)	; HN-181	MCB
DVW-500(UC)	; HN-181	MCB
DVW-500P(EK)	; HN-181	MCB
DVW-500P(UC)	; HN-181	MCB
DVW-A510(J)	; HN-181B	MCB
DVW-A510(UC)	; HN-181B	MCB
DVW-A510P(EK)	; HN-181B	MCB
DVW-510(J)	; HN-181B	MCB
DVW-510(UC)	; HN-181B	MCB
DVW-510P(EK)	; HN-181B	MCB
DVW-CA510(J)	; HN-181B	MCB
DVW-CA510(UC)	; HN-181B	MCB
DVW-CA510P(EK)	; HN-181B	MCB

HN-181(1-648-561-13)

CN201	A-1
CN202	A-3
CN203	A-4
CN204	J-1
CN205	J-5
CN206	J-5
CN207	J-4
CN208	G-3
CN209	G-3
CN210	F-3
CN211	F-2
CN212	H-1
CN213	G-1
CN214	F-2
CN215	C-1
CN216	E-1
CN217	E-1
CN218	E-1
CN219	A-5
D202	B-1
D204	J-1
Q202	B-1
Q204	J-1

LOT NO. G-2



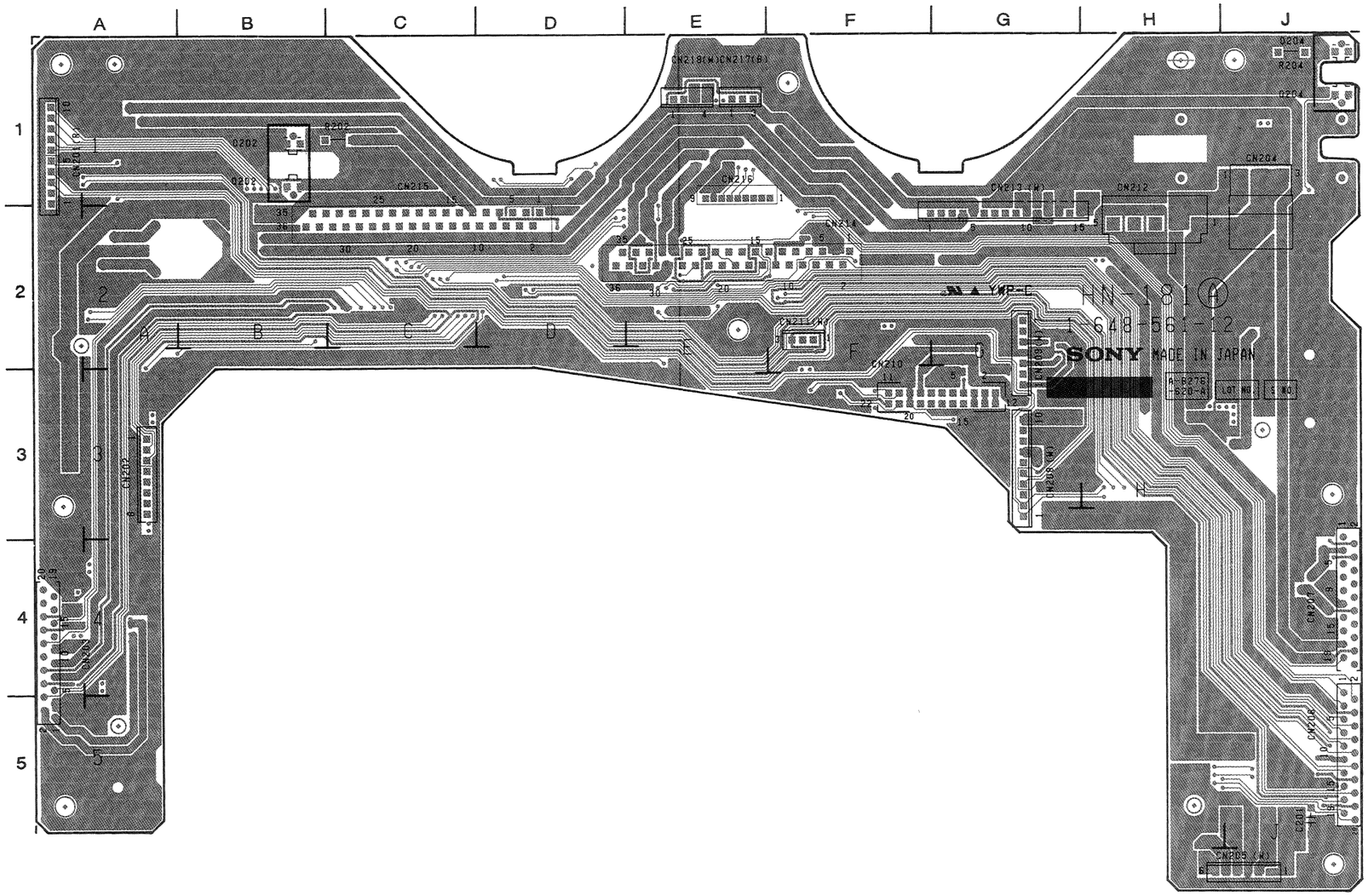
HN-181 BOARD -B SIDE-

1-648-561-13 (LOT No. 403 -)

DVW-A500(J)	; HN-181	MCB
DVW-A500(UC)	; HN-181	MCB
DVW-A500P(EK)	; HN-181	MCB
DVW-A500P(UC)	; HN-181	MCB
DVW-500(J)	; HN-181	MCB
DVW-500(UC)	; HN-181	MCB
DVW-500P(EK)	; HN-181	MCB
DVW-500P(UC)	; HN-181	MCB
DVW-A510(J)	; HN-181B	MCB
DVW-A510(UC)	; HN-181B	MCB
DVW-A510P(EK)	; HN-181B	MCB
DVW-510(J)	; HN-181B	MCB
DVW-510(UC)	; HN-181B	MCB
DVW-510P(EK)	; HN-181B	MCB
DVW-CA510(J)	; HN-181B	MCB
DVW-CA510(UC)	; HN-181B	MCB
DVW-CA510P(EK)	; HN-181B	MCB

HN-181 ; Connection board with REC inhibit sensor (Drum/Capstan/Reel-shift motors, CTL head, DT-34/34B/HN-184/HN-185/PTC-59/PTC-71 boards)

(Board's Lot No. 307 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



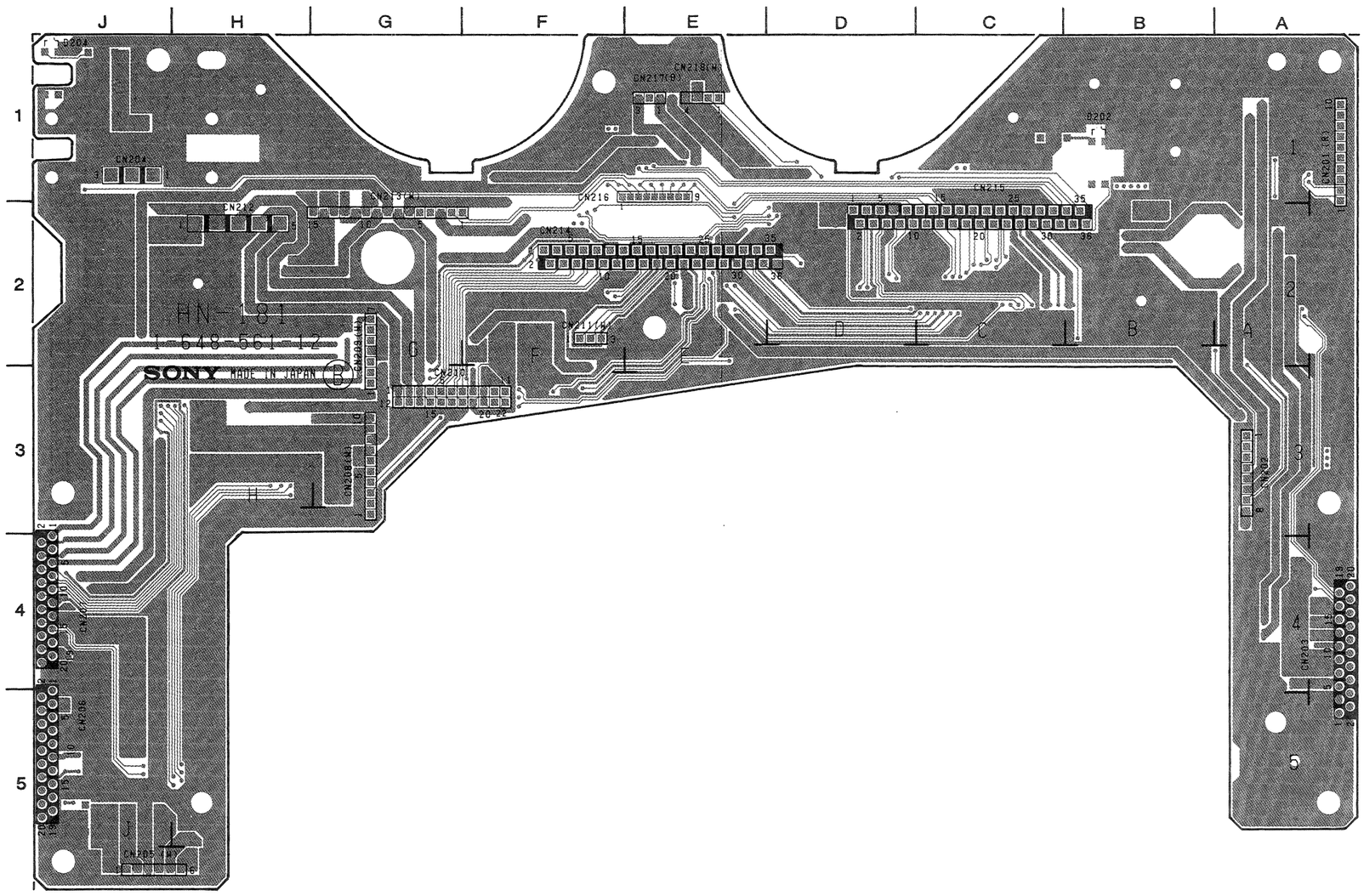
HN-181 BOARD -A SIDE-

1-648-561-12 (LOT No. 307 - 402)

DVW-A500(J)	; HN-181	MCB
DVW-A500(UC)	; HN-181	MCB
DVW-A500P(EK)	; HN-181	MCB
DVW-500(J)	; HN-181	MCB
DVW-500(UC)	; HN-181	MCB
DVW-500P(EK)	; HN-181	MCB
DVW-A510(J)	; HN-181B	MCB
DVW-A510(UC)	; HN-181B	MCB
DVW-A510P(EK)	; HN-181B	MCB
DVW-510(J)	; HN-181B	MCB
DVW-510(UC)	; HN-181B	MCB
DVW-510P(EK)	; HN-181B	MCB
DVW-CA510(UC)	; HN-181B	MCB
DVW-CA510P(EK)	; HN-181B	MCB

HN-181(1-648-561-12)

CN201	A-1
CN202	A-3
CN203	A-4
CN204	J-1
CN205	J-5
CN206	J-5
CN207	J-4
CN208	G-3
CN209	G-3
CN210	F-3
CN211	F-2
CN212	H-1
CN213	G-1
CN214	F-2
CN215	C-1
CN216	E-1
CN217	E-1
CN218	E-1
D202	B-1
D204	J-1
Q202	B-1
Q204	J-1
LOT NO.	J-3



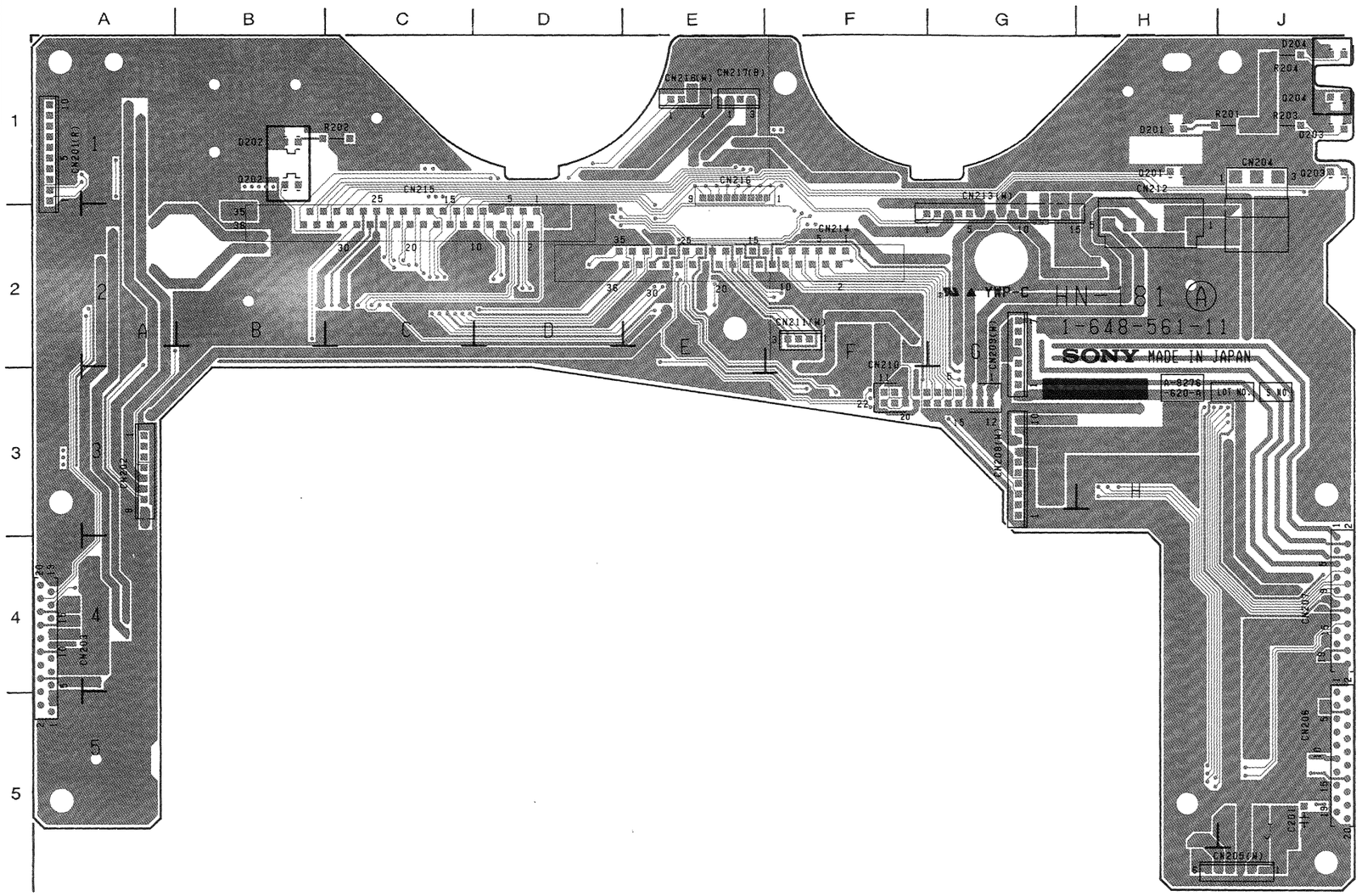
HN-181 BOARD -B SIDE-

1-648-561-12 (LOT No. 307 - 402)

DVW-A500(J)	; HN-181	MCB
DVW-A500(UC)	; HN-181	MCB
DVW-A500P(EK)	; HN-181	MCB
DVW-500(J)	; HN-181	MCB
DVW-500(UC)	; HN-181	MCB
DVW-500P(EK)	; HN-181	MCB
DVW-A510(J)	; HN-181B	MCB
DVW-A510(UC)	; HN-181B	MCB
DVW-A510P(EK)	; HN-181B	MCB
DVW-510(J)	; HN-181B	MCB
DVW-510(UC)	; HN-181B	MCB
DVW-510P(EK)	; HN-181B	MCB
DVW-CA510(UC)	; HN-181B	MCB
DVW-CA510P(EK)	; HN-181B	MCB

HN-181 ; Connection board with REC inhibit sensor (Drum/Capstan/Reel-shift motors, CTL head, DT-34/34B/HN-184/HN-185/PTC-59/PTC-71 boards)

(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)



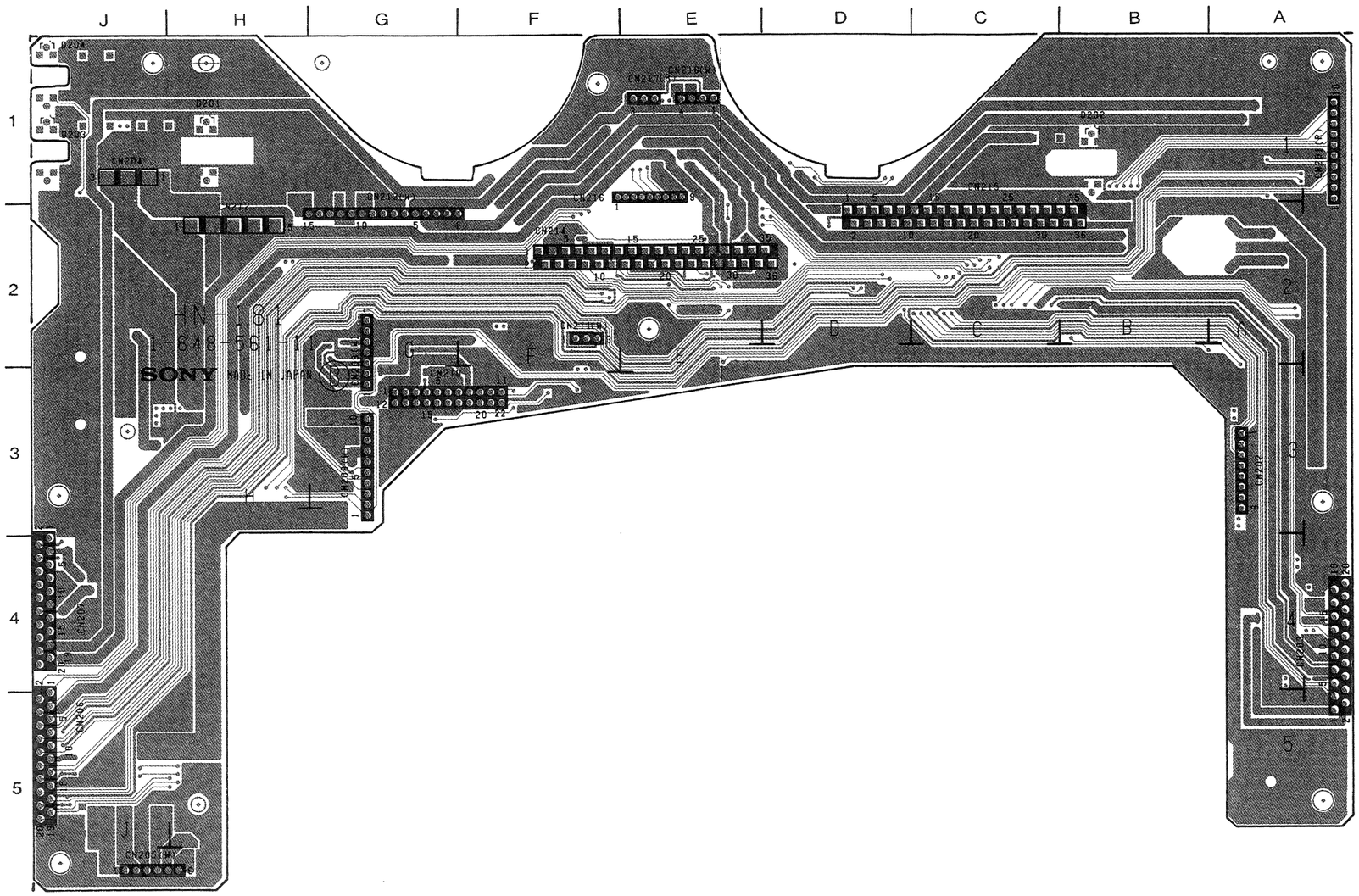
HN-181 BOARD -A SIDE-

1-648-561-11 (LOT No. 302 - 306)
DVW-A500(J) ; HN-181 MCB
DVW-A500(UC) ; HN-181 MCB
DVW-A500P(EK) ; HN-181 MCB
DVW-A500P(UC) ; HN-181 MCB
DVW-500(J) ; HN-181 MCB
DVW-500(UC) ; HN-181 MCB
DVW-500P(EK) ; HN-181 MCB

HN-181(1-648-561-11)

CN201	A-1
CN202	A-3
CN203	A-4
CN204	J-1
CN205	J-5
CN206	J-5
CN207	J-4
CN208	G-3
CN209	G-3
CN210	F-3
CN211	F-2
CN212	H-1
CN213	G-1
CN214	F-2
CN215	C-1
CN216	E-1
CN217	E-1
CN218	E-1
D201	H-1
D202	B-1
D203	J-1
D204	J-1
Q201	H-1
Q202	B-1
Q203	J-1
Q204	J-1

LOT NO. J-3



HN-181 BOARD -B SIDE-

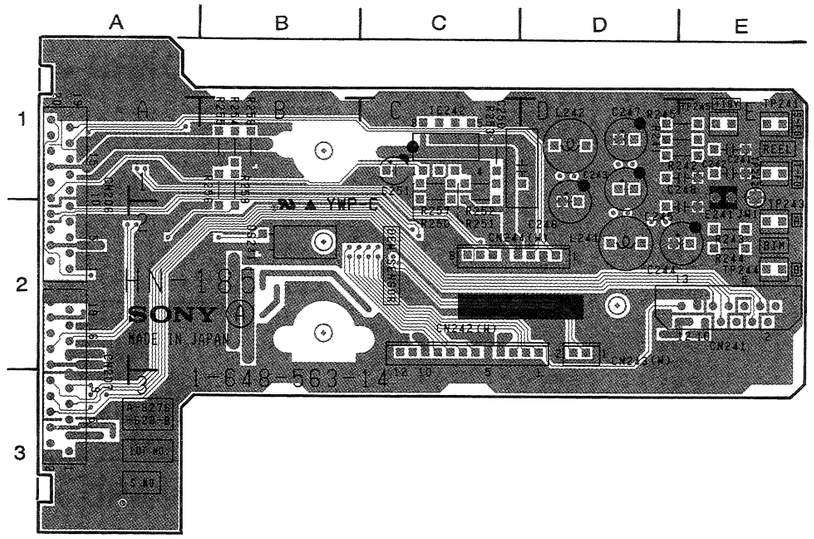
1-648-561-11 (LOT No. 302 - 306)
DVW-A500(J) ; HN-181 MCB
DVW-A500(UC) ; HN-181 MCB
DVW-A500P(EK) ; HN-181 MCB
DVW-A500P(UC) ; HN-181 MCB
DVW-500(J) ; HN-181 MCB
DVW-500(UC) ; HN-181 MCB
DVW-500P(EK) ; HN-181 MCB

HN-185 ; Connection board with dew sensor
(Tape top sensor, Cassette compartment, TR-79 board, Slip ring)

(Board's Lot No. 403 and higher)
All DVWs

HN-185(1-648-563-14)

CN206	A-1
CN207	A-3
CN241	E-2
CN242	C-2
CN243	D-2
CN244	C-2
DS241	B-2
E241	E-1
IC242	C-1
TP241	E-1
TP242	E-1
TP243	E-2
TP244	E-2
TP245	E-1
LOT NO.	A-3

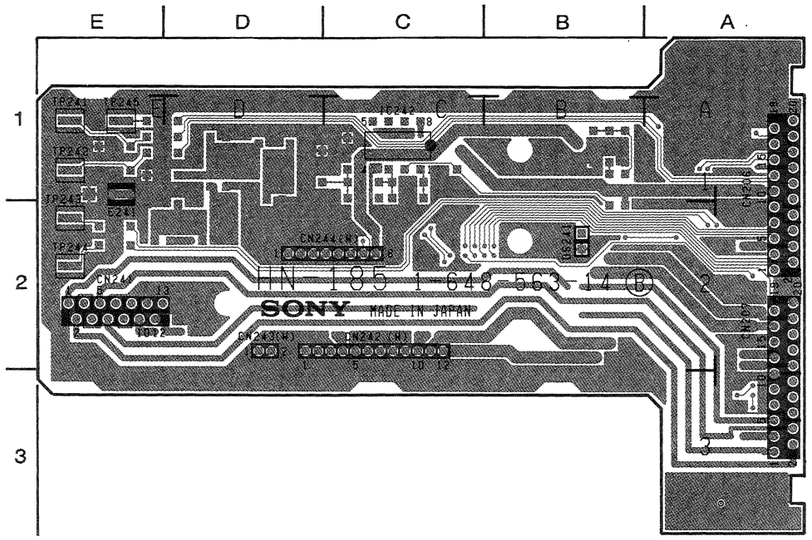


HN-185 BOARD

-A SIDE-

1-648-563-14 (LOT No. 403 -)

DVW-A500(J)	; HN-185 MCB
DVW-A500(UC)	; HN-185 MCB
DVW-A500P(EK)	; HN-185 MCB
DVW-A500P(UC)	; HN-185 MCB
DVW-500(J)	; HN-185 MCB
DVW-500(UC)	; HN-185 MCB
DVW-500P(EK)	; HN-185 MCB
DVW-500P(UC)	; HN-185 MCB
DVW-A510(J)	; HN-185 MCB
DVW-A510(UC)	; HN-185 MCB
DVW-A510P(EK)	; HN-185 MCB
DVW-510(J)	; HN-185 MCB
DVW-510(UC)	; HN-185 MCB
DVW-510P(EK)	; HN-185 MCB
DVW-CA510(J)	; HN-185 MCB
DVW-CA510(UC)	; HN-185 MCB
DVW-CA510P(EK)	; HN-185 MCB



HN-185 BOARD

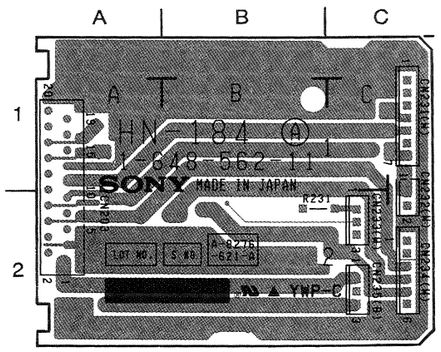
-B SIDE-

1-648-563-14 (LOT No. 403 -)

DVW-A500(J)	; HN-185 MCB
DVW-A500(UC)	; HN-185 MCB
DVW-A500P(EK)	; HN-185 MCB
DVW-A500P(UC)	; HN-185 MCB
DVW-500(J)	; HN-185 MCB
DVW-500(UC)	; HN-185 MCB
DVW-500P(EK)	; HN-185 MCB
DVW-500P(UC)	; HN-185 MCB
DVW-A510(J)	; HN-185 MCB
DVW-A510(UC)	; HN-185 MCB
DVW-A510P(EK)	; HN-185 MCB
DVW-510(J)	; HN-185 MCB
DVW-510(UC)	; HN-185 MCB
DVW-510P(EK)	; HN-185 MCB
DVW-CA510(J)	; HN-185 MCB
DVW-CA510(UC)	; HN-185 MCB
DVW-CA510P(EK)	; HN-185 MCB

HN-184 ; Connection board (Threading motor, Tape end sensor, and PD-35/PTC-54/TR-78 boards)

(Board's Lot No. 302 and higher)
All DVWs

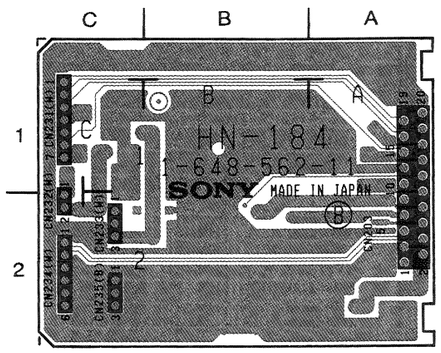


HN-184 BOARD

-A SIDE-

1-648-562-11 (LOT No. 302 - 306)

DVW-A500(J)	; HN-184 MCB
DVW-A500(UC)	; HN-184 MCB
DVW-A500P(EK)	; HN-184 MCB
DVW-A500P(UC)	; HN-184 MCB
DVW-500(J)	; HN-184 MCB
DVW-500(UC)	; HN-184 MCB
DVW-500P(EK)	; HN-184 MCB

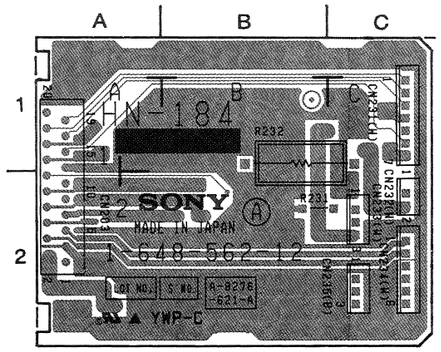


HN-184 BOARD

-B SIDE-

1-648-562-11 (LOT No. 302 - 306)

DVW-A500(J)	; HN-184 MCB
DVW-A500(UC)	; HN-184 MCB
DVW-A500P(EK)	; HN-184 MCB
DVW-A500P(UC)	; HN-184 MCB
DVW-500(J)	; HN-184 MCB
DVW-500(UC)	; HN-184 MCB
DVW-500P(EK)	; HN-184 MCB

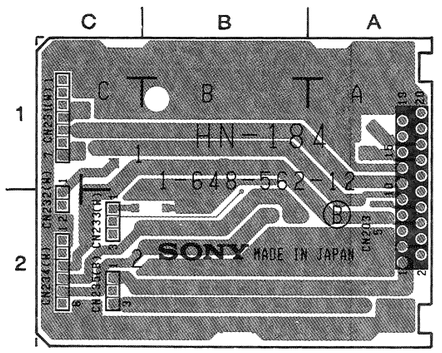


HN-184 BOARD

-A SIDE-

1-648-562-12 (LOT No. 307 - 402)

DVW-A500(J)	; HN-184 MCB
DVW-A500(UC)	; HN-184 MCB
DVW-A500P(EK)	; HN-184 MCB
DVW-500(J)	; HN-184 MCB
DVW-500(UC)	; HN-184 MCB
DVW-500P(EK)	; HN-184 MCB
DVW-A510(J)	; HN-184 MCB
DVW-A510(UC)	; HN-184 MCB
DVW-A510P(EK)	; HN-184 MCB
DVW-510(J)	; HN-184 MCB
DVW-510(UC)	; HN-184 MCB
DVW-510P(EK)	; HN-184 MCB
DVW-CA510(UC)	; HN-184 MCB
DVW-CA510P(EK)	; HN-184 MCB

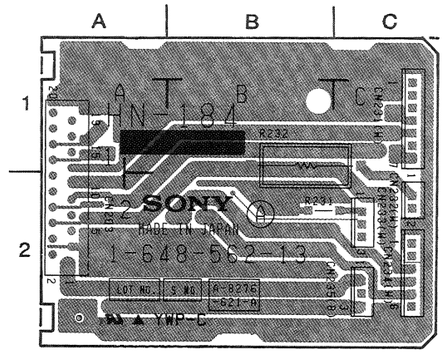


HN-184 BOARD

-B SIDE-

1-648-562-12 (LOT No. 307 - 402)

DVW-A500(J)	; HN-184 MCB
DVW-A500(UC)	; HN-184 MCB
DVW-A500P(EK)	; HN-184 MCB
DVW-500(J)	; HN-184 MCB
DVW-500(UC)	; HN-184 MCB
DVW-500P(EK)	; HN-184 MCB
DVW-A510(J)	; HN-184 MCB
DVW-A510(UC)	; HN-184 MCB
DVW-A510P(EK)	; HN-184 MCB
DVW-510(J)	; HN-184 MCB
DVW-510(UC)	; HN-184 MCB
DVW-510P(EK)	; HN-184 MCB
DVW-CA510(UC)	; HN-184 MCB
DVW-CA510P(EK)	; HN-184 MCB

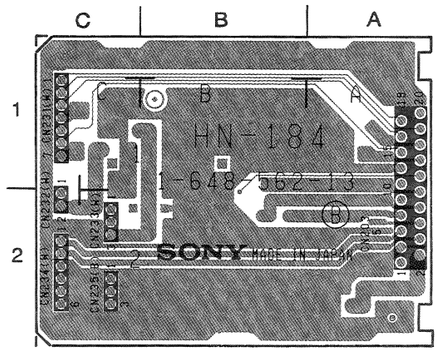


HN-184 BOARD

-A SIDE-

1-648-562-13 (LOT No. 403 -)

DVW-A500(J)	; HN-184 MCB
DVW-A500(UC)	; HN-184 MCB
DVW-A500P(EK)	; HN-184 MCB
DVW-A500P(UC)	; HN-184 MCB
DVW-500(J)	; HN-184 MCB
DVW-500(UC)	; HN-184 MCB
DVW-500P(EK)	; HN-184 MCB
DVW-500P(UC)	; HN-184 MCB
DVW-A510(J)	; HN-184 MCB
DVW-A510(UC)	; HN-184 MCB
DVW-A510P(EK)	; HN-184 MCB
DVW-510(J)	; HN-184 MCB
DVW-510(UC)	; HN-184 MCB
DVW-510P(EK)	; HN-184 MCB
DVW-CA510(J)	; HN-184 MCB
DVW-CA510(UC)	; HN-184 MCB
DVW-CA510P(EK)	; HN-184 MCB



HN-184 BOARD

-B SIDE-

1-648-562-13 (LOT No. 403 -)

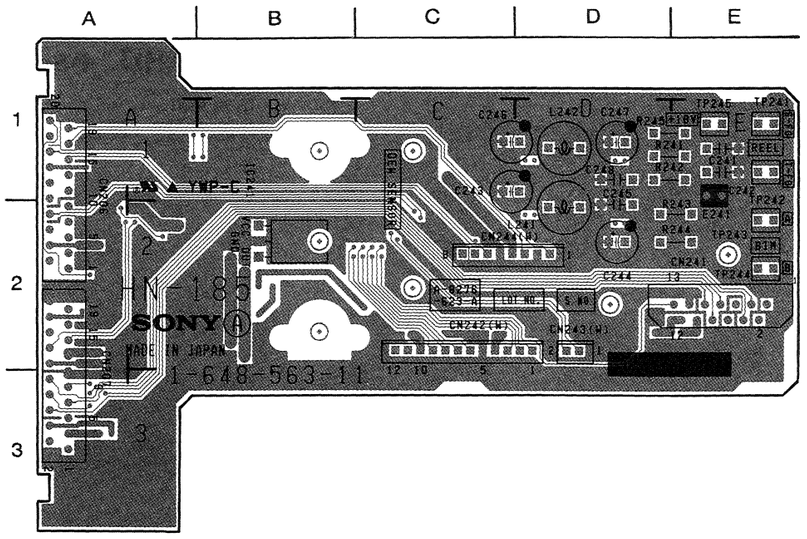
DVW-A500(J)	; HN-184 MCB
DVW-A500(UC)	; HN-184 MCB
DVW-A500P(EK)	; HN-184 MCB
DVW-A500P(UC)	; HN-184 MCB
DVW-500(J)	; HN-184 MCB
DVW-500(UC)	; HN-184 MCB
DVW-500P(EK)	; HN-184 MCB
DVW-500P(UC)	; HN-184 MCB
DVW-A510(J)	; HN-184 MCB
DVW-A510(UC)	; HN-184 MCB
DVW-A510P(EK)	; HN-184 MCB
DVW-510(J)	; HN-184 MCB
DVW-510(UC)	; HN-184 MCB
DVW-510P(EK)	; HN-184 MCB
DVW-CA510(J)	; HN-184 MCB
DVW-CA510(UC)	; HN-184 MCB
DVW-CA510P(EK)	; HN-184 MCB

HN-185 ; Connection board with dew sensor
(Tape top sensor, Cassette compartment, TR-79 board, Slip ring)

(Board's Lot No. 302 through 402
All DVWs

HN-185(1-648-563-11)

CN206	A-1
CN207	A-3
CN241	E-2
CN242	C-2
CN243	D-2
CN244	C-2
E241	E-1
IC241	B-2
TP241	E-1
TP242	E-1
TP243	E-2
TP244	E-2
TP245	E-1
LOT NO.	C-2

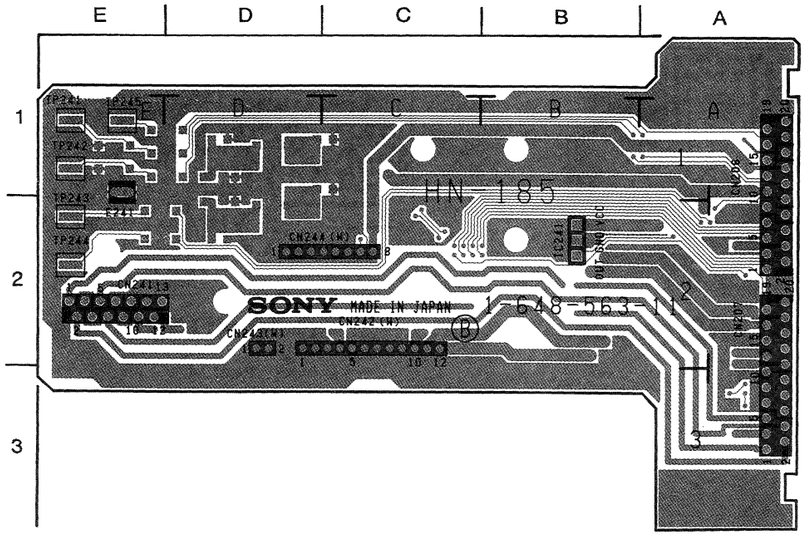


HN-185 BOARD

-A SIDE-

1-648-563-11 (LOT No. 302 - 306)

DVW-A500(J)	; HN-185 MCB
DVW-A500(UC)	; HN-185 MCB
DVW-A500P(EK)	; HN-185 MCB
DVW-A500P(UC)	; HN-185 MCB
DVW-500(J)	; HN-185 MCB
DVW-500(UC)	; HN-185 MCB
DVW-500P(EK)	; HN-185 MCB



HN-185 BOARD

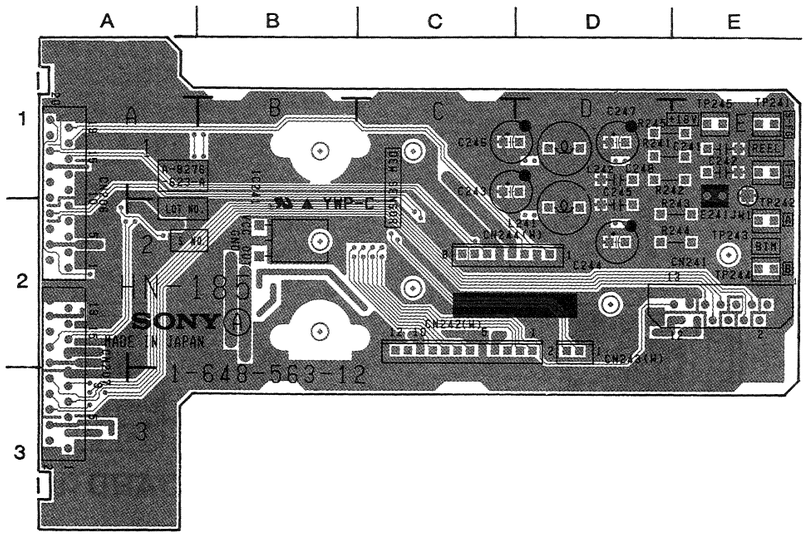
-B SIDE-

1-648-563-11 (LOT No. 302 - 306)

DVW-A500(J)	; HN-185 MCB
DVW-A500(UC)	; HN-185 MCB
DVW-A500P(EK)	; HN-185 MCB
DVW-A500P(UC)	; HN-185 MCB
DVW-500(J)	; HN-185 MCB
DVW-500(UC)	; HN-185 MCB
DVW-500P(EK)	; HN-185 MCB

HN-185(1-648-563-12)

CN206	A-1
CN207	A-3
CN241	E-2
CN242	C-2
CN243	D-2
CN244	C-2
E241	E-1
IC241	B-2
TP241	E-1
TP242	E-1
TP243	E-2
TP244	E-2
TP245	E-1
LOT NO.	C-2

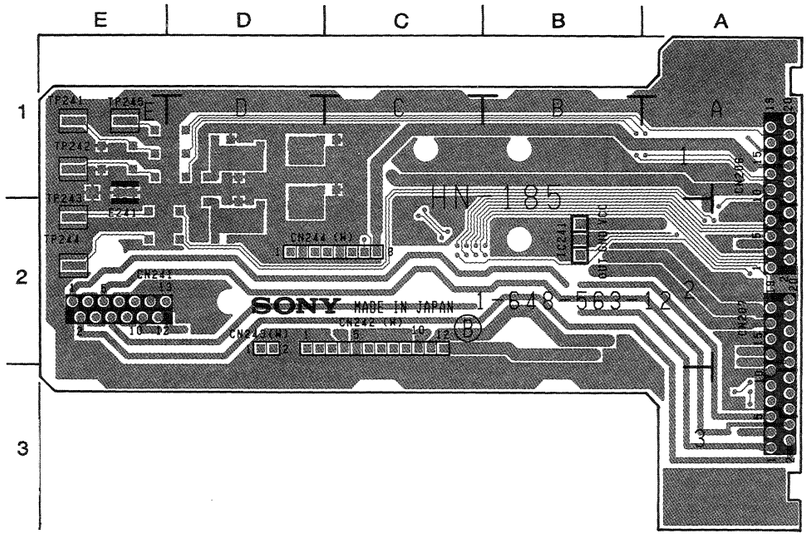


HN-185 BOARD

-A SIDE-

1-648-563-12 (LOT No. 307 - 402)

DVW-A500(J)	; HN-185 MCB
DVW-A500(UC)	; HN-185 MCB
DVW-A500P(EK)	; HN-185 MCB
DVW-500(J)	; HN-185 MCB
DVW-500(UC)	; HN-185 MCB
DVW-500P(EK)	; HN-185 MCB
DVW-A510(J)	; HN-185 MCB
DVW-A510(UC)	; HN-185 MCB
DVW-A510P(EK)	; HN-185 MCB
DVW-510(J)	; HN-185 MCB
DVW-510(UC)	; HN-185 MCB
DVW-510P(EK)	; HN-185 MCB
DVW-CA510(UC)	; HN-185 MCB
DVW-CA510P(EK)	; HN-185 MCB



HN-185 BOARD

-B SIDE-

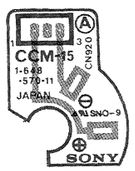
1-648-563-12 (LOT No. 307 - 402)

DVW-A500(J)	; HN-185 MCB
DVW-A500(UC)	; HN-185 MCB
DVW-A500P(EK)	; HN-185 MCB
DVW-500(J)	; HN-185 MCB
DVW-500(UC)	; HN-185 MCB
DVW-500P(EK)	; HN-185 MCB
DVW-A510(J)	; HN-185 MCB
DVW-A510(UC)	; HN-185 MCB
DVW-A510P(EK)	; HN-185 MCB
DVW-510(J)	; HN-185 MCB
DVW-510(UC)	; HN-185 MCB
DVW-510P(EK)	; HN-185 MCB
DVW-CA510(UC)	; HN-185 MCB
DVW-CA510P(EK)	; HN-185 MCB

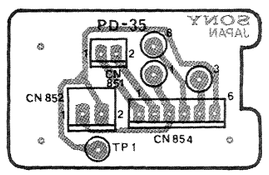
CCM-15, PD-35, PTC-54/59/71, TR-78/79

CCM-15 ; Threadind motor/Reel-shift motor
PD-35 ; Pinch solenoid connection
PTC-54 ; Threading FG
PTC-59 ; Cassette's tabs sensor
PTC-71 ; Reel position sensor
TR-78 ; S tension sensor
TR-79 ; T tension sensor, Therad/unthread end sensor

All DVWs

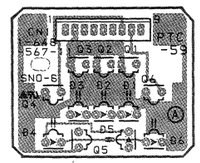


CCM-15 BOARD -A SIDE-
1-648-570-11
All DVWs

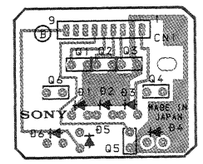


PD-35 BOARD -A SIDE-
1-622-596-11
All DVWs

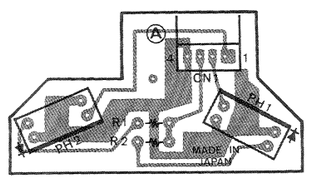
PTC-54 BOARD -A SIDE-
1-640-163-11, 12
All DVWs ; PTC-54 MCB



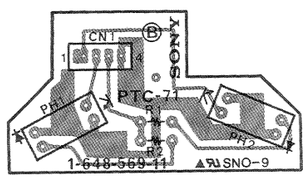
PTC-59 BOARD -A SIDE-
1-648-567-11
All DVWs ; PTC-59 MCB



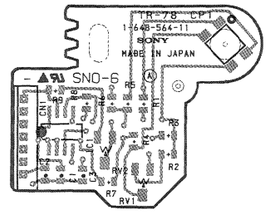
PTC-59 BOARD -B SIDE-
1-648-567-11
All DVWs ; PTC-59 MCB



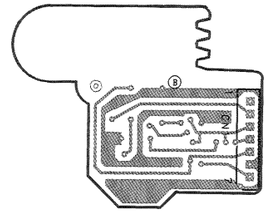
PTC-71 BOARD -A SIDE-
1-648-569-11
All DVWs ; PTC-71 MCB



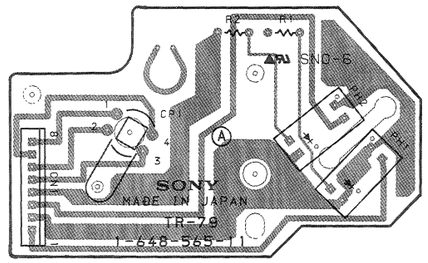
PTC-71 BOARD -B SIDE-
1-648-569-11
All DVWs ; PTC-71 MCB



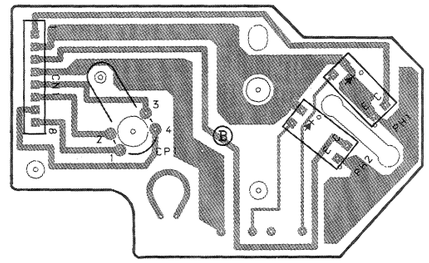
TR-78 BOARD -A SIDE-
1-648-564-11
All DVWs ; TR-78 MCB



TR-78 BOARD -B SIDE-
1-648-564-11
All DVWs ; TR-78 MCB



TR-79 BOARD -A SIDE-
1-648-565-11
All DVWs ; TR-79 MCB

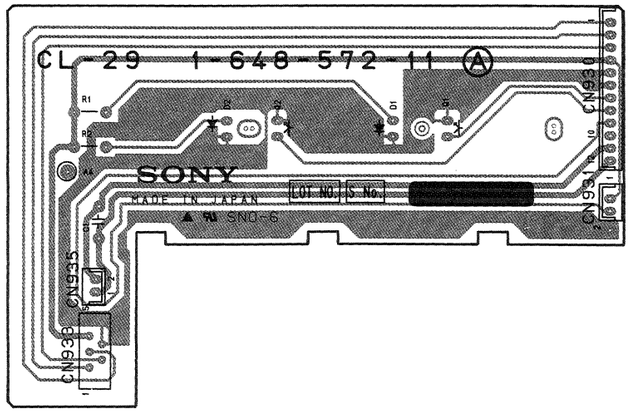


TR-79 BOARD -B SIDE-
1-648-565-11
All DVWs ; TR-79 MCB

1-92

CL-29 ; Cassette up/down motor, Cassette down sensor

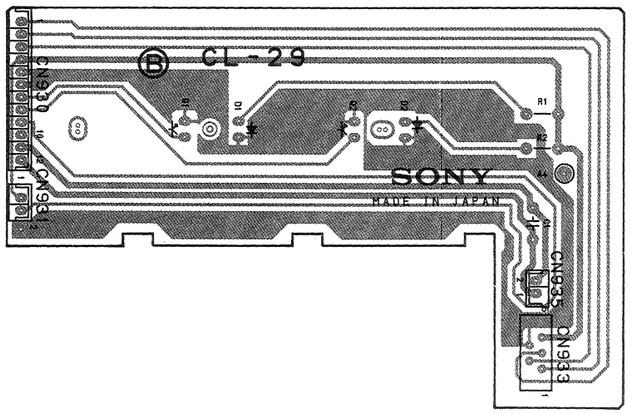
(Board's Lot No. 302 and higher)
DVW-A500/A500P/500/500P
DVW-A510/A510P/510/510P



CL-29 BOARD -A SIDE-

1-648-572-11 (LOT No. 302 -)

DVW-A500(J)	; CL-29	MCB
DVW-A500(UC)	; CL-29	MCB
DVW-A500P(EK)	; CL-29	MCB
DVW-A500P(UC)	; CL-29	MCB
DVW-500(J)	; CL-29	MCB
DVW-500(UC)	; CL-29	MCB
DVW-500P(EK)	; CL-29	MCB
DVW-500P(UC)	; CL-29	MCB
DVW-A510(J)	; CL-29	MCB
DVW-A510(UC)	; CL-29	MCB
DVW-A510P(EK)	; CL-29	MCB
DVW-510(J)	; CL-29	MCB
DVW-510(UC)	; CL-29	MCB
DVW-510P(EK)	; CL-29	MCB



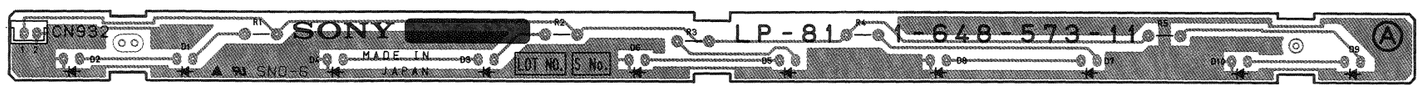
CL-29 BOARD -B SIDE-

1-648-572-11 (LOT No. 302 -)

DVW-A500(J)	; CL-29	MCB
DVW-A500(UC)	; CL-29	MCB
DVW-A500P(EK)	; CL-29	MCB
DVW-A500P(UC)	; CL-29	MCB
DVW-500(J)	; CL-29	MCB
DVW-500(UC)	; CL-29	MCB
DVW-500P(EK)	; CL-29	MCB
DVW-500P(UC)	; CL-29	MCB
DVW-A510(J)	; CL-29	MCB
DVW-A510(UC)	; CL-29	MCB
DVW-A510P(EK)	; CL-29	MCB
DVW-510(J)	; CL-29	MCB
DVW-510(UC)	; CL-29	MCB
DVW-510P(EK)	; CL-29	MCB

LP-81 ; Lamp of cassette compartment

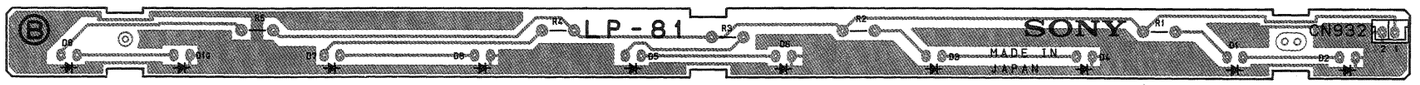
(Board's Lot No. 302 and higher)
DVW-A500/A500P/500/500P
DVW-A510/A510P/510P/510P



LP-81 BOARD -A SIDE-

1-648-573-11 (LOT No. 302 -)

DVW-A500(J)	; LP-81	MCB
DVW-A500(UC)	; LP-81	MCB
DVW-A500P(EK)	; LP-81	MCB
DVW-A500P(UC)	; LP-81	MCB
DVW-500(J)	; LP-81	MCB
DVW-500(UC)	; LP-81	MCB
DVW-500P(EK)	; LP-81	MCB
DVW-500P(UC)	; LP-81	MCB
DVW-A510(J)	; LP-81	MCB
DVW-A510(UC)	; LP-81	MCB
DVW-A510P(EK)	; LP-81	MCB
DVW-510(J)	; LP-81	MCB
DVW-510(UC)	; LP-81	MCB
DVW-510P(EK)	; LP-81	MCB



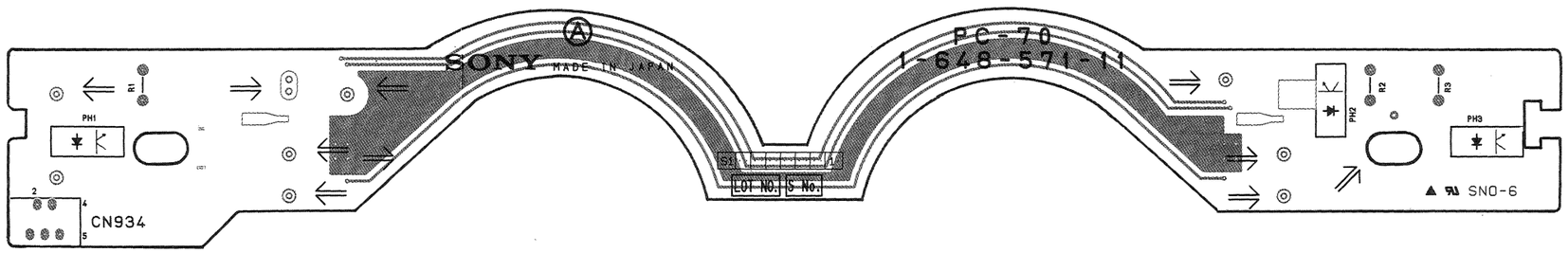
LP-81 BOARD -B SIDE-

1-648-573-11 (LOT No. 302 -)

DVW-A500(J)	; LP-81	MCB
DVW-A500(UC)	; LP-81	MCB
DVW-A500P(EK)	; LP-81	MCB
DVW-A500P(UC)	; LP-81	MCB
DVW-500(J)	; LP-81	MCB
DVW-500(UC)	; LP-81	MCB
DVW-500P(EK)	; LP-81	MCB
DVW-500P(UC)	; LP-81	MCB
DVW-A510(J)	; LP-81	MCB
DVW-A510(UC)	; LP-81	MCB
DVW-A510P(EK)	; LP-81	MCB
DVW-510(J)	; LP-81	MCB
DVW-510(UC)	; LP-81	MCB
DVW-510P(EK)	; LP-81	MCB

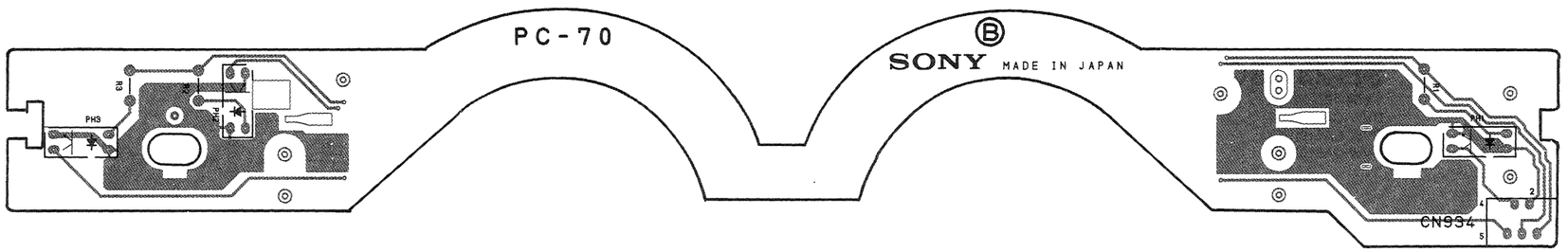
PC-70 ; Cassette-in sensor, Cassette size sensor

(Board's Lot No. 302 and higher)
DVW-A500/A500P/500/500P
DVW-A510/A510P/510/510P



PC-70 BOARD -A SIDE-

1-648-571-11 (LOT No. 302 -)
DVW-A500(J) ; PC-70 MCB
DVW-A500(UC) ; PC-70 MCB
DVW-A500P(EK) ; PC-70 MCB
DVW-A500P(UC) ; PC-70 MCB
DVW-500(J) ; PC-70 MCB
DVW-500(UC) ; PC-70 MCB
DVW-500P(EK) ; PC-70 MCB
DVW-500P(UC) ; PC-70 MCB
DVW-A510(J) ; PC-70 MCB
DVW-A510(UC) ; PC-70 MCB
DVW-A510P(EK) ; PC-70 MCB
DVW-510(J) ; PC-70 MCB
DVW-510(UC) ; PC-70 MCB
DVW-510P(EK) ; PC-70 MCB



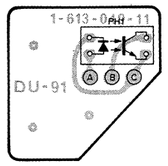
PC-70 BOARD -B SIDE-

1-648-571-11 (LOT No. 302 -)
DVW-A500(J) ; PC-70 MCB
DVW-A500(UC) ; PC-70 MCB
DVW-A500P(EK) ; PC-70 MCB
DVW-A500P(UC) ; PC-70 MCB
DVW-500(J) ; PC-70 MCB
DVW-500(UC) ; PC-70 MCB
DVW-500P(EK) ; PC-70 MCB
DVW-500P(UC) ; PC-70 MCB
DVW-A510(J) ; PC-70 MCB
DVW-A510(UC) ; PC-70 MCB
DVW-A510P(EK) ; PC-70 MCB
DVW-510(J) ; PC-70 MCB
DVW-510(UC) ; PC-70 MCB
DVW-510P(EK) ; PC-70 MCB

LED-200, SE-225/226/237, DU-91, IF-36

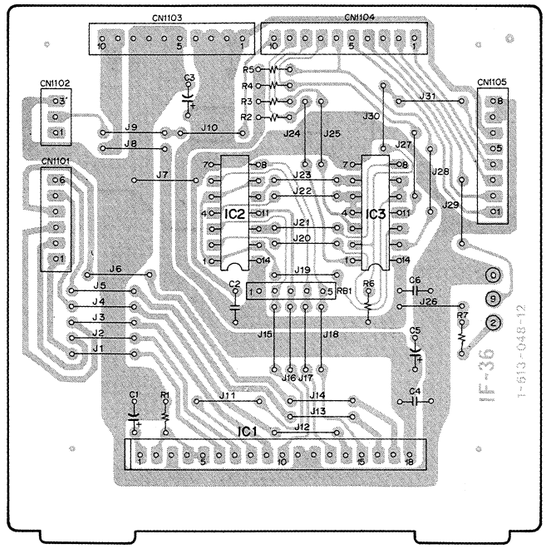
DU-91 ; Cassette up/down, Cassette IN/OUT detector
IF-36 ; Cart interface
LED-200 ; ON AIR lamp
SE-225 ; switch
SE-226 ; switch
SE-237 ; Cassette up/down, Cassette IN/OUT detector

(Board's Lot No. 308 and higher)
DVW-CA510/CA510P



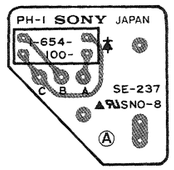
DU-91 BOARD -B SIDE-

1-613-049-11
DVW-CA510(UC)
DVW-CA510P(EK)



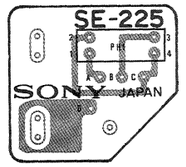
IF-36 BOARD -B SIDE-

1-613-048-12
DVW-CA510(J) ; IF-36 MCB
DVW-CA510(UC) ; IF-36 MCB
DVW-CA510P(EK) ; IF-36 MCB



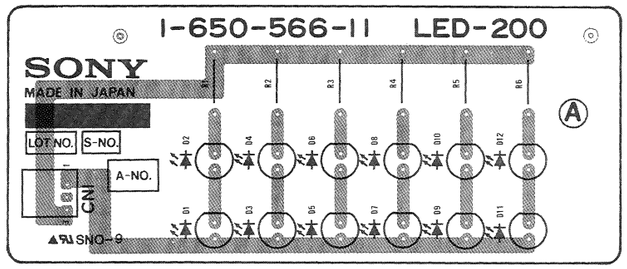
SE-237 BOARD -A SIDE-

1-654-100-12
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



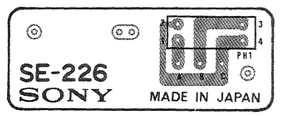
SE-225 BOARD -B SIDE-

1-650-567-11
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



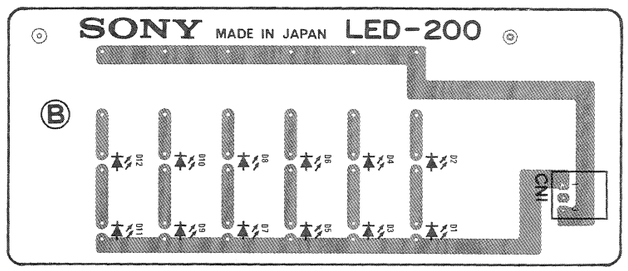
LED-200 BOARD -A SIDE-

1-650-566-11 (LOT No. 308 -)
DVW-CA510(J) ; LED-200 MCB
DVW-CA510(UC) ; LED-200 MCB
DVW-CA510P(EK) ; LED-200 MCB



SE-226 BOARD -B SIDE-

1-650-568-11
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



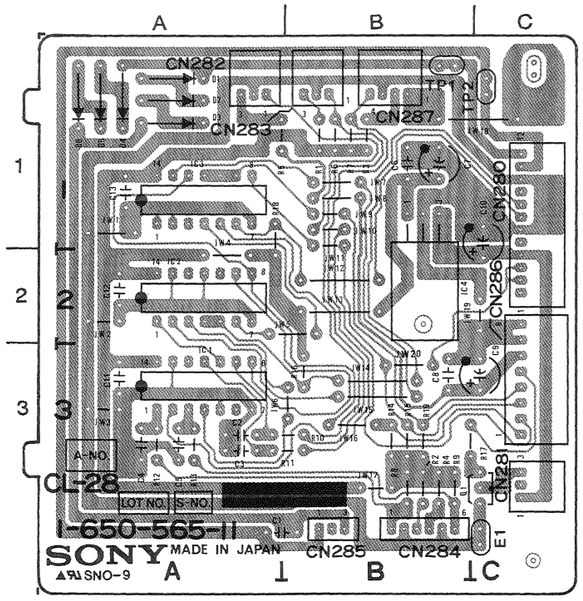
LED-200 BOARD -B SIDE-

1-650-566-11 (LOT No. 308 -)
DVW-CA510(J) ; LED-200 MCB
DVW-CA510(UC) ; LED-200 MCB
DVW-CA510P(EK) ; LED-200 MCB

1-96

CL-28 ; Cassette-up compartment

(Board's Lot No. 308 and higher)
DVW-CA510/CA510P

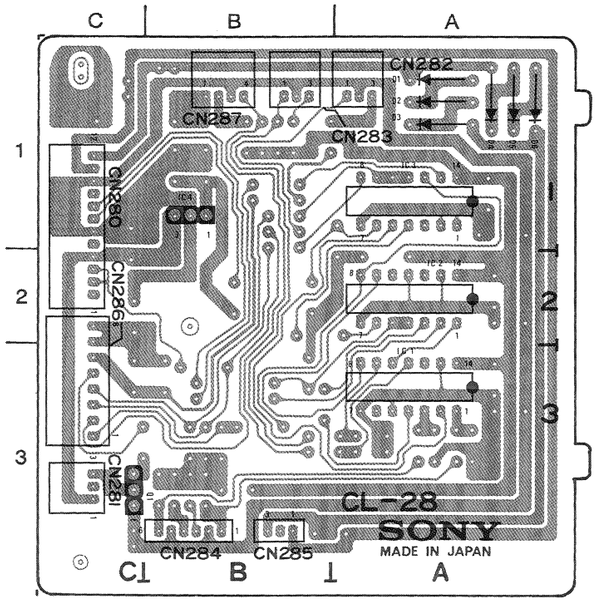


CL-28(1-650-565-11)

D1	A-1
D2	A-1
D3	A-1
D4	A-1
D5	A-1
D6	A-1
E1	C-3
IC1	A-3
IC2	A-2
IC3	A-1
IC4	B-2
Q1	C-3
TP1	B-1
TP2	C-1
LOT NO.	A-3

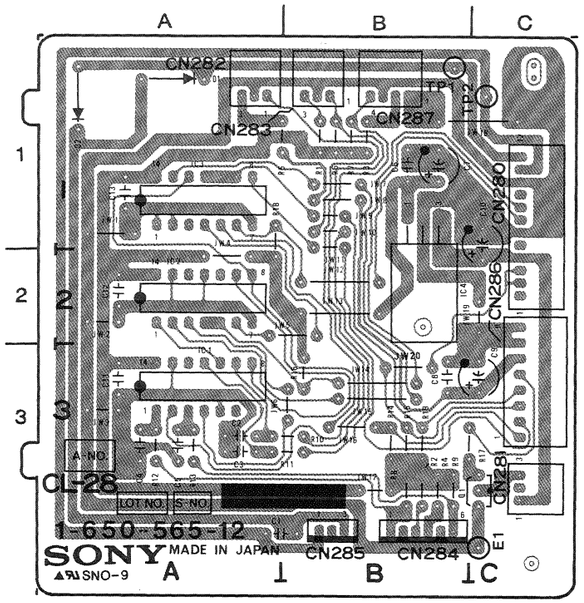
CL-28 BOARD -A SIDE-

1-650-565-11 (LOT No. 308 - 312)
DVW-CA510(UC) ; CL-28 MCB
DVW-CA510P(EK) ; CL-28 MCB



CL-28 BOARD -B SIDE-

1-650-565-11 (LOT No. 308 - 312)
DVW-CA510(UC) ; CL-28 MCB
DVW-CA510P(EK) ; CL-28 MCB

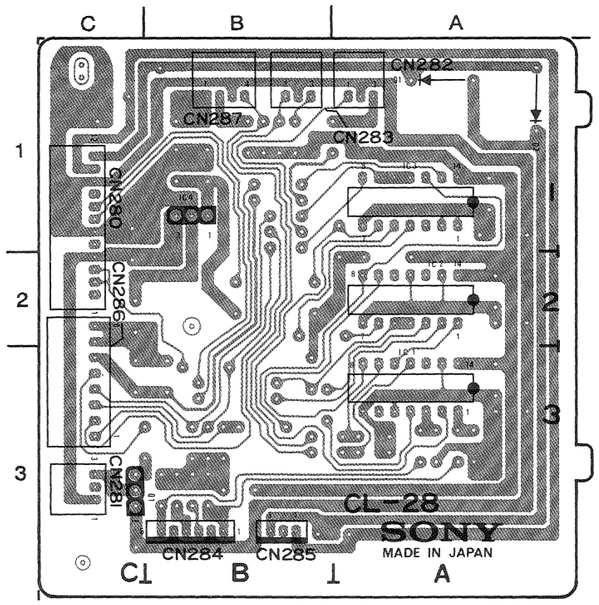


CL-28(1-650-565-12)

D1	A-1
D2	A-1
E1	C-3
IC1	A-3
IC2	A-2
IC3	A-1
IC4	B-2
Q1	C-3
TP1	B-1
TP2	C-1
LOT NO.	A-3

CL-28 BOARD -A SIDE-

1-650-565-12 (LOT No. 401 -)
DVW-CA510(J) ; CL-28 MCB
DVW-CA510(UC) ; CL-28 MCB
DVW-CA510P(EK) ; CL-28 MCB



CL-28 BOARD -B SIDE-

1-650-565-12 (LOT No. 401 -)
DVW-CA510(J) ; CL-28 MCB
DVW-CA510(UC) ; CL-28 MCB
DVW-CA510P(EK) ; CL-28 MCB

FP-58/58B ; Sub control panel and Upper panel function (SWs, LEDs) control, CAV control level conversion

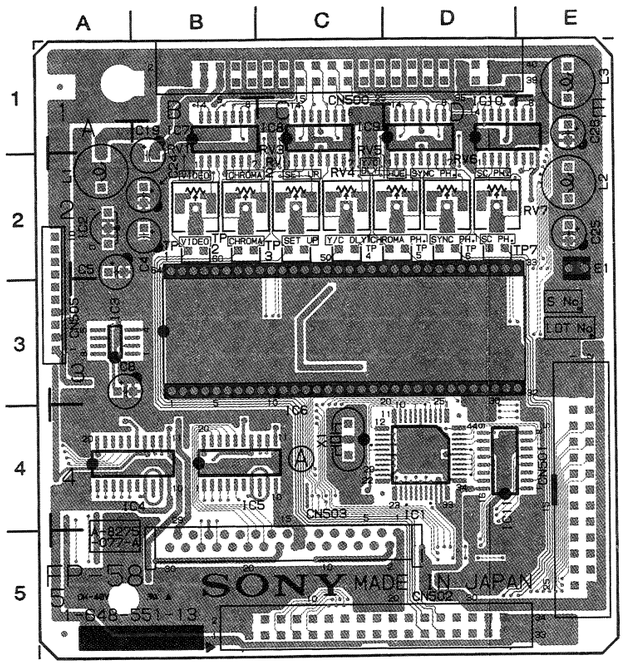
(Board's Lot No. 403 and higher)
All DVWs

FP-58/58B(1-648-551-13/23)

CN500	C-1	IC3	A-3	✱Q1	A-3	TP1	B-2
CN501	E-4	IC4	A-4			TP2	B-2
CN502	D-5	IC5	B-4	RV1	B-1	TP3	C-2
CN503	C-4	IC6	C-3	RV2	C-2	TP4	C-2
CN505	A-3	IC7	B-1	RV3	C-2	TP5	D-2
		IC8	C-1	RV4	C-2	TP6	D-2
E1	E-2	IC9	C-1	RV5	C-1	TP7	E-2
		IC10	D-1	RV6	D-2		
IC1	D-4	IC11	D-4	RV7	E-2	X1	C-4
IC2	A-2						

✱: B SIDE

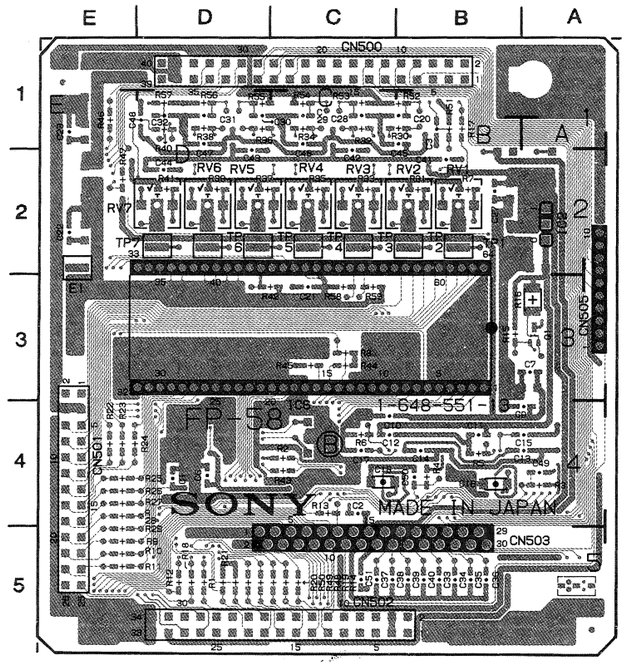
LOT NO. E-3



FP-58/58B BOARD -A SIDE-

1-648-551-13/23 (LOT No. 403 -)

DVW-A500(J)	; FP-58	MCB
DVW-A500(UC)	; FP-58	MCB
DVW-A500P(EK)	; FP-58	MCB
DVW-A500P(UC)	; FP-58	MCB
DVW-500(J)	; FP-58	MCB
DVW-500(UC)	; FP-58	MCB
DVW-500P(EK)	; FP-58	MCB
DVW-500P(UC)	; FP-58	MCB
DVW-A510(J)	; FP-58B	MCB
DVW-A510(UC)	; FP-58B	MCB
DVW-A510P(EK)	; FP-58B	MCB
DVW-510(J)	; FP-58B	MCB
DVW-510(UC)	; FP-58B	MCB
DVW-510P(EK)	; FP-58B	MCB
DVW-CA510(J)	; FP-58B	MCB
DVW-CA510(UC)	; FP-58B	MCB
DVW-CA510P(EK)	; FP-58B	MCB



FP-58/58B BOARD -B SIDE-

1-648-551-13/23 (LOT No. 403 -)

DVW-A500(J)	; FP-58	MCB
DVW-A500(UC)	; FP-58	MCB
DVW-A500P(EK)	; FP-58	MCB
DVW-A500P(UC)	; FP-58	MCB
DVW-500(J)	; FP-58	MCB
DVW-500(UC)	; FP-58	MCB
DVW-500P(EK)	; FP-58	MCB
DVW-500P(UC)	; FP-58	MCB
DVW-A510(J)	; FP-58B	MCB
DVW-A510(UC)	; FP-58B	MCB
DVW-A510P(EK)	; FP-58B	MCB
DVW-510(J)	; FP-58B	MCB
DVW-510(UC)	; FP-58B	MCB
DVW-510P(EK)	; FP-58B	MCB
DVW-CA510(J)	; FP-58B	MCB
DVW-CA510(UC)	; FP-58B	MCB
DVW-CA510P(EK)	; FP-58B	MCB

FP-58/58B ; Sub control panel and Upper panel function (SWs, LEDs) control, CAV control level conversion

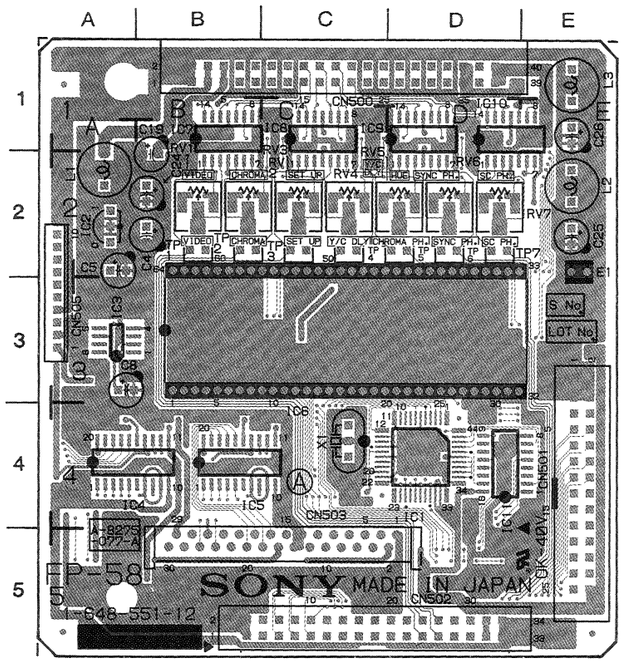
(Board's Lot No. 307 through 402)
All DVWs

FP-58/58B(1-648-551-12/22)

CN500	C-1	IC3	A-3	✱Q1	A-3	TP1	B-2
CN501	E-4	IC4	A-4			TP2	B-2
CN502	D-5	IC5	B-4	RV1	B-1	TP3	C-2
CN503	C-4	IC6	C-3	RV2	C-2	TP4	C-2
CN505	A-3	IC7	B-1	RV3	C-2	TP5	D-2
		IC8	C-1	RV4	C-2	TP6	D-2
E1	E-2	IC9	C-1	RV5	C-1	TP7	E-2
		IC10	D-1	RV6	D-2		
IC1	D-4	IC11	D-4	RV7	E-2	X1	C-4
IC2	A-2						

✱: B SIDE

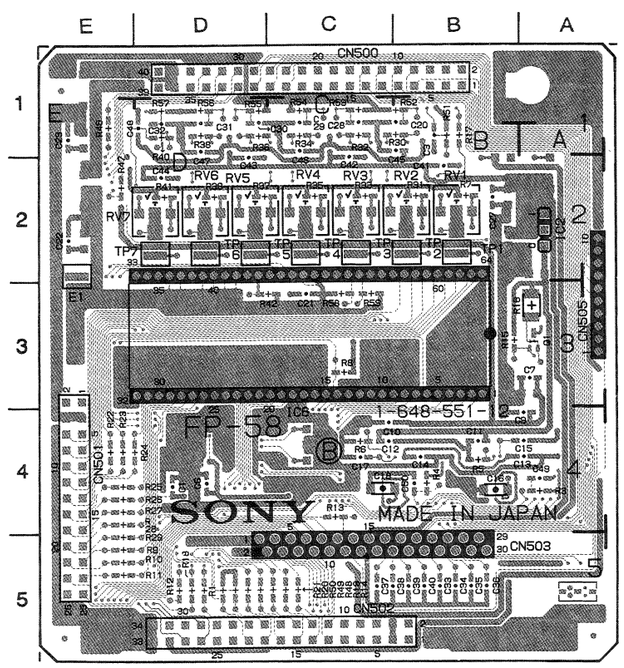
LOT NO. E-3



FP-58/58B BOARD -A SIDE-

1-648-551-12/22 (LOT No. 307 - 402)

DVW-A500(J)	; FP-58	MCB
DVW-A500(UC)	; FP-58	MCB
DVW-A500P(EK)	; FP-58	MCB
DVW-500(J)	; FP-58	MCB
DVW-500(UC)	; FP-58	MCB
DVW-500P(EK)	; FP-58	MCB
DVW-A510(J)	; FP-58B	MCB
DVW-A510(UC)	; FP-58B	MCB
DVW-A510P(EK)	; FP-58B	MCB
DVW-510(J)	; FP-58B	MCB
DVW-510(UC)	; FP-58B	MCB
DVW-510P(EK)	; FP-58B	MCB
DVW-CA510(UC)	; FP-58B	MCB
DVW-CA510P(EK)	; FP-58B	MCB



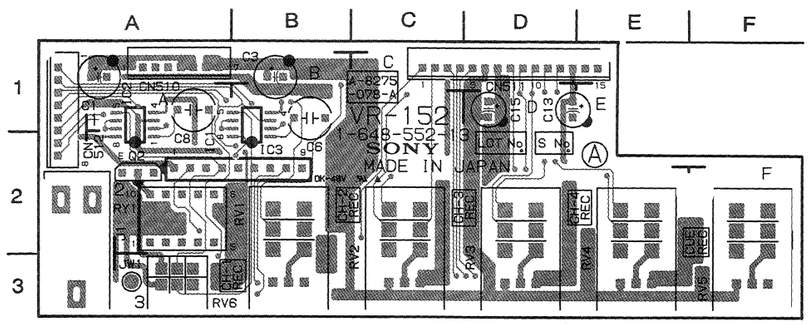
FP-58/58B BOARD -B SIDE-

1-648-551-12/22 (LOT No. 307 - 402)

DVW-A500(J)	; FP-58	MCB
DVW-A500(UC)	; FP-58	MCB
DVW-A500P(EK)	; FP-58	MCB
DVW-500(J)	; FP-58	MCB
DVW-500(UC)	; FP-58	MCB
DVW-500P(EK)	; FP-58	MCB
DVW-A510(J)	; FP-58B	MCB
DVW-A510(UC)	; FP-58B	MCB
DVW-A510P(EK)	; FP-58B	MCB
DVW-510(J)	; FP-58B	MCB
DVW-510(UC)	; FP-58B	MCB
DVW-510P(EK)	; FP-58B	MCB
DVW-CA510(UC)	; FP-58B	MCB
DVW-CA510P(EK)	; FP-58B	MCB

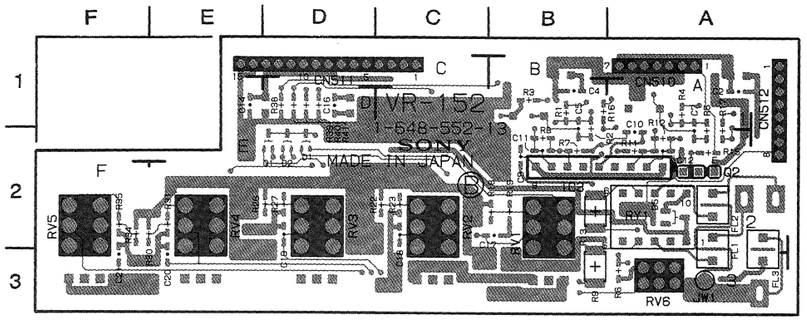
VR-152 ; Audio REC and Phone level RVs, Phone connector

(Board's Lot No. 403 and higher)
All recorder models



VR-152 BOARD -A SIDE-

1-648-552-13 (LOT No. 403 -)
DVW-A500(J) ; VR-152 MCB
DVW-A500(UC) ; VR-152 MCB
DVW-A500P(EK) ; VR-152 MCB
DVW-A500P(UC) ; VR-152 MCB
DVW-500(J) ; VR-152 MCB
DVW-500(UC) ; VR-152 MCB
DVW-500P(EK) ; VR-152 MCB
DVW-500P(UC) ; VR-152 MCB



VR-152 BOARD -B SIDE-

1-648-552-13 (LOT No. 403 -)
DVW-A500(J) ; VR-152 MCB
DVW-A500(UC) ; VR-152 MCB
DVW-A500P(EK) ; VR-152 MCB
DVW-A500P(UC) ; VR-152 MCB
DVW-500(J) ; VR-152 MCB
DVW-500(UC) ; VR-152 MCB
DVW-500P(EK) ; VR-152 MCB
DVW-500P(UC) ; VR-152 MCB

VR-152(1-648-552-13)

CN510	A-1
CN511	D-1
CN512	A-1
✱D1	D-2
✱D2	D-2
✱D5	A-2
✱FL1	A-3
✱FL2	A-2
✱FL3	A-3
IC1	B-1
IC2	A-1
IC3	B-2
J1	A-2
JW1	A-3
✱Q1	D-2
Q2	A-2
RV1	B-1
RV2	C-1
RV3	D-1
RV4	E-1
RV5	F-1
RV6	A-1
RY1	A-2

✱ : B SIDE

LOT NO. D-2

FP-58/58B, DUS-728

FP-58/58B ; Sub control panel and Upper panel function (SWs, LEDs) control,
CAV control level conversion
DUS-728

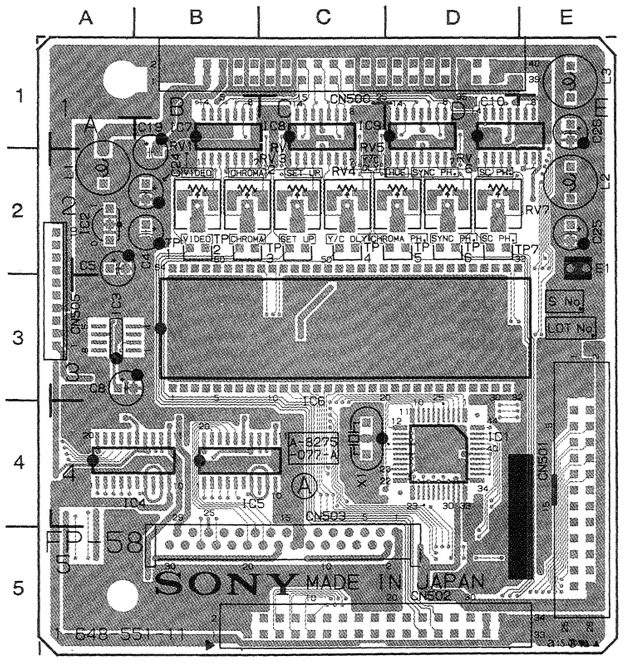
(Board's Lot No. 302 through 306)
All DVWs

FP-58(1-648-551-11)

CN500	C-1	IC3	A-3	RV1	B-1	TP3	C-2
CN501	E-4	IC4	A-4	RV2	C-2	TP4	C-2
CN502	D-5	IC5	B-4	RV3	C-2	TP5	D-2
CN503	C-4	IC6	C-3	RV4	C-2	TP6	D-2
CN505	A-3	IC7	B-1	RV5	C-1	TP7	E-2
		IC8	C-1	RV6	D-2		
E1	E-2	IC9	C-1	RV7	E-2	X1	C-4
		IC10	D-1				
IC1	D-4			TP1	B-2		
IC2	A-2	✱Q1	A-3	TP2	B-2		

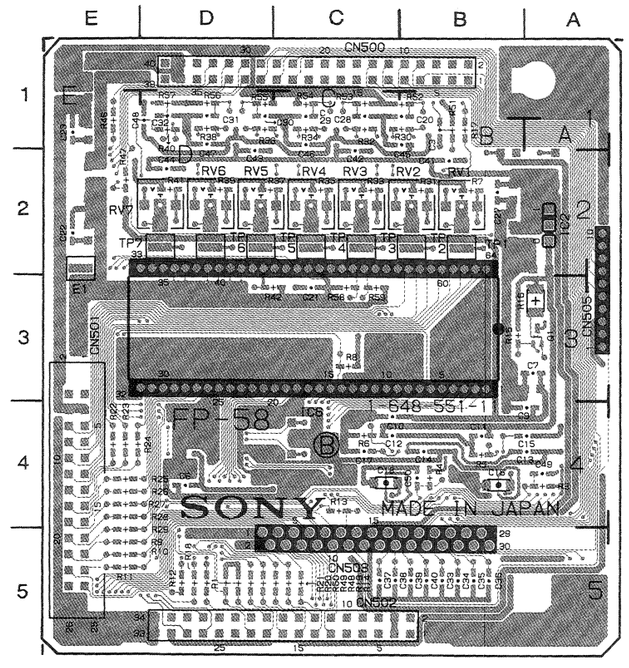
✱ : B SIDE

LOT NO. E-3



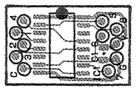
FP-58 BOARD -A SIDE-

1-648-551-11 (LOT No. 302 - 306)
DVW-A500(J) ; FP-58 MCB
DVW-A500(UC) ; FP-58 MCB
DVW-A500P(EK) ; FP-58 MCB
DVW-A500P(UC) ; FP-58 MCB
DVW-500(J) ; FP-58 MCB
DVW-500(UC) ; FP-58 MCB
DVW-500P(EK) ; FP-58 MCB



FP-58 BOARD -B SIDE-

1-648-551-11 (LOT No. 302 - 306)
DVW-A500(J) ; FP-58 MCB
DVW-A500(UC) ; FP-58 MCB
DVW-A500P(EK) ; FP-58 MCB
DVW-A500P(UC) ; FP-58 MCB
DVW-500(J) ; FP-58 MCB
DVW-500(UC) ; FP-58 MCB
DVW-500P(EK) ; FP-58 MCB



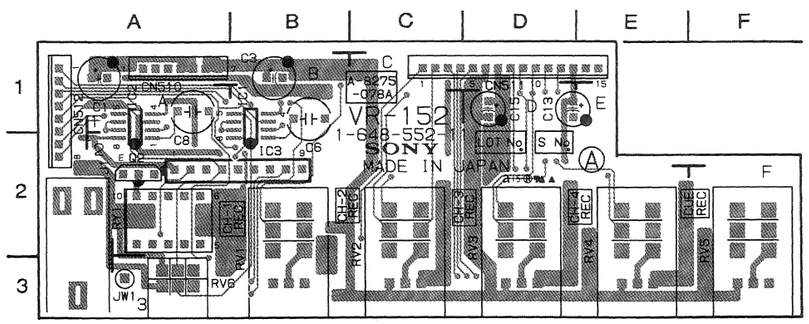
DUS-728 BOARD -A SIDE-

1-651-012-11
for FP-58 (1-648-551-11) of LOT No. 306
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

1-98 (a)

VR-152 ; Audio REC and Phone level RVs, Phone connector

(Board's Lot No. 302 through 402)
All recorder models



VR-152 BOARD -A SIDE-

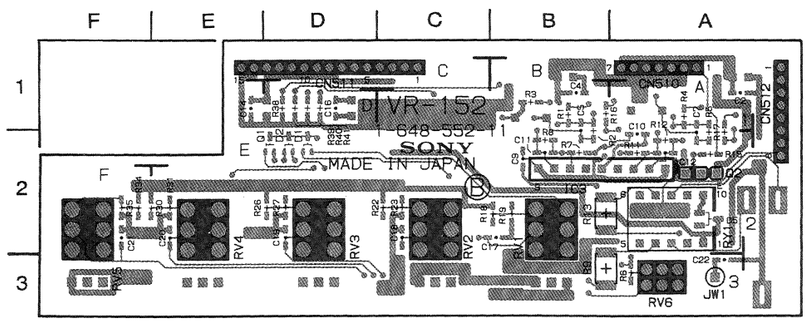
1-648-552-11 (LOT No. 302 - 306)
DVW-A500(J) ; VR-152 MCB
DVW-A500(UC) ; VR-152 MCB
DVW-A500P(EK) ; VR-152 MCB
DVW-A500P(UC) ; VR-152 MCB
DVW-500(J) ; VR-152 MCB
DVW-500(UC) ; VR-152 MCB
DVW-500P(EK) ; VR-152 MCB

VR-152(1-648-552-11)

CN510	A-1
CN511	D-1
CN512	A-1
✱D1	D-2
✱D2	D-2
✱D5	A-2
IC1	B-1
IC2	A-1
IC3	B-2
J1	A-2
JW1	A-3
✱Q1	D-2
Q2	A-2
RV1	B-1
RV2	C-1
RV3	D-1
RV4	E-1
RV5	F-1
RV6	A-1
RY1	A-2

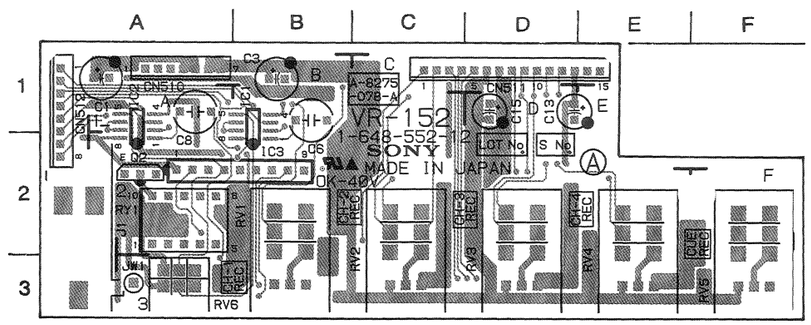
✱ : B SIDE

LOT NO. D-2



VR-152 BOARD -B SIDE-

1-648-552-11 (LOT No. 302 - 306)
DVW-A500(J) ; VR-152 MCB
DVW-A500(UC) ; VR-152 MCB
DVW-A500P(EK) ; VR-152 MCB
DVW-A500P(UC) ; VR-152 MCB
DVW-500(J) ; VR-152 MCB
DVW-500(UC) ; VR-152 MCB
DVW-500P(EK) ; VR-152 MCB



VR-152 BOARD -A SIDE-

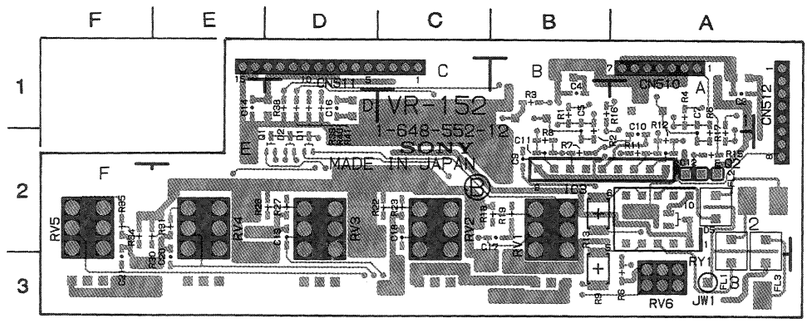
1-648-552-12 (LOT No. 307 - 402)
DVW-A500(J) ; VR-152 MCB
DVW-A500(UC) ; VR-152 MCB
DVW-A500P(EK) ; VR-152 MCB
DVW-500(J) ; VR-152 MCB
DVW-500(UC) ; VR-152 MCB
DVW-500P(EK) ; VR-152 MCB

VR-152(1-648-552-12)

CN510	A-1
CN511	D-1
CN512	A-1
✱D1	D-2
✱D2	D-2
✱D5	A-2
✱FL1	A-3
✱FL2	A-2
✱FL3	A-3
IC1	B-1
IC2	A-1
IC3	B-2
J1	A-2
JW1	A-3
✱Q1	D-2
Q2	A-2
RV1	B-1
RV2	C-1
RV3	D-1
RV4	E-1
RV5	F-1
RV6	A-1
RY1	A-2

✱ : B SIDE

LOT NO. D-2

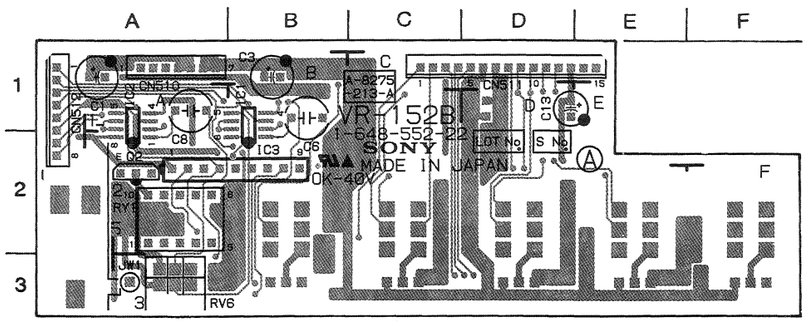


VR-152 BOARD -B SIDE-

1-648-552-12 (LOT No. 307 - 402)
DVW-A500(J) ; VR-152 MCB
DVW-A500(UC) ; VR-152 MCB
DVW-A500P(EK) ; VR-152 MCB
DVW-500(J) ; VR-152 MCB
DVW-500(UC) ; VR-152 MCB
DVW-500P(EK) ; VR-152 MCB

VR-152B ; Phone level RVs, Phone connector

(Board's Lot No. 307 and higher)
All player models



VR-152B BOARD -A SIDE-

1-648-552-22 (LOT No. 307 - 402)

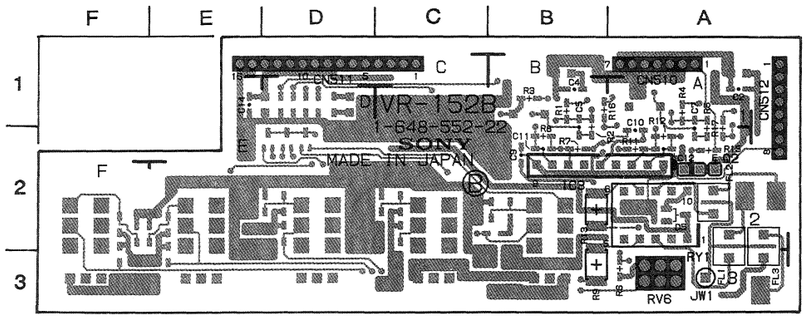
DVW-A510(J)	; VR-152B MCB
DVW-A510(UC)	; VR-152B MCB
DVW-A510P(EK)	; VR-152B MCB
DVW-510(J)	; VR-152B MCB
DVW-510(UC)	; VR-152B MCB
DVW-510P(EK)	; VR-152B MCB
DVW-CA510(UC)	; VR-152B MCB
DVW-CA510P(EK)	; VR-152B MCB

VR-152B(1-648-552-22)

CN510	A-1
CN511	D-1
CN512	A-1
✱D5	A-2
✱FL1	A-3
✱FL2	A-2
✱FL3	A-3
IC1	B-1
IC2	A-1
IC3	B-2
J1	A-2
JW1	A-3
Q2	A-2
RV6	A-1
RY1	A-2

✱ : B SIDE

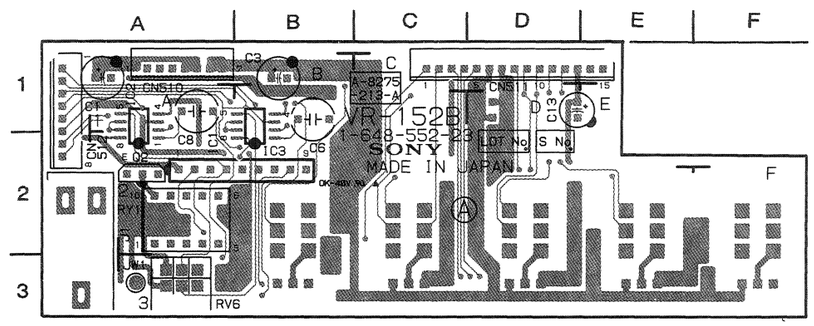
LOT NO. D-2



VR-152B BOARD -B SIDE-

1-648-552-22 (LOT No. 307 - 402)

DVW-A510(J)	; VR-152B MCB
DVW-A510(UC)	; VR-152B MCB
DVW-A510P(EK)	; VR-152B MCB
DVW-510(J)	; VR-152B MCB
DVW-510(UC)	; VR-152B MCB
DVW-510P(EK)	; VR-152B MCB
DVW-CA510(UC)	; VR-152B MCB
DVW-CA510P(EK)	; VR-152B MCB



VR-152B BOARD -A SIDE-

1-648-552-23 (LOT No. 403 -)

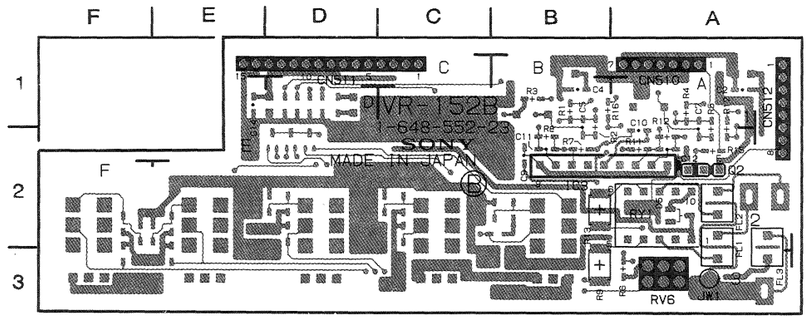
DVW-A510(J)	; VR-152B MCB
DVW-A510(UC)	; VR-152B MCB
DVW-A510P(EK)	; VR-152B MCB
DVW-510(J)	; VR-152B MCB
DVW-510(UC)	; VR-152B MCB
DVW-510P(EK)	; VR-152B MCB
DVW-CA510(J)	; VR-152B MCB
DVW-CA510(UC)	; VR-152B MCB
DVW-CA510P(EK)	; VR-152B MCB

VR-152B(1-648-552-23)

CN510	A-1
CN511	D-1
CN512	A-1
✱D5	A-2
✱FL1	A-3
✱FL2	A-2
✱FL3	A-3
IC1	B-1
IC2	A-1
IC3	B-2
J1	A-2
JW1	A-3
Q2	A-2
RV6	A-1
RY1	A-2

✱ : B SIDE

LOT NO. D-2



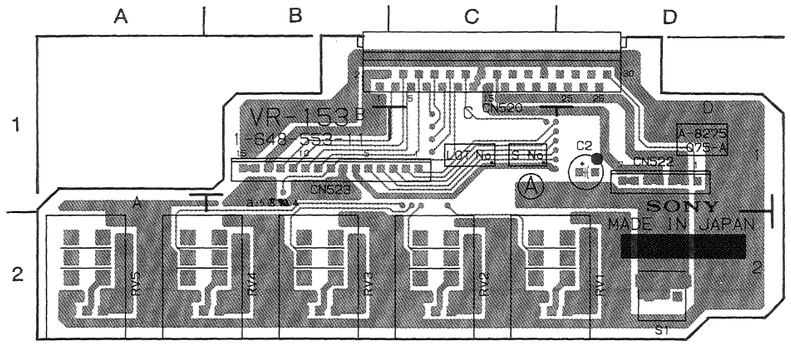
VR-152B BOARD -B SIDE-

1-648-552-23 (LOT No. 403 -)

DVW-A510(J)	; VR-152B MCB
DVW-A510(UC)	; VR-152B MCB
DVW-A510P(EK)	; VR-152B MCB
DVW-510(J)	; VR-152B MCB
DVW-510(UC)	; VR-152B MCB
DVW-510P(EK)	; VR-152B MCB
DVW-CA510(J)	; VR-152B MCB
DVW-CA510(UC)	; VR-152B MCB
DVW-CA510P(EK)	; VR-152B MCB

VR-153/153B ; Audio PB level RVs

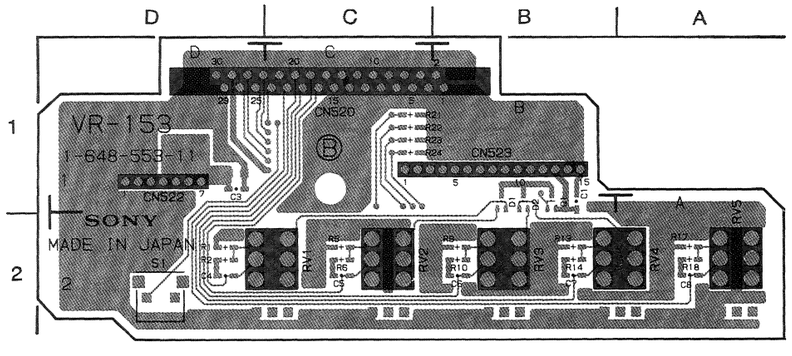
(Board's Lot No. 302 and higher)
All DVWs



VR-153 BOARD -A SIDE-

1-648-553-11 (LOT No. 302 - 306)

DVW-A500(J)	; VR-153	MCB
DVW-A500(UC)	; VR-153	MCB
DVW-A500P(EK)	; VR-153	MCB
DVW-A500P(UC)	; VR-153	MCB
DVW-500(J)	; VR-153	MCB
DVW-500(UC)	; VR-153	MCB
DVW-500P(EK)	; VR-153	MCB



VR-153 BOARD -B SIDE-

1-648-553-11 (LOT No. 302 - 306)

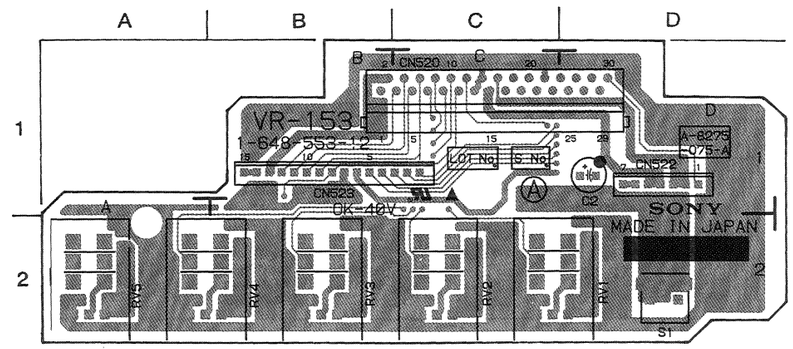
DVW-A500(J)	; VR-153	MCB
DVW-A500(UC)	; VR-153	MCB
DVW-A500P(EK)	; VR-153	MCB
DVW-A500P(UC)	; VR-153	MCB
DVW-500(J)	; VR-153	MCB
DVW-500(UC)	; VR-153	MCB
DVW-500P(EK)	; VR-153	MCB

VR-153(1-648-553-11)

CN520	C-1
CN522	D-1
CN523	B-1
✱D1	B-1
✱D2	B-1
✱Q1	B-1
RV1	C-2
RV2	C-2
RV3	B-2
RV4	A-2
RV5	A-2
S1	D-2

✱ : B SIDE

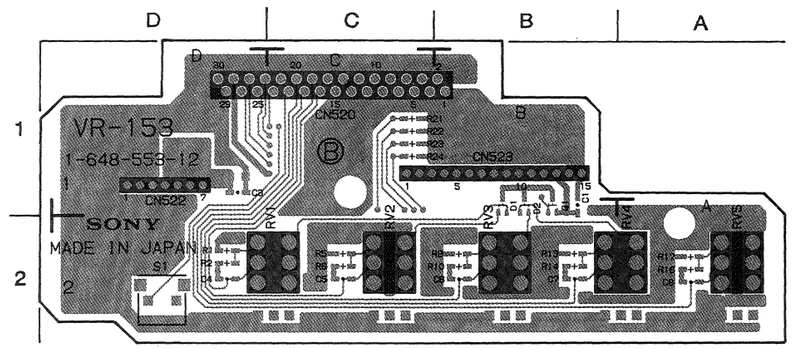
LOT NO. C-1



VR-153/153B BOARD -A SIDE-

1-648-553-12/22 (LOT No. 307 -)

DVW-A500(J)	; VR-153	MCB
DVW-A500(UC)	; VR-153	MCB
DVW-A500P(EK)	; VR-153	MCB
DVW-A500P(UC)	; VR-153	MCB
DVW-500(J)	; VR-153	MCB
DVW-500(UC)	; VR-153	MCB
DVW-500P(EK)	; VR-153	MCB
DVW-500P(UC)	; VR-153	MCB
DVW-A510(J)	; VR-153B	MCB
DVW-A510(UC)	; VR-153B	MCB
DVW-A510P(EK)	; VR-153B	MCB
DVW-510(J)	; VR-153B	MCB
DVW-510(UC)	; VR-153B	MCB
DVW-510P(EK)	; VR-153B	MCB
DVW-CA510(J)	; VR-153B	MCB
DVW-CA510(UC)	; VR-153B	MCB
DVW-CA510P(EK)	; VR-153B	MCB



VR-153/153B BOARD -B SIDE-

1-648-553-12/22 (LOT No. 307 -)

DVW-A500(J)	; VR-153	MCB
DVW-A500(UC)	; VR-153	MCB
DVW-A500P(EK)	; VR-153	MCB
DVW-A500P(UC)	; VR-153	MCB
DVW-500(J)	; VR-153	MCB
DVW-500(UC)	; VR-153	MCB
DVW-500P(EK)	; VR-153	MCB
DVW-500P(UC)	; VR-153	MCB
DVW-A510(J)	; VR-153B	MCB
DVW-A510(UC)	; VR-153B	MCB
DVW-A510P(EK)	; VR-153B	MCB
DVW-510(J)	; VR-153B	MCB
DVW-510(UC)	; VR-153B	MCB
DVW-510P(EK)	; VR-153B	MCB
DVW-CA510(J)	; VR-153B	MCB
DVW-CA510(UC)	; VR-153B	MCB
DVW-CA510P(EK)	; VR-153B	MCB

VR-153/153B(1-648-553-12/22)

CN520	C-1
CN522	D-1
CN523	B-1
✱D1	B-1
✱D2	B-1
✱Q1	B-1
RV1	C-2
RV2	C-2
RV3	B-2
RV4	A-2
RV5	A-2
S1	D-2

✱ : B SIDE

LOT NO. C-1

SWC-17 ; Upper panel function (SWs, LEDs)

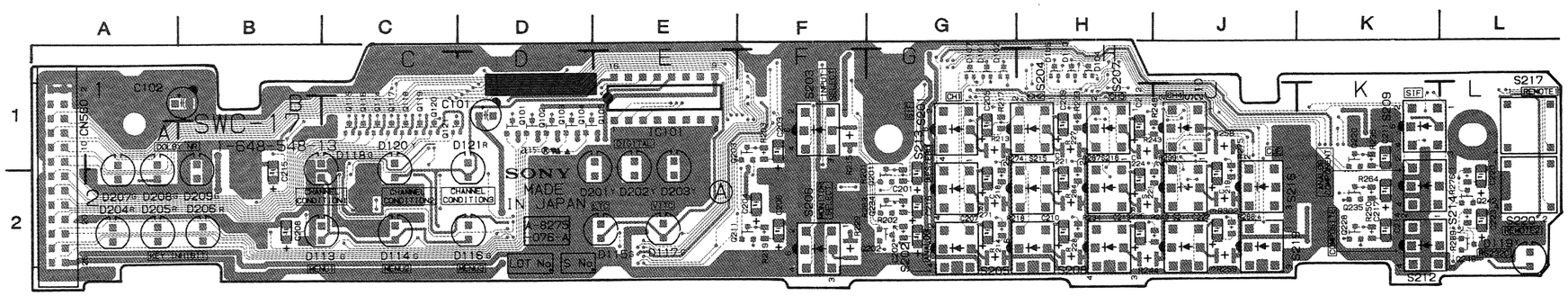
(Board's Lot No. 403 and higher)
All recorder models

SWC-17(1-648-548-13)

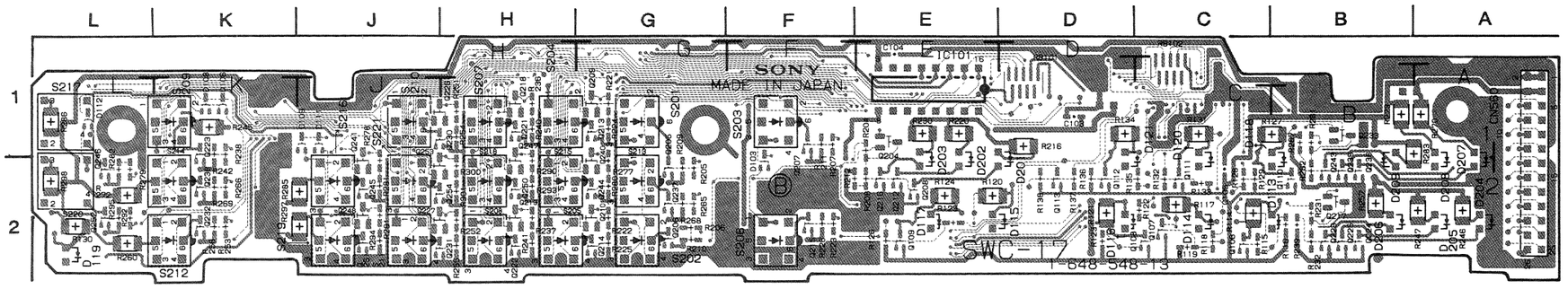
CN560	A-1	✱Q217	B-2
		✱Q218	H-1
D101	G-1	✱Q219	H-2
D102	G-1	Q220	K-1
✱D103	F-2	✱Q221	H-1
D104	H-1	✱Q222	H-2
D105	H-1	✱Q223	K-2
✱D106	K-1	✱Q224	B-2
D107	G-1	✱Q225	B-2
✱D108	K-1	✱Q226	H-1
✱D109	J-1	✱Q227	J-2
D110	H-1	Q228	K-2
✱D111	J-1	✱Q229	B-2
✱D112	L-1	✱Q230	H-1
D113	B-2	Q231	H-2
D114	C-2	✱Q232	K-2
D115	E-2	✱Q233	B-1
D116	C-2	Q234	G-2
D117	E-2	Q235	K-2
D118	C-1	✱Q236	B-2
D119	L-2	✱Q237	G-2
D120	C-1	✱Q238	K-2
D121	C-1	✱Q239	B-2
D201	D-2	✱Q240	G-2
D202	E-2	✱Q241	J-1
D203	E-2	Q242	L-2
D204	A-2	✱Q243	B-2
D205	A-2	✱Q244	G-2
D206	B-2	✱Q245	J-2
D207	A-2	✱Q246	L-2
D208	A-2	✱Q247	H-1
D209	B-2	✱Q248	J-2
		Q249	L-2
IC101	E-1	✱Q250	H-2
		✱Q251	J-2
Q101	D-1	✱Q252	L-2
Q102	D-1	✱Q253	J-1
Q103	D-1	✱Q254	H-2
Q104	D-1		
Q105	E-1	✱RB101	D-1
✱Q106	C-2	✱RB102	C-1
✱Q107	C-2		
✱Q108	D-2	S201	G-1
✱Q109	E-2	S202	G-2
✱Q110	B-2	S203	F-1
✱Q111	C-2	S204	H-1
✱Q112	D-2	S205	G-2
✱Q113	D-2	S206	F-2
Q114	C-1	S207	H-1
Q115	C-1	S208	H-2
Q116	C-1	S209	K-1
Q117	C-1	S210	J-1
Q118	C-1	S211	J-2
Q119	C-1	S212	K-2
Q120	C-1	S213	G-1
Q121	C-1	S214	L-2
Q201	G-2	S215	H-1
Q202	F-2	S216	J-2
Q203	E-1	S217	L-1
✱Q204	E-1	S218	H-1
✱Q205	G-1	S219	J-2
✱Q206	G-2	S220	L-2
✱Q207	F-2	S221	H-2
✱Q208	E-2		
✱Q209	G-1		
✱Q210	G-2		
Q211	E-2		
✱Q212	E-2		
✱Q213	G-1		
✱Q214	G-2		
✱Q215	F-2		
✱Q216	E-2		

✱: B SIDE

LOT NO. G-2



SWC-17 BOARD -A SIDE-
1-648-548-13 (LOT No. 403 -)
DVW-A500(J) ; SWC-17 MCB
DVW-A500(UC) ; SWC-17 MCB
DVW-A500P(EK) ; SWC-17 MCB
DVW-A500P(UC) ; SWC-17 MCB
DVW-500(J) ; SWC-17 MCB
DVW-500(UC) ; SWC-17 MCB
DVW-500P(EK) ; SWC-17 MCB
DVW-500P(UC) ; SWC-17 MCB



SWC-17 BOARD -B SIDE-
1-648-548-13 (LOT No. 403 -)
DVW-A500(J) ; SWC-17 MCB
DVW-A500(UC) ; SWC-17 MCB
DVW-A500P(EK) ; SWC-17 MCB
DVW-A500P(UC) ; SWC-17 MCB
DVW-500(J) ; SWC-17 MCB
DVW-500(UC) ; SWC-17 MCB
DVW-500P(EK) ; SWC-17 MCB
DVW-500P(UC) ; SWC-17 MCB

SWC-17B ; Upper panel function (SWs, LEDs)

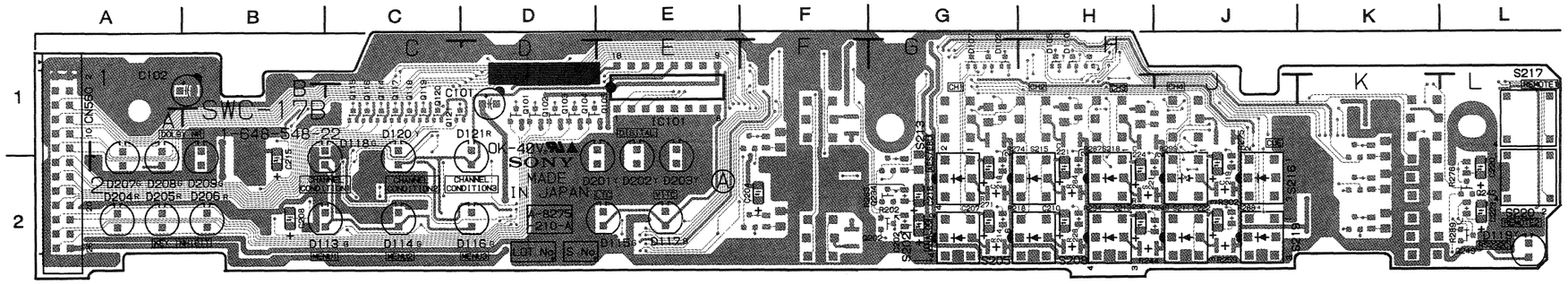
(Board's Lot No. 403 and higher)
All player models

SWC-17B(1-648-548-22)

CN560	A-1	Q202	F-2
		✱Q204	E-1
D102	G-1	✱Q206	G-2
D105	H-1	✱Q208	E-2
D107	G-1	✱Q210	G-2
✱D109	J-1	✱Q212	E-2
D110	H-1	✱Q214	G-2
✱D111	J-1	✱Q216	E-2
✱D112	L-1	✱Q217	B-2
D113	B-2	✱Q219	H-2
D114	C-2	✱Q222	H-2
D115	E-2	✱Q224	B-2
D116	C-2	✱Q225	B-2
D117	E-2	✱Q227	J-2
D118	C-1	✱Q229	B-2
D119	L-2	Q231	H-2
D120	C-1	✱Q233	B-1
D121	C-1	Q234	G-2
D201	D-2	✱Q236	B-2
D202	E-2	✱Q237	G-2
D203	E-2	✱Q239	B-2
D204	A-2	✱Q240	G-2
D205	A-2	✱Q241	J-1
D206	B-2	Q242	L-2
D207	A-2	✱Q243	B-2
D208	A-2	✱Q244	G-2
D209	B-2	✱Q245	J-2
		✱Q246	L-2
IC101	E-1	✱Q247	H-1
		✱Q248	J-2
Q101	D-1	Q249	L-2
Q102	D-1	✱Q250	H-2
Q103	D-1	✱Q251	J-2
Q104	D-1	✱Q252	L-2
Q105	E-1	✱Q253	J-1
✱Q106	C-2	✱Q254	H-2
✱Q107	C-2		
✱Q108	D-2	✱RB101	D-1
✱Q109	E-2	✱RB102	C-1
✱Q110	B-2		
✱Q111	C-2	S202	G-2
✱Q112	D-2	S205	G-2
✱Q113	D-2	S208	H-2
Q114	C-1	S211	J-2
Q115	C-1	S213	G-1
Q116	C-1	S215	H-1
Q117	C-1	S216	J-2
Q118	C-1	S217	L-1
Q119	C-1	S218	H-1
Q120	C-1	S219	J-2
Q121	C-1	S220	L-2
		S221	H-2

✱: B SIDE

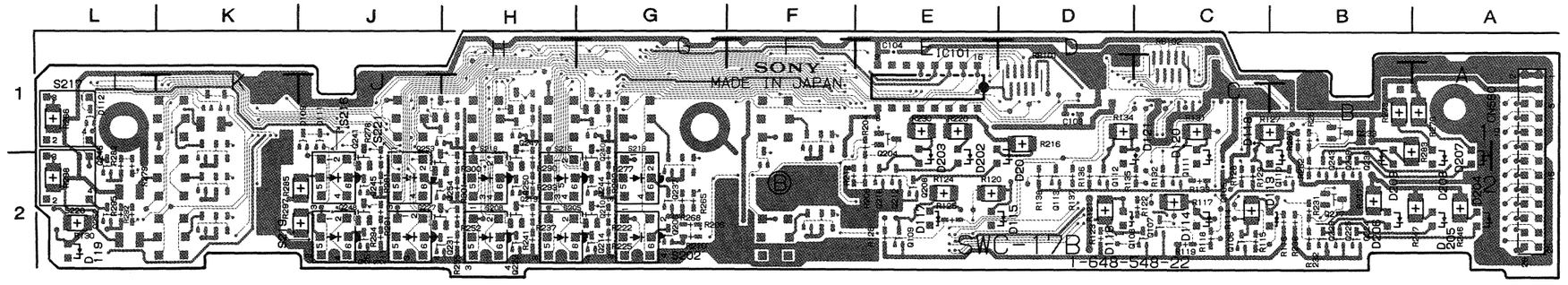
LOT NO. D-2



SWC-17B BOARD -A SIDE-

1-648-548-22 (LOT No. 403 -)

DVW-A510(J)	; SWC-17B	MCB
DVW-A510(UC)	; SWC-17B	MCB
DVW-A510P(EK)	; SWC-17B	MCB
DVW-510(J)	; SWC-17B	MCB
DVW-510(UC)	; SWC-17B	MCB
DVW-510P(EK)	; SWC-17B	MCB
DVW-CA510(J)	; SWC-17B	MCB
DVW-CA510(UC)	; SWC-17B	MCB
DVW-CA510P(EK)	; SWC-17B	MCB



SWC-17B BOARD -B SIDE-

1-648-548-22 (LOT No. 403 -)

DVW-A510(J)	; SWC-17B	MCB
DVW-A510(UC)	; SWC-17B	MCB
DVW-A510P(EK)	; SWC-17B	MCB
DVW-510(J)	; SWC-17B	MCB
DVW-510(UC)	; SWC-17B	MCB
DVW-510P(EK)	; SWC-17B	MCB
DVW-CA510(J)	; SWC-17B	MCB
DVW-CA510(UC)	; SWC-17B	MCB
DVW-CA510P(EK)	; SWC-17B	MCB

SWC-17 ; Upper panel function (SWs, LEDs)

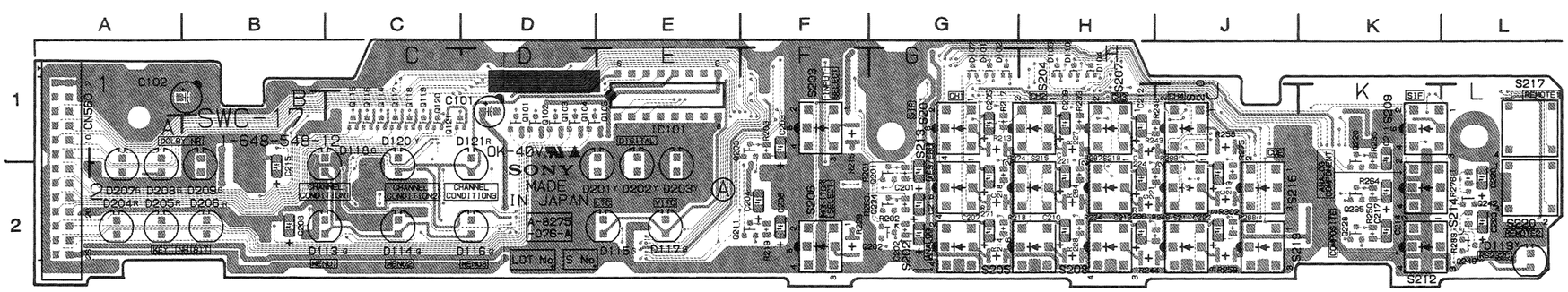
(Board's Lot No. 302 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

SWC-17(1-648-548-11/12)

CN560	A-1	Q120	C-1	✱Q253	J-1
		Q121	C-1	✱Q254	H-2
D101	G-1	Q201	G-2		
D102	G-1	Q202	F-2	✱RB101	D-1
✱D103	F-2	Q203	E-1	✱RB102	C-1
D104	H-1	✱Q204	E-1		
D105	H-1	✱Q205	G-1	S201	G-1
✱D106	K-1	✱Q206	G-2	S202	G-2
D107	G-1	✱Q207	F-2	S203	F-1
✱D108	K-1	✱Q208	E-2	S204	H-1
✱D109	J-1	✱Q209	G-1	S205	G-2
D110	H-1	✱Q210	G-2	S206	F-2
✱D111	J-1	Q211	E-2	S207	H-1
✱D112	L-1	✱Q212	E-2	S208	H-2
D113	B-2	✱Q213	G-1	S209	K-1
D114	C-2	✱Q214	G-2	S210	J-1
D115	E-2	✱Q215	F-2	S211	J-2
D116	C-2	✱Q216	E-2	S212	K-2
D117	E-2	✱Q217	B-2	S213	G-1
D118	C-1	✱Q218	H-1	S214	L-2
D119	L-2	✱Q219	H-2	S215	H-1
D120	C-1	Q220	K-1	S216	J-2
D121	C-1	✱Q221	H-1	S217	L-1
D201	D-2	✱Q222	H-2	S218	H-1
D202	E-2	✱Q223	K-2	S219	J-2
D203	E-2	✱Q224	B-2	S220	L-2
D204	A-2	✱Q225	B-2	S221	H-2
D205	A-2	✱Q226	H-1		
D206	B-2	✱Q227	J-2		
D207	A-2	Q228	K-2		
D208	A-2	✱Q229	B-2		
D209	B-2	✱Q230	H-1		
		Q231	H-2		
IC101	E-1	✱Q232	K-2		
		✱Q233	B-1		
Q101	D-1	Q234	G-2		
Q102	D-1	Q235	K-2		
Q103	D-1	✱Q236	B-2		
Q104	D-1	✱Q237	G-2		
Q105	E-1	✱Q238	K-2		
✱Q106	C-2	✱Q239	B-2		
✱Q107	C-2	✱Q240	G-2		
✱Q108	D-2	✱Q241	J-1		
✱Q109	E-2	Q242	L-2		
✱Q110	B-2	✱Q243	B-2		
✱Q111	C-2	✱Q244	G-2		
✱Q112	D-2	✱Q245	J-2		
✱Q113	D-2	✱Q246	L-2		
Q114	C-1	✱Q247	H-1		
Q115	C-1	✱Q248	J-2		
Q116	C-1	Q249	L-2		
Q117	C-1	✱Q250	H-2		
Q118	C-1	✱Q251	J-2		
Q119	C-1	✱Q252	L-2		

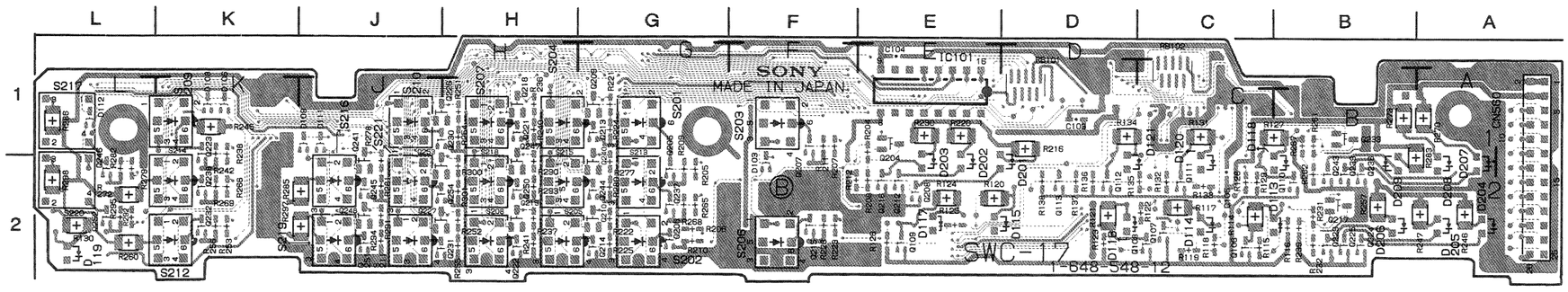
✱ : B SIDE

LOT NO. G-2



SWC-17 BOARD -A SIDE-

1-648-548-11,12 (LOT No. 302 - 402)
DVW-A500(J) ; SWC-17 MCB
DVW-A500(UC) ; SWC-17 MCB
DVW-A500P(EK) ; SWC-17 MCB
DVW-A500P(UC) ; SWC-17 MCB
DVW-500(J) ; SWC-17 MCB
DVW-500(UC) ; SWC-17 MCB
DVW-500P(EK) ; SWC-17 MCB



SWC-17 BOARD -B SIDE-

1-648-548-11,12 (LOT No. 302 - 402)
DVW-A500(J) ; SWC-17 MCB
DVW-A500(UC) ; SWC-17 MCB
DVW-A500P(EK) ; SWC-17 MCB
DVW-A500P(UC) ; SWC-17 MCB
DVW-500(J) ; SWC-17 MCB
DVW-500(UC) ; SWC-17 MCB
DVW-500P(EK) ; SWC-17 MCB

SWC-17B ; Upper panel function (SWs, LEDs)

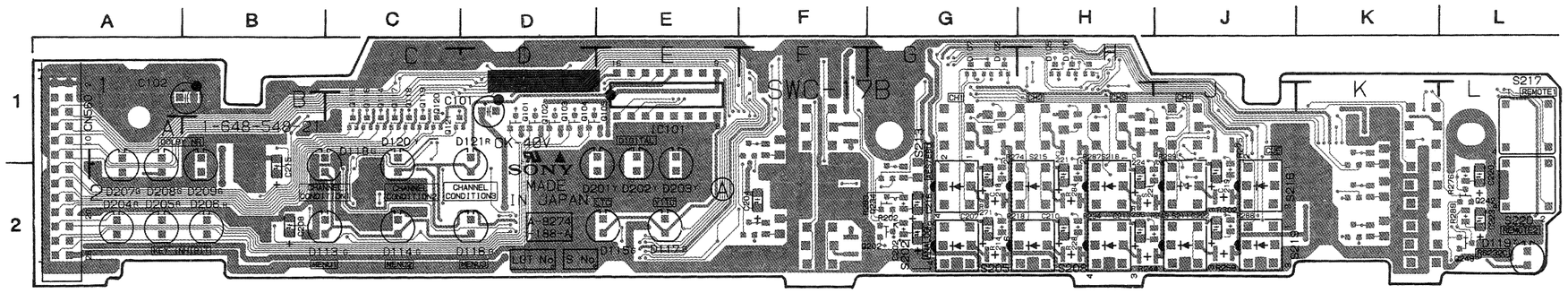
(Board's Lot No. 307 through 402)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

SWC-17B(1-648-548-21)

CN560	A-1	Q202	F-2
		✱Q204	E-1
D102	G-1	✱Q206	G-2
D105	H-1	✱Q208	E-2
D107	G-1	✱Q210	G-2
✱D109	J-1	✱Q212	E-2
D110	H-1	✱Q214	G-2
✱D111	J-1	✱Q216	E-2
✱D112	L-1	✱Q217	B-2
D113	B-2	✱Q219	H-2
D114	C-2	✱Q222	H-2
D115	E-2	✱Q224	B-2
D116	C-2	✱Q225	B-2
D117	E-2	✱Q227	J-2
D118	C-1	✱Q229	B-2
D119	L-2	Q231	H-2
D120	C-1	✱Q233	B-1
D121	C-1	Q234	G-2
D201	D-2	✱Q236	B-2
D202	E-2	✱Q237	G-2
D203	E-2	✱Q239	B-2
D204	A-2	✱Q240	G-2
D205	A-2	✱Q241	J-1
D206	B-2	Q242	L-2
D207	A-2	✱Q243	B-2
D208	A-2	✱Q244	G-2
D209	B-2	✱Q245	J-2
		✱Q246	L-2
IC101	E-1	✱Q247	H-1
		✱Q248	J-2
Q101	D-1	Q249	L-2
Q102	D-1	✱Q250	H-2
Q103	D-1	✱Q251	J-2
Q104	D-1	✱Q252	L-2
Q105	E-1	✱Q253	J-1
✱Q106	C-2	✱Q254	H-2
✱Q107	C-2		
✱Q108	D-2	✱RB101	D-1
✱Q109	E-2	✱RB102	C-1
✱Q110	B-2		
✱Q111	C-2	S202	G-2
✱Q112	D-2	S205	G-2
✱Q113	D-2	S208	H-2
Q114	C-1	S211	J-2
Q115	C-1	S213	G-1
Q116	C-1	S215	H-1
Q117	C-1	S216	J-2
Q118	C-1	S217	L-1
Q119	C-1	S218	H-1
Q120	C-1	S219	J-2
Q121	C-1	S220	L-2
		S221	H-2

✱ : B SIDE

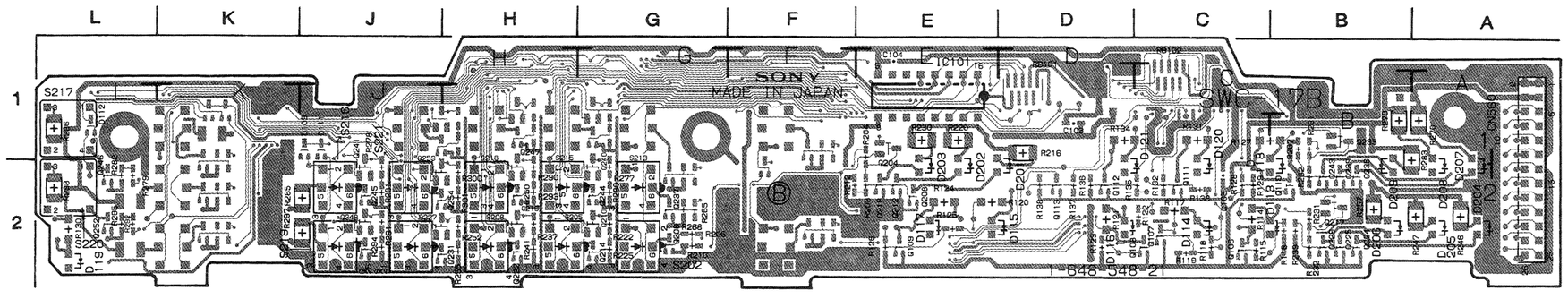
LOT NO. D-2



SWC-17B BOARD -A SIDE-

1-648-548-21 (LOT No. 307 - 402)

DVW-A510(J)	; SWC-17B MCB
DVW-A510(UC)	; SWC-17B MCB
DVW-A510P(EK)	; SWC-17B MCB
DVW-510(J)	; SWC-17B MCB
DVW-510(UC)	; SWC-17B MCB
DVW-510P(EK)	; SWC-17B MCB
DVW-CA510(UC)	; SWC-17B MCB
DVW-CA510P(EK)	; SWC-17B MCB



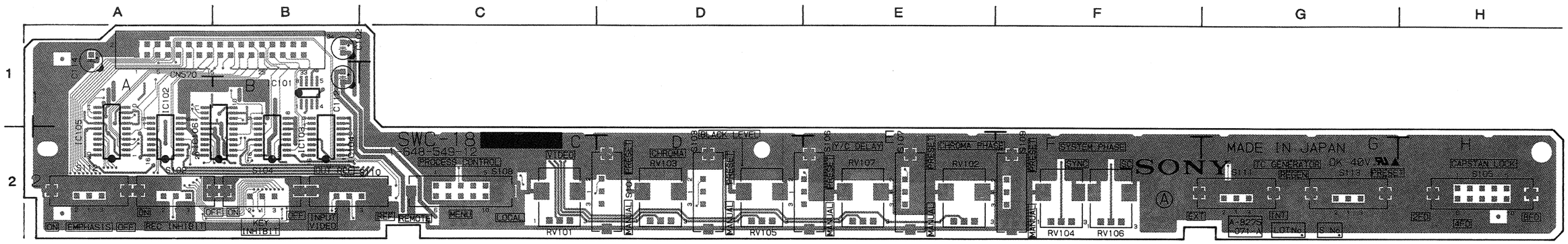
SWC-17B BOARD -B SIDE-

1-648-548-21 (LOT No. 307 - 402)

DVW-A510(J)	; SWC-17B MCB
DVW-A510(UC)	; SWC-17B MCB
DVW-A510P(EK)	; SWC-17B MCB
DVW-510(J)	; SWC-17B MCB
DVW-510(UC)	; SWC-17B MCB
DVW-510P(EK)	; SWC-17B MCB
DVW-CA510(UC)	; SWC-17B MCB
DVW-CA510P(EK)	; SWC-17B MCB

SWC-18 ; Sub control panel function

(Board's Lot No. 307 and higher)
All recorder models



SWC-18(1-648-549-12)

CN570	A-1	IC104	B-2	RV104	F-2	S109	F-2
		IC105	A-2	RV105	D-2	S110	C-2
✱D101	D-1	IC106	A-2	RV106	F-2	S111	G-2
✱D102	A-2			RV107	E-2	S112	A-2
✱D103	E-2	✱Q101	A-1			S113	G-2
✱D104	H-2	✱Q102	A-1	S101	D-2		
✱D105	F-2	✱Q103	A-1	S102	A-2		
✱D106	G-2			S103	D-2		
✱D107	A-2	✱RB101	A-2	S104	B-2		
				S105	H-2		
IC101	B-1	RV101	C-2	S106	E-2		
IC102	A-1	RV102	E-2	S107	E-2		
IC103	B-2	RV103	D-2	S108	C-2		

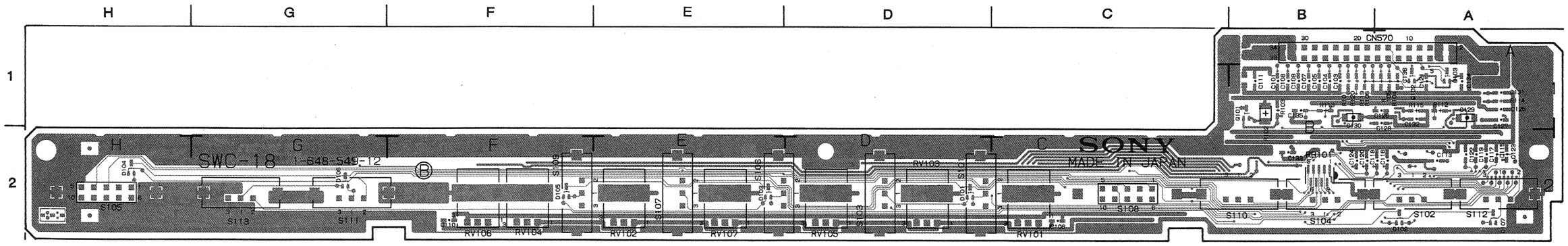
✱ : B SIDE

LOT NO. G-2

SWC-18 BOARD -A SIDE-

1-648-549-12 (LOT No. 307 -)

DVW-A500(J)	; SWC-18A	MCB
DVW-A500(UC)	; SWC-18A	MCB
DVW-A500P(EK)	; SWC-18A	MCB
DVW-A500P(UC)	; SWC-18A	MCB
DVW-500(J)	; SWC-18	MCB
DVW-500(UC)	; SWC-18	MCB
DVW-500P(EK)	; SWC-18	MCB
DVW-500P(UC)	; SWC-18	MCB



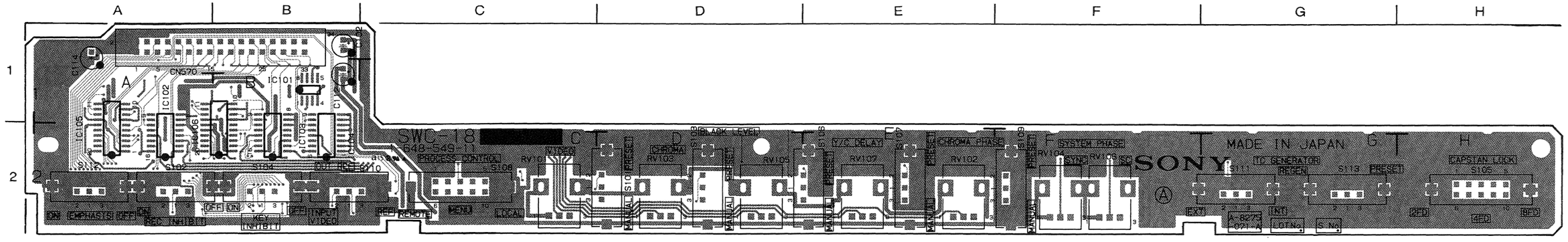
SWC-18 BOARD -B SIDE-

1-648-549-12 (LOT No. 307 -)

DVW-A500(J)	; SWC-18A	MCB
DVW-A500(UC)	; SWC-18A	MCB
DVW-A500P(EK)	; SWC-18A	MCB
DVW-A500P(UC)	; SWC-18A	MCB
DVW-500(J)	; SWC-18	MCB
DVW-500(UC)	; SWC-18	MCB
DVW-500P(EK)	; SWC-18	MCB
DVW-500P(UC)	; SWC-18	MCB

SWC-18 ; Sub control panel function

(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)



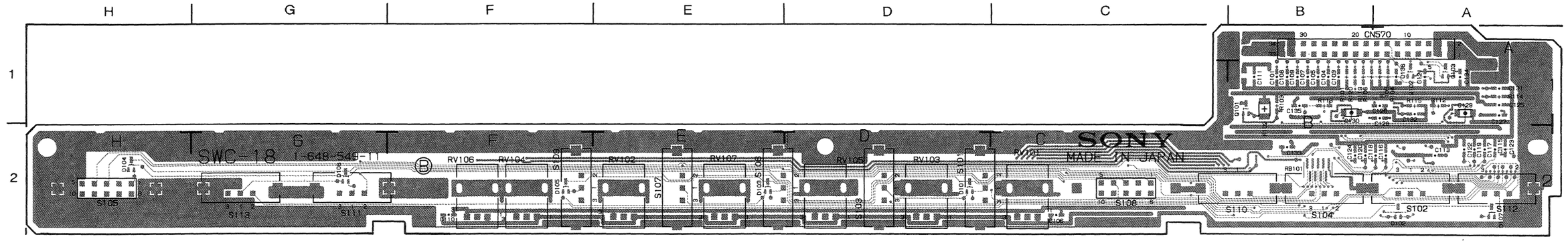
SWC-18(1-648-549-11)

CN570	A-1	IC104	B-2	RV104	F-2	S109	F-2
		IC105	A-2	RV105	D-2	S110	C-2
✱D101	D-1	IC106	A-2	RV106	F-2	S111	G-2
✱D102	A-2			RV107	E-2	S112	A-2
✱D103	E-2	✱Q101	A-1			S113	G-2
✱D104	H-2	✱Q102	A-1	S101	D-2		
✱D105	F-2	✱Q103	A-1	S102	A-2	✱ : B SIDE	
✱D106	G-2			S103	D-2		
✱D107	A-2	✱RB101	A-2	S104	B-2	LOT NO. G-2	
				S105	H-2		
IC101	B-1	RV101	C-2	S106	E-2		
IC102	A-1	RV102	E-2	S107	E-2		
IC103	B-2	RV103	D-2	S108	C-2		

SWC-18 BOARD -A SIDE-

1-648-549-11 (LOT No. 302 - 306)

DVW-A500(J)	; SWC-18A	MCB
DVW-A500(UC)	; SWC-18A	MCB
DVW-A500P(EK)	; SWC-18A	MCB
DVW-A500P(UC)	; SWC-18A	MCB
DVW-500(J)	; SWC-18	MCB
DVW-500(UC)	; SWC-18	MCB
DVW-500P(EK)	; SWC-18	MCB



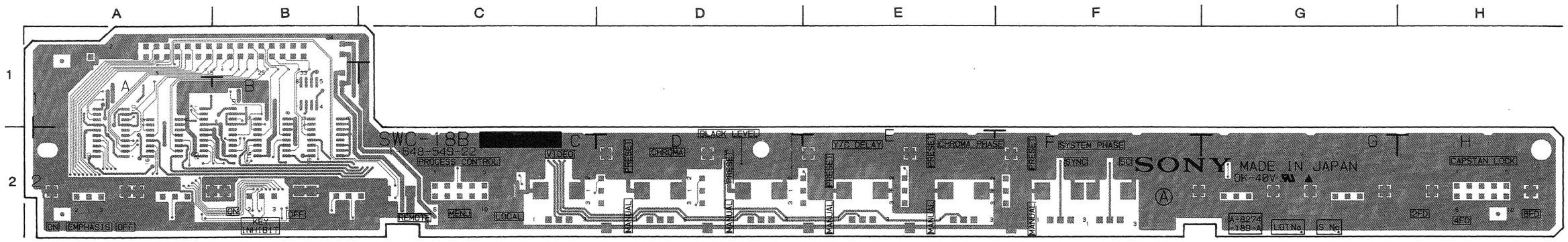
SWC-18 BOARD -B SIDE-

1-648-549-11 (LOT No. 302 - 306)

DVW-A500(J)	; SWC-18A	MCB
DVW-A500(UC)	; SWC-18A	MCB
DVW-A500P(EK)	; SWC-18A	MCB
DVW-A500P(UC)	; SWC-18A	MCB
DVW-500(J)	; SWC-18	MCB
DVW-500(UC)	; SWC-18	MCB
DVW-500P(EK)	; SWC-18	MCB

SWC-18B ; Sub control panel function

(Board's Lot No. 307 and higher)
All player models



SWC-18B BOARD -A SIDE-

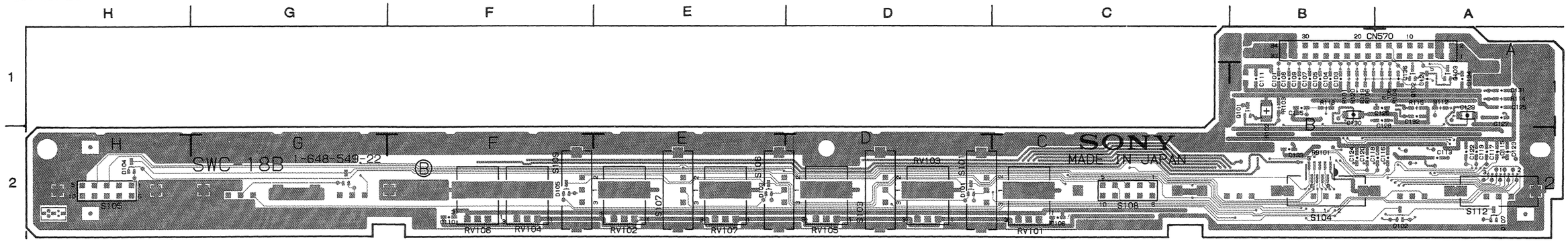
1-648-549-22 (LOT No. 307 -)
DVW-A510(J) ; SWC-18BA MCB
DVW-A510(UC) ; SWC-18BA MCB
DVW-A510P(EK) ; SWC-18BA MCB
DVW-510(J) ; SWC-18B MCB
DVW-510(UC) ; SWC-18B MCB
DVW-510P(EK) ; SWC-18B MCB
DVW-CA510(J) ; SWC-18BA MCB
DVW-CA510(UC) ; SWC-18BA MCB
DVW-CA510P(EK) ; SWC-18BA MCB

SWC-18B(1-648-549-22)

CN570	A-1	IC105	A-2	RV105	D-2
		IC106	A-2	RV106	F-2
✱D101	D-1			RV107	E-2
✱D102	A-2	✱Q101	A-1		
✱D103	E-2	✱Q102	A-1	S101	D-2
✱D104	H-2	✱Q103	A-1	S103	D-2
✱D105	F-2			S104	B-2
✱D107	A-2	✱RB101	A-2	S105	H-2
				S106	E-2
IC101	B-1	RV101	C-2	S107	E-2
IC102	A-1	RV102	E-2	S109	F-2
IC103	B-2	RV103	D-2	S112	A-2
IC104	B-2	RV104	F-2		

✱ : B SIDE

LOT NO. G-2



SWC-18B BOARD -B SIDE-

1-648-549-22 (LOT No. 307 -)
DVW-A510(J) ; SWC-18BA MCB
DVW-A510(UC) ; SWC-18BA MCB
DVW-A510P(EK) ; SWC-18BA MCB
DVW-510(J) ; SWC-18B MCB
DVW-510(UC) ; SWC-18B MCB
DVW-510P(EK) ; SWC-18B MCB
DVW-CA510(J) ; SWC-18BA MCB
DVW-CA510(UC) ; SWC-18BA MCB
DVW-CA510P(EK) ; SWC-18BA MCB

SWC-19 ; System setup panel function control

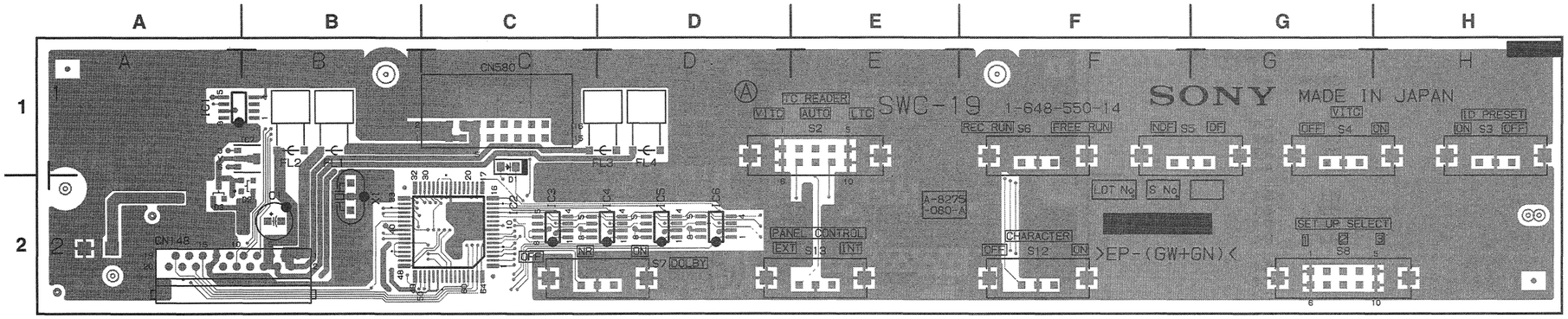
(Board's Lot No. 705 and higher)
All player models

SWC-19(1-648-550-14)

CN148	A-2
CN580	C-1
D1	C-1
D2	B-2
D3	A-2
D4	A-2
FL1	B-1
FL2	B-1
FL3	D-1
FL4	D-1
IC1	B-1
IC2	C-2
IC3	C-2
IC4	D-2
IC5	D-2
IC6	D-2
IC7	B-1
*RB1	C-2
S2	E-1
S3	H-1
S4	G-1
S6	F-1
S7	D-2
S8	G-2
S12	F-2
S13	E-2
X1	B-2

*: B SIDE

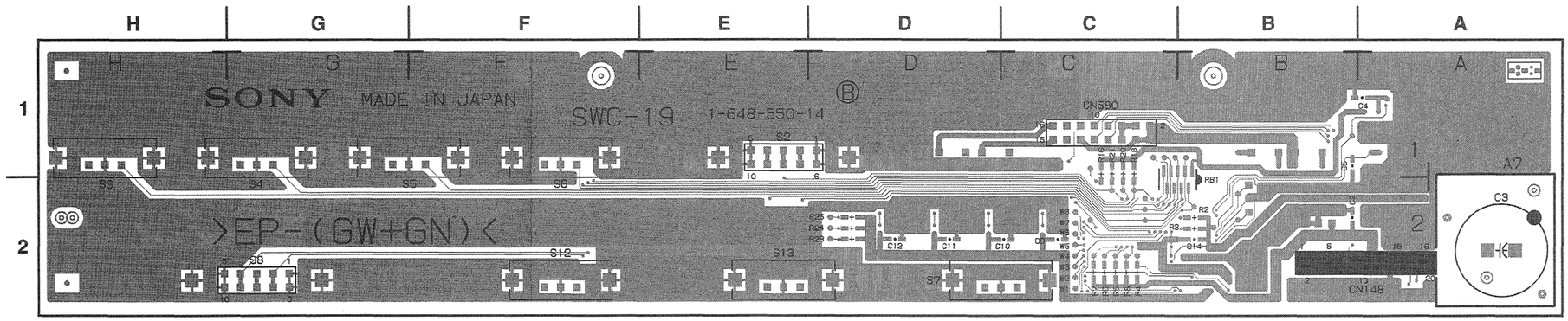
LOT NO. F-2



SWC-19 BOARD -A SIDE-

1-648-550-14 (LOT No. 705 -)

DVW-A500(J)	; SWC-19A	MCB
DVW-A500(UC)	; SWC-19A	MCB
DVW-A500P(EK)	; SWC-19AP	MCB
DVW-A500P(UC)	; SWC-19AP	MCB
DVW-500(J)	; SWC-19	MCB
DVW-500(UC)	; SWC-19	MCB
DVW-500P(EK)	; SWC-19P	MCB
DVW-500P(UC)	; SWC-19P	MCB



SWC-19 BOARD -B SIDE-

1-648-550-14 (LOT No. 705 -)

DVW-A500(J)	; SWC-19A	MCB
DVW-A500(UC)	; SWC-19A	MCB
DVW-A500P(EK)	; SWC-19AP	MCB
DVW-A500P(UC)	; SWC-19AP	MCB
DVW-500(J)	; SWC-19	MCB
DVW-500(UC)	; SWC-19	MCB
DVW-500P(EK)	; SWC-19P	MCB
DVW-500P(UC)	; SWC-19P	MCB

SWC-19 ; System setup panel function control

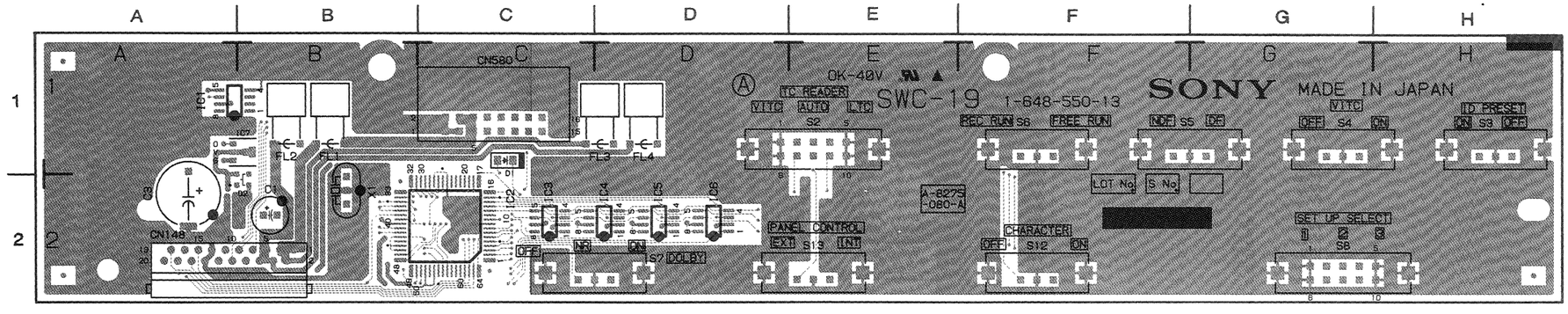
(Board's Lot No. 403 through 704)
All player models

SWC-19(1-648-550-13)

CN148	A-2
CN580	C-1
D1	C-2
D2	B-2
FL1	B-1
FL2	B-1
FL3	D-1
FL4	D-1
IC1	A-1
IC2	C-2
IC3	C-2
IC4	D-2
IC5	D-2
IC6	D-2
IC7	B-1
✱RB1	B-1
S2	E-1
S3	H-1
S4	G-1
S5	F-1
S6	F-1
S7	D-2
S8	G-2
S12	F-2
S13	E-2
X1	B-2

✱: B SIDE

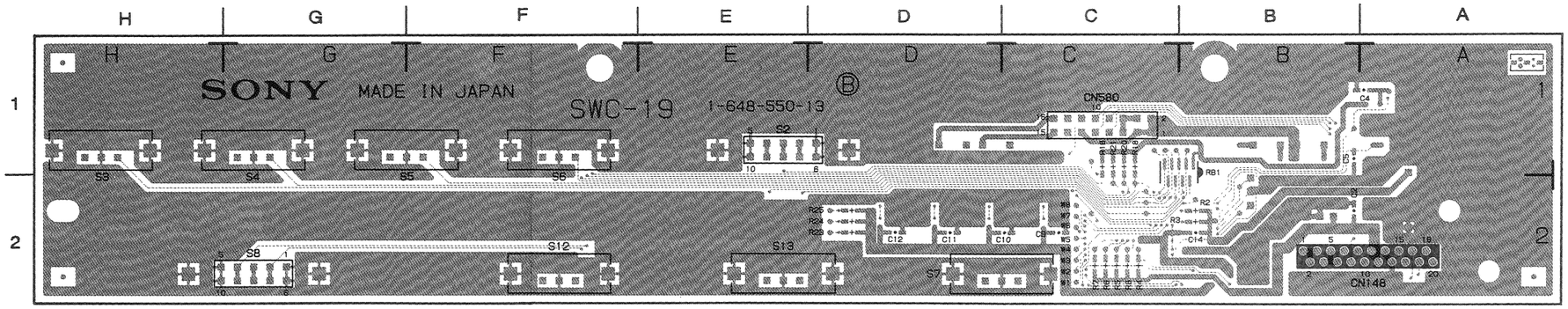
LOT NO. F-2



SWC-19 BOARD -A SIDE-

1-648-550-13 (LOT No. 403 - 704)

DVW-A500(J)	; SWC-19A	MCB
DVW-A500(UC)	; SWC-19A	MCB
DVW-A500P(EK)	; SWC-19AP	MCB
DVW-A500P(UC)	; SWC-19AP	MCB
DVW-500(J)	; SWC-19	MCB
DVW-500(UC)	; SWC-19	MCB
DVW-500P(EK)	; SWC-19P	MCB
DVW-500P(UC)	; SWC-19P	MCB



SWC-19 BOARD -B SIDE-

1-648-550-13 (LOT No. 403 - 704)

DVW-A500(J)	; SWC-19A	MCB
DVW-A500(UC)	; SWC-19A	MCB
DVW-A500P(EK)	; SWC-19AP	MCB
DVW-A500P(UC)	; SWC-19AP	MCB
DVW-500(J)	; SWC-19	MCB
DVW-500(UC)	; SWC-19	MCB
DVW-500P(EK)	; SWC-19P	MCB
DVW-500P(UC)	; SWC-19P	MCB

SWC-19B ; System setup panel function control

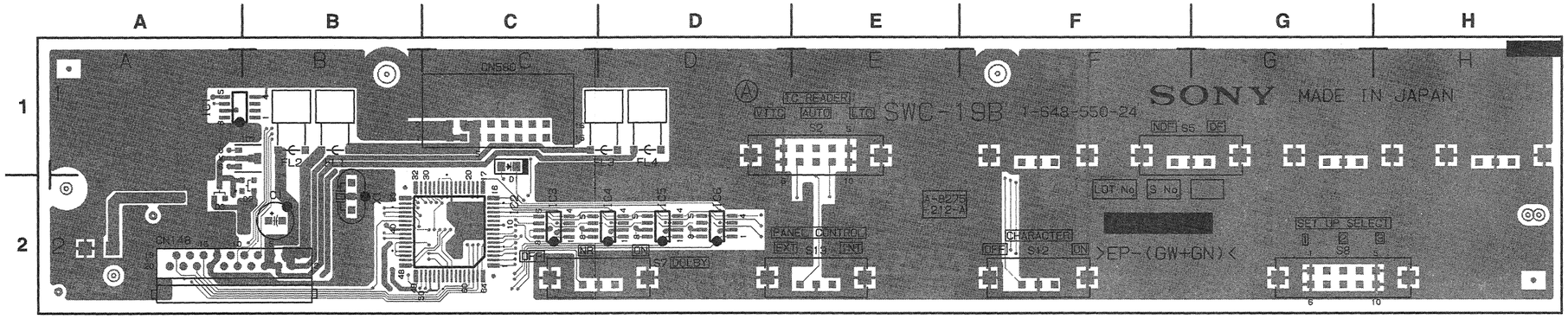
(Board's Lot No. 705 and higher)
All player models

SWC-19B(1-648-550-24)

CN148	A-2
CN580	C-1
D1	C-1
D2	B-2
D3	A-2
D4	A-2
FL1	B-1
FL2	B-1
FL3	D-1
FL4	D-1
IC1	B-1
IC2	C-2
IC3	C-2
IC4	D-2
IC5	D-2
IC6	D-2
IC7	B-1
*RB1	C-2
S2	E-1
S5	G-1
S8	G-2
S12	F-2
S13	E-2
X1	B-2

*: B SIDE

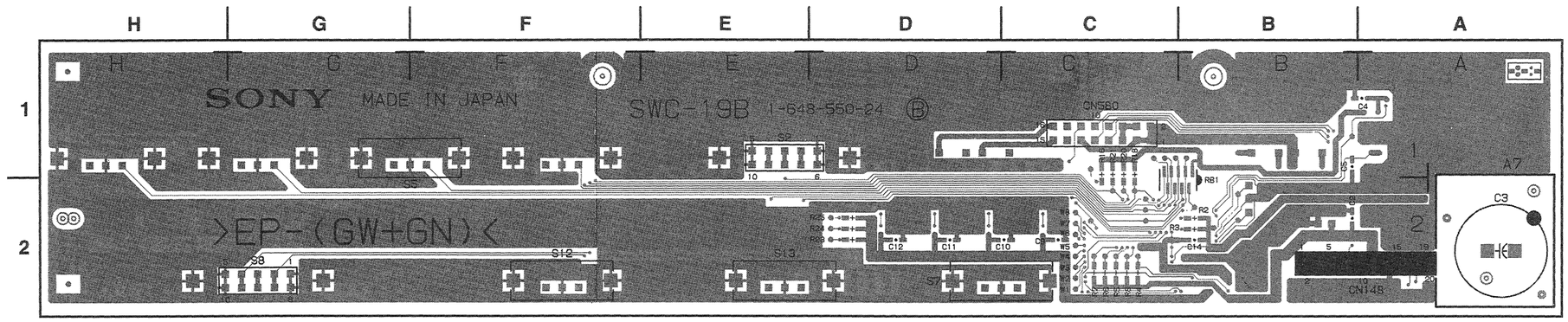
LOT NO. F-2



SWC-19B BOARD -A SIDE-

1-648-550-24 (LOT No. 705 -)

DVW-A510(J)	; SWC-19BA	MCB
DVW-A510(UC)	; SWC-19BA	MCB
DVW-A510P(EK)	; SWC-19BAP	MCB
DVW-510(J)	; SWC-19B	MCB
DVW-510(UC)	; SWC-19B	MCB
DVW-510P(EK)	; SWC-19BP	MCB
DVW-CA510(J)	; SWC-19BA	MCB
DVW-CA510(UC)	; SWC-19BA	MCB
DVW-CA510P(EK)	; SWC-19BAP	MCB



SWC-19B BOARD -B SIDE-

1-648-550-24 (LOT No. 705 -)

DVW-A510(J)	; SWC-19BA	MCB
DVW-A510(UC)	; SWC-19BA	MCB
DVW-A510P(EK)	; SWC-19BAP	MCB
DVW-510(J)	; SWC-19B	MCB
DVW-510(UC)	; SWC-19B	MCB
DVW-510P(EK)	; SWC-19BP	MCB
DVW-CA510(J)	; SWC-19BA	MCB
DVW-CA510(UC)	; SWC-19BA	MCB
DVW-CA510P(EK)	; SWC-19BAP	MCB

SWC-19 ; System setup panel function control

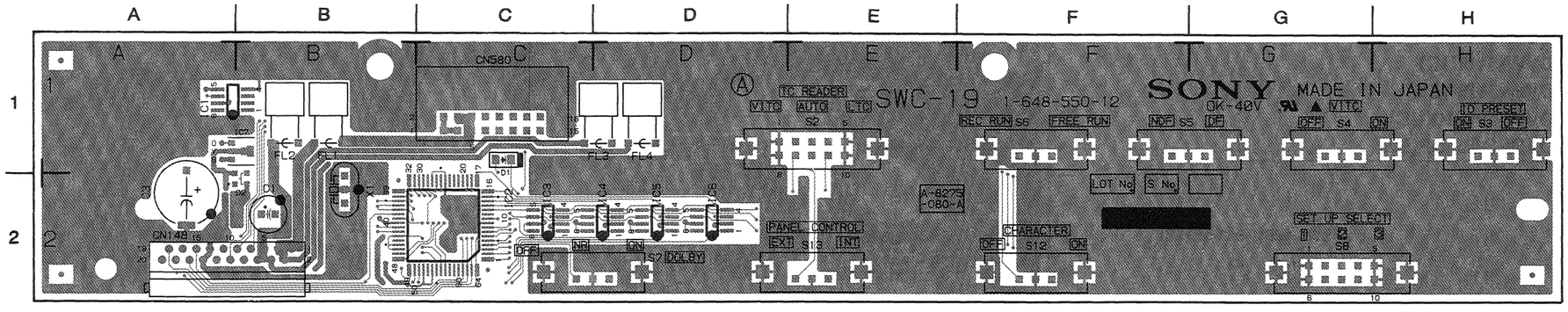
(Board's Lot No. 307 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

SWC-19(1-648-550-12)

CN148	A-2
CN580	C-1
D1	C-2
D2	B-2
FL1	B-1
FL2	B-1
FL3	D-1
FL4	D-1
IC1	A-1
IC2	C-2
IC3	C-2
IC4	D-2
IC5	D-2
IC6	D-2
IC7	B-1
✱RB1	B-1
S2	E-1
S3	H-1
S4	G-1
S5	F-1
S6	F-1
S7	D-2
S8	G-2
S12	F-2
S13	E-2
X1	B-2

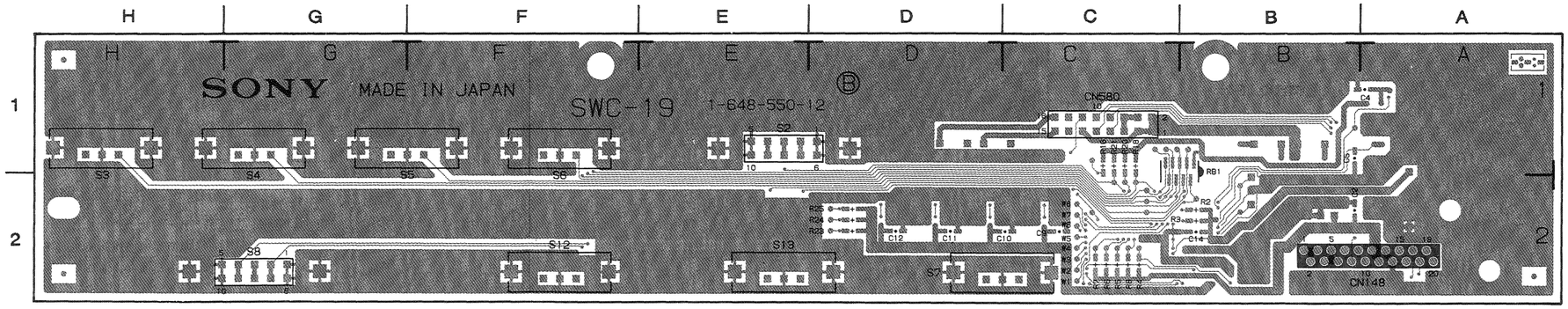
✱ : B SIDE

LOT NO. F-2



SWC-19 BOARD -A SIDE-
1-648-550-12 (LOT No. 307 - 402)

DVW-A500(J)	; SWC-19A MCB
DVW-A500(UC)	; SWC-19A MCB
DVW-A500P(EK)	; SWC-19AP MCB
DVW-500(J)	; SWC-19 MCB
DVW-500(UC)	; SWC-19 MCB
DVW-500P(EK)	; SWC-19P MCB



SWC-19 BOARD -B SIDE-
1-648-550-12 (LOT No. 307 -402)

DVW-A500(J)	; SWC-19A MCB
DVW-A500(UC)	; SWC-19A MCB
DVW-A500P(EK)	; SWC-19AP MCB
DVW-500(J)	; SWC-19 MCB
DVW-500(UC)	; SWC-19 MCB
DVW-500P(EK)	; SWC-19P MCB

SWC-19B ; System setup panel function control

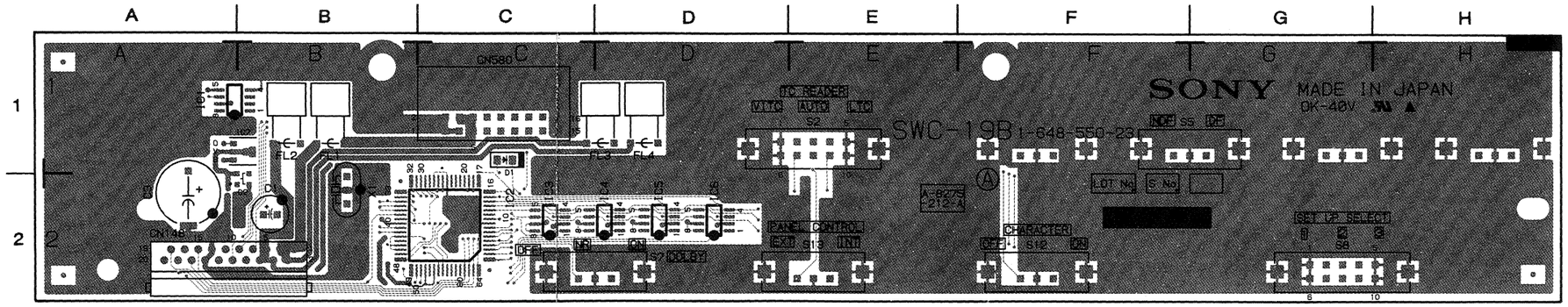
(Board's Lot No. 403 through 704)
All player models

SWC-19B(1-648-550-23)

CN148	A-2
CN580	C-1
D1	C-2
D2	A-2
FL1	B-1
FL2	B-1
FL3	D-1
FL4	D-1
IC1	B-1
IC2	C-2
IC3	C-2
IC4	D-2
IC5	D-2
IC6	D-2
IC7	A-1
✱RB1	B-1
S2	E-1
S5	F-1
S7	D-2
S8	G-2
S12	F-2
S13	E-2
X1	B-2

✱ : B SIDE

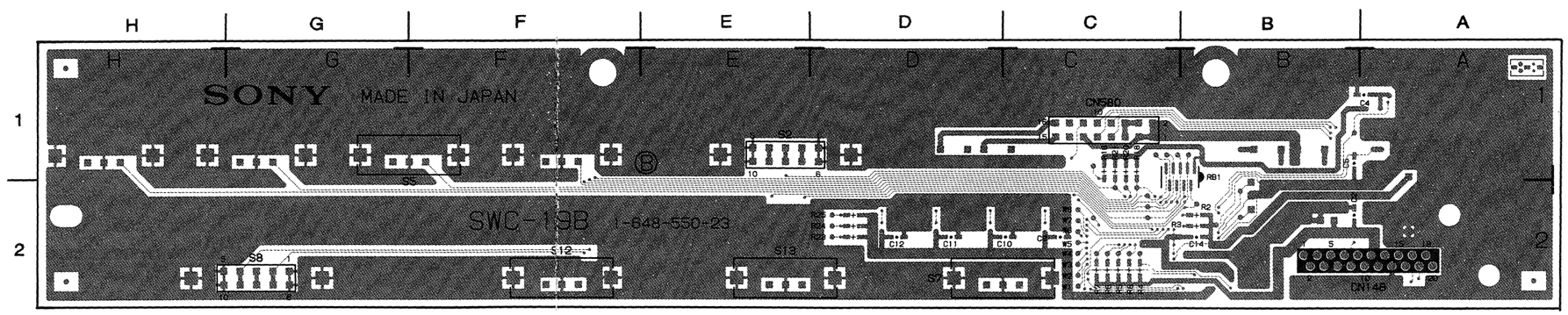
LOT NO. F-2



SWC-19B BOARD -A SIDE-

1-648-550-23 (LOT No. 403 - 704)

DVW-A510(J)	; SWC-19BA	MCB
DVW-A510(UC)	; SWC-19BA	MCB
DVW-A510P(EK)	; SWC-19BAP	MCB
DVW-510(J)	; SWC-19B	MCB
DVW-510(UC)	; SWC-19B	MCB
DVW-510P(EK)	; SWC-19BP	MCB
DVW-CA510(J)	; SWC-19BA	MCB
DVW-CA510(UC)	; SWC-19BA	MCB
DVW-CA510P(EK)	; SWC-19BAP	MCB



SWC-19B BOARD -B SIDE-

1-648-550-23 (LOT No. 403 - 704)

DVW-A510(J)	; SWC-19BA	MCB
DVW-A510(UC)	; SWC-19BA	MCB
DVW-A510P(EK)	; SWC-19BAP	MCB
DVW-510(J)	; SWC-19B	MCB
DVW-510(UC)	; SWC-19B	MCB
DVW-510P(EK)	; SWC-19BP	MCB
DVW-CA510(J)	; SWC-19BA	MCB
DVW-CA510(UC)	; SWC-19BA	MCB
DVW-CA510P(EK)	; SWC-19BAP	MCB

SWC-19 ; System setup panel function control

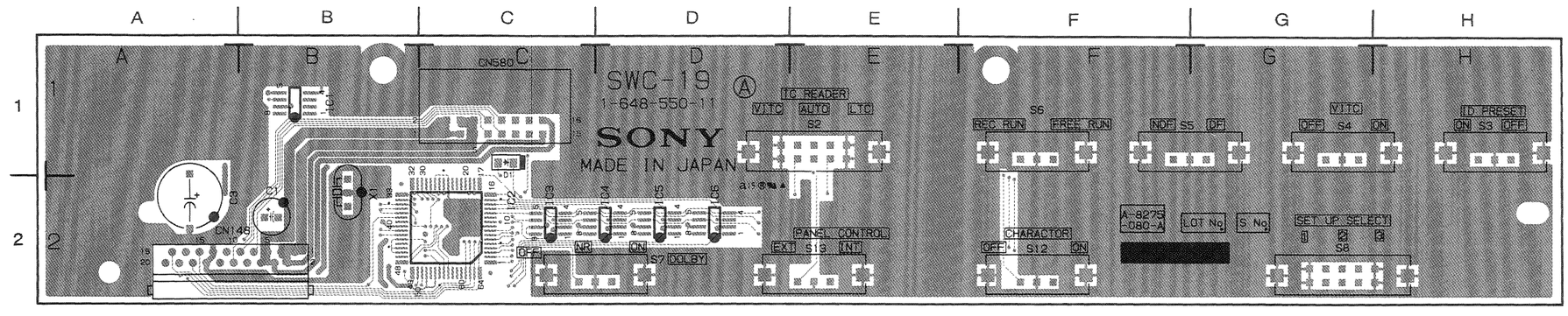
(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

SWC-19(1-648-550-11)

CN148	A-2
CN580	C-1
D1	C-2
✱D2	A-2
IC1	B-1
IC2	C-2
IC3	C-2
IC4	D-2
IC5	D-2
IC6	D-2
✱IC7	B-1
✱RB1	B-1
S2	E-1
S3	H-1
S4	G-1
S5	F-1
S6	F-1
S7	D-2
S8	G-2
S12	F-2
S13	E-2
X1	B-2

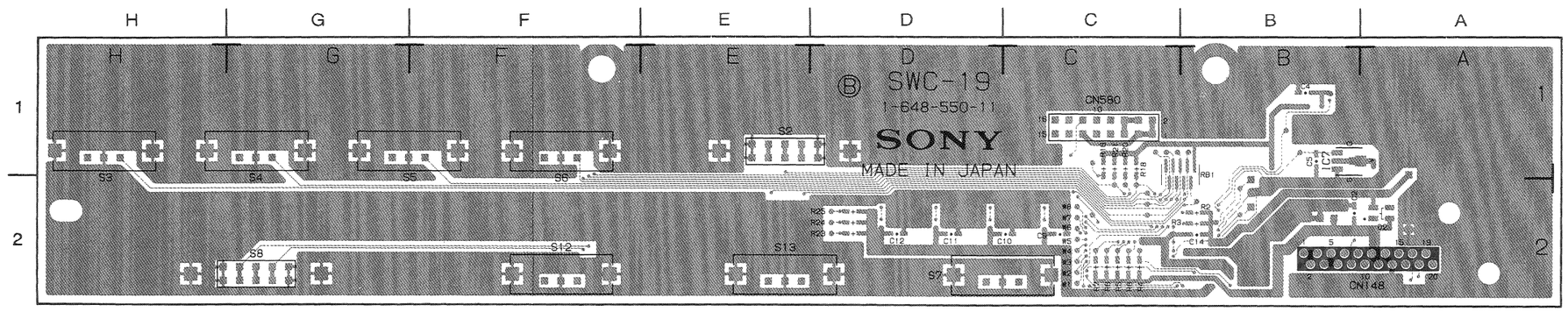
✱ : B SIDE

LOT NO. G-2



SWC-19 BOARD -A SIDE-

1-648-550-11 (LOT No. 302 - 306)
DVW-A500(J) ; SWC-19A MCB
DVW-A500(UC) ; SWC-19A MCB
DVW-A500P(EK) ; SWC-19AP MCB
DVW-A500P(UC) ; SWC-19AP MCB
DVW-500(J) ; SWC-19 MCB
DVW-500(UC) ; SWC-19 MCB
DVW-500P(EK) ; SWC-19P MCB



SWC-19 BOARD -B SIDE-

1-648-550-11 (LOT No. 302 - 306)
DVW-A500(J) ; SWC-19A MCB
DVW-A500(UC) ; SWC-19A MCB
DVW-A500P(EK) ; SWC-19AP MCB
DVW-A500P(UC) ; SWC-19AP MCB
DVW-500(J) ; SWC-19 MCB
DVW-500(UC) ; SWC-19 MCB
DVW-500P(EK) ; SWC-19P MCB

SWC-19B ; System setup panel function control

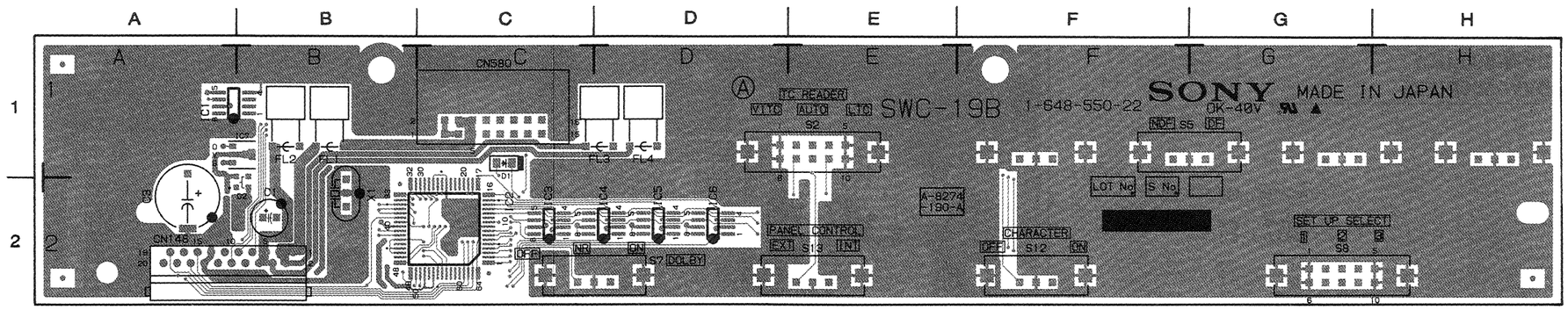
(Board's Lot No. 307 through 402)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

SWC-19B(1-648-550-22)

CN148	A-2
CN580	C-1
D1	C-2
D2	A-2
FL1	B-1
FL2	B-1
FL3	D-1
FL4	D-1
IC1	B-1
IC2	C-2
IC3	C-2
IC4	D-2
IC5	D-2
IC6	D-2
IC7	A-1
✱RB1	B-1
S2	E-1
S5	F-1
S7	D-2
S8	G-2
S12	F-2
S13	E-2
X1	B-2

✱: B SIDE

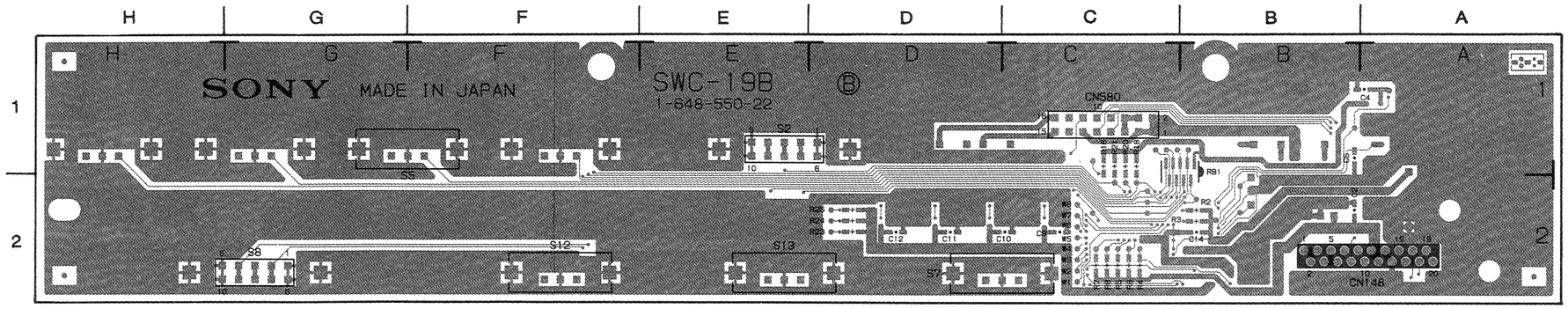
LOT NO. F-2



SWC-19B BOARD -A SIDE-

1-648-550-22 (LOT No. 307 - 402)

DVW-A510(J)	; SWC-19BA	MCB
DVW-A510(UC)	; SWC-19BA	MCB
DVW-A510P(EK)	; SWC-19BAP	MCB
DVW-510(J)	; SWC-19B	MCB
DVW-510(UC)	; SWC-19B	MCB
DVW-510P(EK)	; SWC-19BP	MCB
DVW-CA510(UC)	; SWC-19BA	MCB
DVW-CA510P(EK)	; SWC-19BAP	MCB



SWC-19B BOARD -B SIDE-

1-648-550-22 (LOT No. 307 - 402)

DVW-A510(J)	; SWC-19BA	MCB
DVW-A510(UC)	; SWC-19BA	MCB
DVW-A510P(EK)	; SWC-19BAP	MCB
DVW-510(J)	; SWC-19B	MCB
DVW-510(UC)	; SWC-19B	MCB
DVW-510P(EK)	; SWC-19BP	MCB
DVW-CA510(UC)	; SWC-19BA	MCB
DVW-CA510P(EK)	; SWC-19BAP	MCB

KY-231 ; Lower panel function control

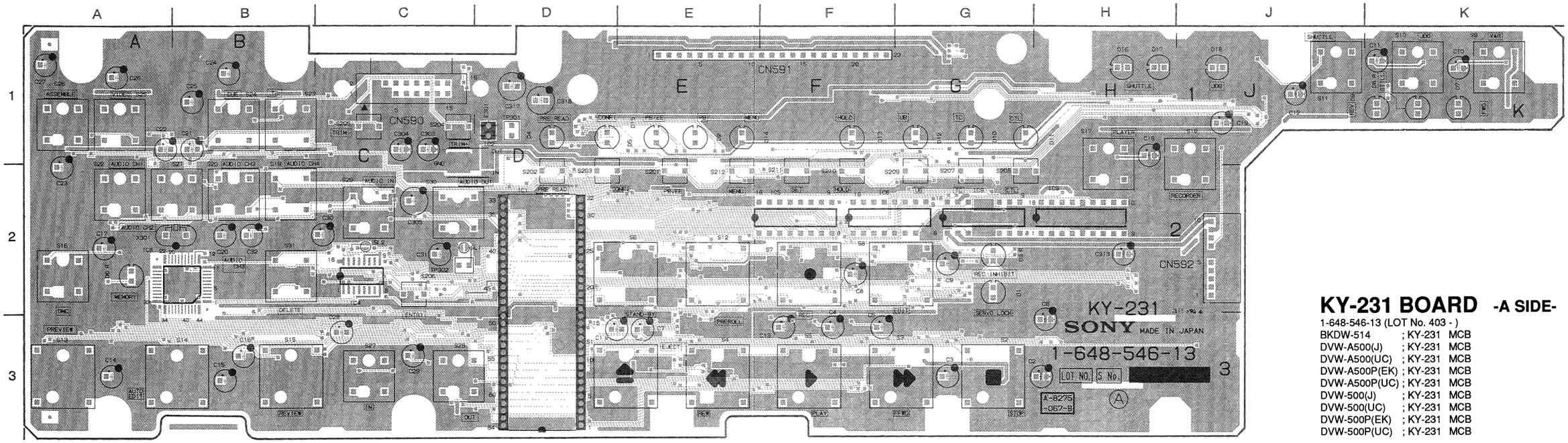
(Board's Lot No. 403 and higher)
All recorder models
BKDW-514

KY-231(1-648-546-13)

CN590	C-1	✱Q22	K-1	✱Q205	C-3
CN592	H-2	✱Q23	J-1	✱Q206	D-3
		✱Q24	J-1	✱Q301	H-2
D1	G-2	✱Q25	E-3	✱Q302	H-2
D2	E-1	✱Q26	F-2		
D3	G-2	✱Q27	A-3	S1	D-3
D4	D-1	✱Q28	A-3	S2	G-3
D5	E-1	✱Q29	B-3	S3	G-3
D6	A-2	✱Q30	A-3	S4	E-3
D7	K-1	✱Q31	B-3	S5	F-3
D8	K-1	✱Q32	B-3	S6	E-2
D9	K-1	✱Q33	A-2	S7	F-2
D10	G-1	✱Q34	A-2	S8	F-2
D11	H-1	✱Q35	H-2	S9	K-1
D12	G-1	✱Q36	H-1	S10	K-1
D13	F-1	✱Q37	J-1	S11	J-1
D14	E-1	✱Q38	H-1	S12	E-2
D15	E-1	✱Q39	B-1	S13	A-3
D16	H-1	✱Q40	B-2	S14	B-3
D17	H-1	✱Q41	B-1	S15	B-3
D18	J-1	✱Q42	B-2	S16	A-2
✱D201	G-3	✱Q43	A-1	S17	H-1
✱D202	F-3	✱Q44	A-2	S18	J-1
✱D203	F-3	✱Q45	A-2	S19	B-1
✱D204	D-2	✱Q46	A-2	S20	B-1
✱D205	F-2	✱Q47	B-1	S21	B-1
✱D206	K-1	✱Q48	B-1	S22	A-1
✱D207	K-1	✱Q49	A-1	S23	B-1
✱D208	D-2	✱Q50	B-1	S24	B-1
✱D209	A-3	✱Q51	A-1	S25	A-1
✱D210	A-3	✱Q52	A-1	S26	A-1
✱D211	C-1	✱Q53	A-1	S27	C-3
✱D212	H-1	✱Q54	A-1	S28	C-3
✱D213	B-2	✱Q55	C-3	S29	C-2
✱D214	A-2	✱Q56	C-3	S30	C-2
✱D215	B-1	✱Q57	C-3	S31	B-2
✱D216	A-1	✱Q58	C-3	S201	E-2
✱D217	C-3	✱Q59	C-2	S202	D-2
✱D218	C-2	✱Q60	C-2	S203	D-2
✱D219	B-2	✱Q61	C-2	S204	C-1
✱D220	G-2	✱Q62	C-2	S205	C-1
✱D221	F-2	✱Q63	B-2	S206	C-2
✱D222	F-1	✱Q64	B-2	S207	G-2
✱D301	H-2	✱Q65	E-3	S208	G-2
		✱Q66	E-3	S209	F-2
E301	D-1	✱Q67	E-3	S210	F-2
		✱Q68	E-3	S211	F-2
IC1	D-2	✱Q69	E-2	S212	E-2
IC3	H-2	✱Q70	E-2		
IC4	C-2	✱Q71	E-2	SL1	C-2
IC5	F-2	✱Q72	E-2	SL2	C-2
IC6	F-2	✱Q73	E-3		
IC8	A-2	✱Q74	E-3	TP301	D-1
IC9	G-2	✱Q75	E-3	TP302	C-2
		✱Q76	E-3		
✱Q1	D-3	✱Q78	E-2	X301	A-2
✱Q2	D-3	✱Q79	E-2		
✱Q3	G-3	✱Q80	E-2		
✱Q4	G-3	✱Q151	D-3		
✱Q5	G-3	✱Q152	D-3		
✱Q6	F-3	✱Q153	D-3		
✱Q7	F-3	✱Q154	D-3		
✱Q8	F-3	✱Q155	D-3		
✱Q9	F-3	✱Q156	D-3		
✱Q10	F-3	✱Q157	D-3		
✱Q11	G-2	✱Q158	E-1		
✱Q12	G-3	✱Q159	E-1		
✱Q13	E-3	✱Q160	E-1		
✱Q14	E-2	✱Q161	E-1		
✱Q15	F-2	✱Q162	E-1		
✱Q16	F-2	✱Q163	E-1		
✱Q17	G-2	✱Q164	F-1		
✱Q18	F-2	✱Q201	D-2		
✱Q19	K-1	✱Q202	D-2		
✱Q20	K-1	✱Q203	D-3		
✱Q21	K-1	✱Q204	D-3		

✱ : B SIDE

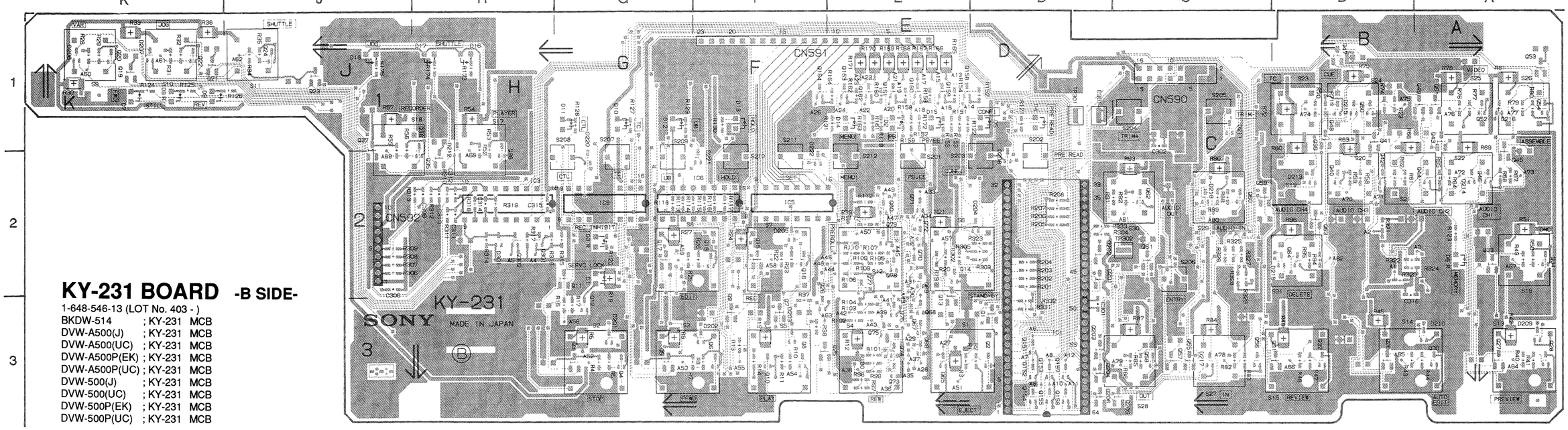
LOT NO. H-3



KY-231 BOARD -A SIDE-

1-648-546-13 (LOT No. 403 -)

BKDW-514	; KY-231	MCB
DVW-A500(J)	; KY-231	MCB
DVW-A500(UC)	; KY-231	MCB
DVW-A500P(EK)	; KY-231	MCB
DVW-A500P(UC)	; KY-231	MCB
DVW-500(J)	; KY-231	MCB
DVW-500(UC)	; KY-231	MCB
DVW-500P(EK)	; KY-231	MCB
DVW-500P(UC)	; KY-231	MCB



KY-231 BOARD -B SIDE-

1-648-546-13 (LOT No. 403 -)

BKDW-514	; KY-231	MCB
DVW-A500(J)	; KY-231	MCB
DVW-A500(UC)	; KY-231	MCB
DVW-A500P(EK)	; KY-231	MCB
DVW-A500P(UC)	; KY-231	MCB
DVW-500(J)	; KY-231	MCB
DVW-500(UC)	; KY-231	MCB
DVW-500P(EK)	; KY-231	MCB
DVW-500P(UC)	; KY-231	MCB

KY-231 ; Lower panel function control

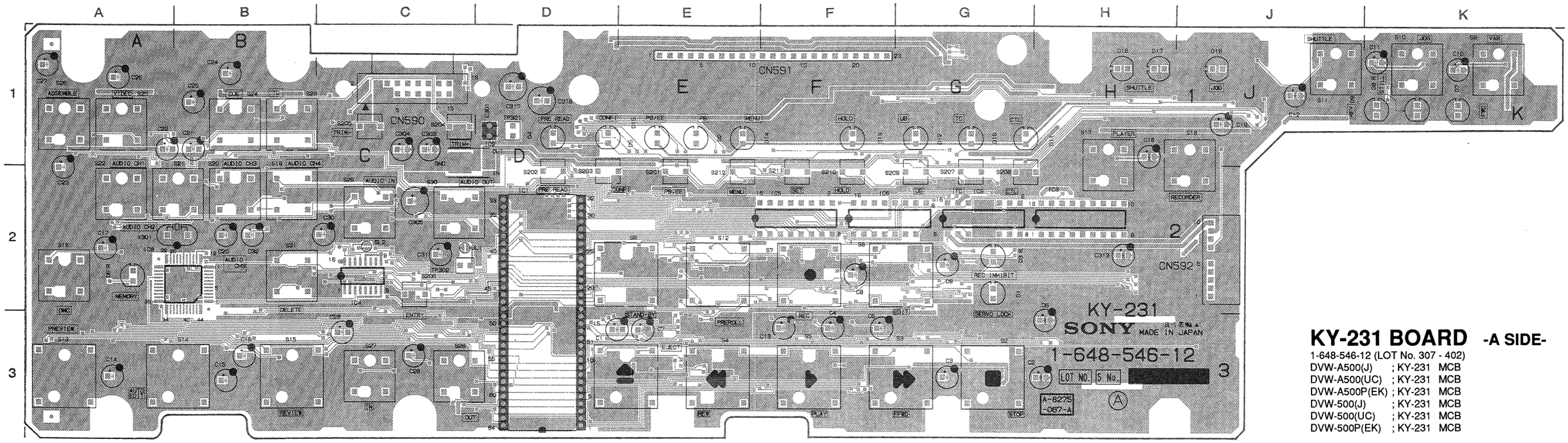
(Board's Lot No. 307 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

KY-231(1-648-546-12)

CN590	C-1	✱Q22	K-1	✱Q205	C-3
CN592	H-2	✱Q23	J-1	✱Q206	D-3
		✱Q24	J-1	✱Q301	H-2
D1	G-2	✱Q25	E-3	✱Q302	H-2
D2	E-1	✱Q26	F-2		
D3	G-2	✱Q27	A-3	S1	D-3
D4	D-1	✱Q28	A-3	S2	G-3
D5	E-1	✱Q29	B-3	S3	G-3
D6	A-2	✱Q30	A-3	S4	E-3
D7	K-1	✱Q31	B-3	S5	F-3
D8	K-1	✱Q32	B-3	S6	E-2
D9	K-1	✱Q33	A-2	S7	F-2
D10	G-1	✱Q34	A-2	S8	F-2
D11	H-1	✱Q35	H-2	S9	K-1
D12	G-1	✱Q36	H-1	S10	K-1
D13	F-1	✱Q37	J-1	S11	J-1
D14	E-1	✱Q38	H-1	S12	E-2
D15	E-1	✱Q39	B-1	S13	A-3
D16	H-1	✱Q40	B-2	S14	B-3
D17	H-1	✱Q41	B-1	S15	B-3
D18	J-1	✱Q42	B-2	S16	A-2
✱D201	G-3	✱Q43	A-1	S17	H-1
✱D202	F-3	✱Q44	A-2	S18	J-1
✱D203	F-3	✱Q45	A-2	S19	B-1
✱D204	D-2	✱Q46	A-2	S20	B-1
✱D205	F-2	✱Q47	B-1	S21	B-1
✱D206	K-1	✱Q48	B-1	S22	A-1
✱D207	K-1	✱Q49	A-1	S23	B-1
✱D208	D-2	✱Q50	B-1	S24	B-1
✱D209	A-3	✱Q51	A-1	S25	A-1
✱D210	A-3	✱Q52	A-1	S26	A-1
✱D211	C-1	✱Q53	A-1	S27	C-3
✱D212	H-1	✱Q54	A-1	S28	C-3
✱D213	B-2	✱Q55	C-3	S29	C-2
✱D214	A-2	✱Q56	C-3	S30	C-2
✱D215	B-1	✱Q57	C-3	S31	B-2
✱D216	A-1	✱Q58	C-3	S201	E-2
✱D217	C-3	✱Q59	C-2	S202	D-2
✱D218	C-2	✱Q60	C-2	S203	D-2
✱D219	B-2	✱Q61	C-2	S204	C-1
✱D220	G-2	✱Q62	C-2	S205	C-1
✱D221	F-2	✱Q63	B-2	S206	C-2
✱D222	F-1	✱Q64	B-2	S207	G-2
✱D301	H-2	✱Q65	E-3	S208	G-2
		✱Q66	E-3	S209	F-2
E301	D-1	✱Q67	E-3	S210	F-2
		✱Q68	E-3	S211	F-2
IC1	D-2	✱Q69	E-2	S212	E-2
IC3	H-2	✱Q70	E-2		
IC4	C-2	✱Q71	E-2	SL1	C-2
IC5	F-2	✱Q72	E-2	SL2	C-2
IC6	F-2	✱Q73	E-3		
IC8	A-2	✱Q74	E-3	TP301	D-1
IC9	G-2	✱Q75	E-3	TP302	C-2
		✱Q76	E-3		
✱Q1	D-3	✱Q78	E-2	X301	A-2
✱Q2	D-3	✱Q79	E-2		
✱Q3	G-3	✱Q80	E-2		
✱Q4	G-3	✱Q151	D-3		
✱Q5	G-3	✱Q152	D-3		
✱Q6	F-3	✱Q153	D-3		
✱Q7	F-3	✱Q154	D-3		
✱Q8	F-3	✱Q155	D-3		
✱Q9	F-3	✱Q156	D-3		
✱Q10	F-3	✱Q157	D-3		
✱Q11	G-2	✱Q158	E-1		
✱Q12	G-3	✱Q159	E-1		
✱Q13	E-3	✱Q160	E-1		
✱Q14	E-2	✱Q161	E-1		
✱Q15	F-2	✱Q162	E-1		
✱Q16	F-2	✱Q163	E-1		
✱Q17	G-2	✱Q164	F-1		
✱Q18	F-2	✱Q201	D-2		
✱Q19	K-1	✱Q202	D-2		
✱Q20	K-1	✱Q203	D-3		
✱Q21	K-1	✱Q204	D-3		

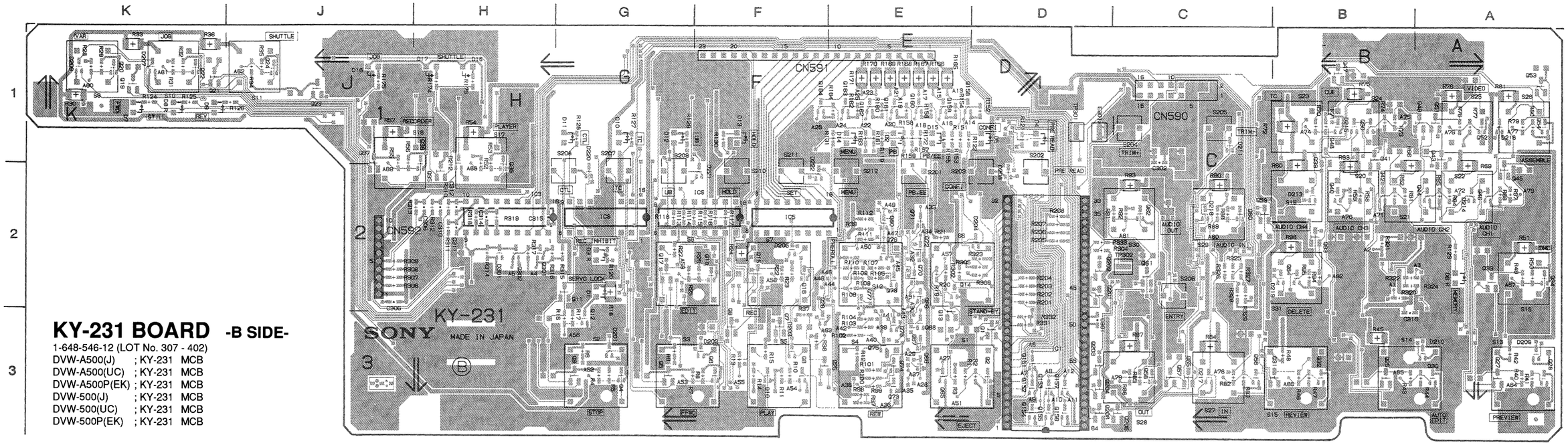
✱ : B SIDE

LOT NO. H-3



KY-231 BOARD **-A SIDE-**

1-648-546-12 (LOT No. 307 - 402)
DVW-A500(J) ; KY-231 MCB
DVW-A500(UC) ; KY-231 MCB
DVW-A500P(EK) ; KY-231 MCB
DVW-500(J) ; KY-231 MCB
DVW-500(UC) ; KY-231 MCB
DVW-500P(EK) ; KY-231 MCB



KY-231 BOARD **-B SIDE-**

1-648-546-12 (LOT No. 307 - 402)
DVW-A500(J) ; KY-231 MCB
DVW-A500(UC) ; KY-231 MCB
DVW-A500P(EK) ; KY-231 MCB
DVW-500(J) ; KY-231 MCB
DVW-500(UC) ; KY-231 MCB
DVW-500P(EK) ; KY-231 MCB

KY-231 ; Lower panel function control

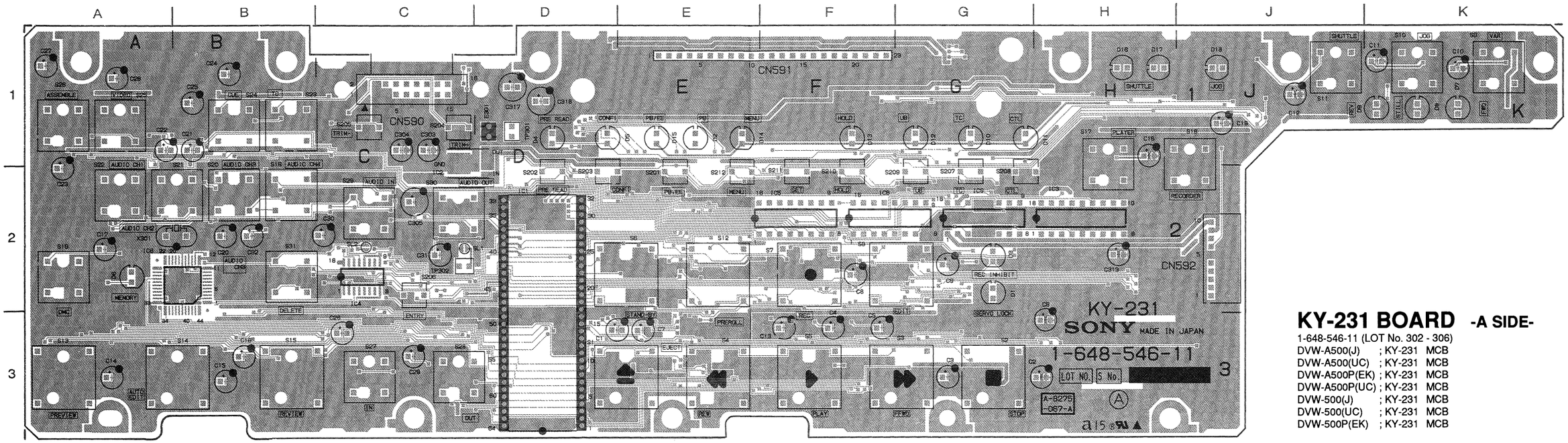
(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

KY-231(1-648-546-11)

CN590	C-1	✱Q22	K-1	✱Q205	C-3
CN592	H-2	✱Q23	J-1	✱Q206	D-3
		✱Q24	J-1	✱Q301	H-2
D1	G-2	✱Q25	E-3	✱Q302	H-2
D2	E-1	✱Q26	F-2		
D3	G-2	✱Q27	A-3	S1	D-3
D4	D-1	✱Q28	A-3	S2	G-3
D5	E-1	✱Q29	B-3	S3	G-3
D6	A-2	✱Q30	A-3	S4	E-3
D7	K-1	✱Q31	B-3	S5	F-3
D8	K-1	✱Q32	B-3	S6	E-2
D9	K-1	✱Q33	A-2	S7	F-2
D10	G-1	✱Q34	A-2	S8	F-2
D11	H-1	✱Q35	H-2	S9	K-1
D12	G-1	✱Q36	H-1	S10	K-1
D13	F-1	✱Q37	J-1	S11	J-1
D14	E-1	✱Q38	H-1	S12	E-2
D15	E-1	✱Q39	B-1	S13	A-3
D16	H-1	✱Q40	B-2	S14	B-3
D17	H-1	✱Q41	B-1	S15	B-3
D18	J-1	✱Q42	B-2	S16	A-2
✱D201	G-3	✱Q43	A-1	S17	H-1
✱D202	F-3	✱Q44	A-2	S18	J-1
✱D203	F-3	✱Q45	A-2	S19	B-1
✱D204	D-2	✱Q46	A-2	S20	B-1
✱D205	F-2	✱Q47	B-1	S21	B-1
✱D206	K-1	✱Q48	B-1	S22	A-1
✱D207	K-1	✱Q49	A-1	S23	B-1
✱D208	D-2	✱Q50	B-1	S24	B-1
✱D209	A-3	✱Q51	A-1	S25	A-1
✱D210	A-3	✱Q52	A-1	S26	A-1
✱D211	C-1	✱Q53	A-1	S27	C-3
✱D212	H-1	✱Q54	A-1	S28	C-3
✱D213	B-2	✱Q55	C-3	S29	C-2
✱D214	A-2	✱Q56	C-3	S30	C-2
✱D215	B-1	✱Q57	C-3	S31	B-2
✱D216	A-1	✱Q58	C-3	S201	E-2
✱D217	C-3	✱Q59	C-2	S202	D-2
✱D218	C-2	✱Q60	C-2	S203	D-2
✱D219	B-2	✱Q61	C-2	S204	C-1
✱D220	G-2	✱Q62	C-2	S205	C-1
✱D221	F-2	✱Q63	B-2	S206	C-2
✱D222	F-1	✱Q64	B-2	S207	G-2
✱D301	H-2	✱Q65	E-3	S208	G-2
		✱Q66	E-3	S209	F-2
E301	D-1	✱Q67	E-3	S210	F-2
		✱Q68	E-3	S211	F-2
IC1	D-2	✱Q69	E-2	S212	E-2
IC3	H-2	✱Q70	E-2		
IC4	C-2	✱Q71	E-2	SL1	C-2
IC5	F-2	✱Q72	E-2	SL2	C-2
IC6	F-2	✱Q73	E-3		
IC8	A-2	✱Q74	E-3	TP301	D-1
IC9	G-2	✱Q75	E-3	TP302	C-2
		✱Q76	E-3		
✱Q1	D-3	✱Q78	E-2	X301	A-2
✱Q2	D-3	✱Q79	E-2		
✱Q3	G-3	✱Q80	E-2		
✱Q4	G-3	✱Q151	D-3		
✱Q5	G-3	✱Q152	D-3		
✱Q6	F-3	✱Q153	D-3		
✱Q7	F-3	✱Q154	D-3		
✱Q8	F-3	✱Q155	D-3		
✱Q9	F-3	✱Q156	D-3		
✱Q10	F-3	✱Q157	D-3		
✱Q11	G-2	✱Q158	E-1		
✱Q12	G-3	✱Q159	E-1		
✱Q13	E-3	✱Q160	E-1		
✱Q14	E-2	✱Q161	E-1		
✱Q15	F-2	✱Q162	E-1		
✱Q16	F-2	✱Q163	E-1		
✱Q17	G-2	✱Q164	F-1		
✱Q18	F-2	✱Q201	D-2		
✱Q19	K-1	✱Q202	D-2		
✱Q20	K-1	✱Q203	D-3		
✱Q21	K-1	✱Q204	D-3		

✱ : B SIDE

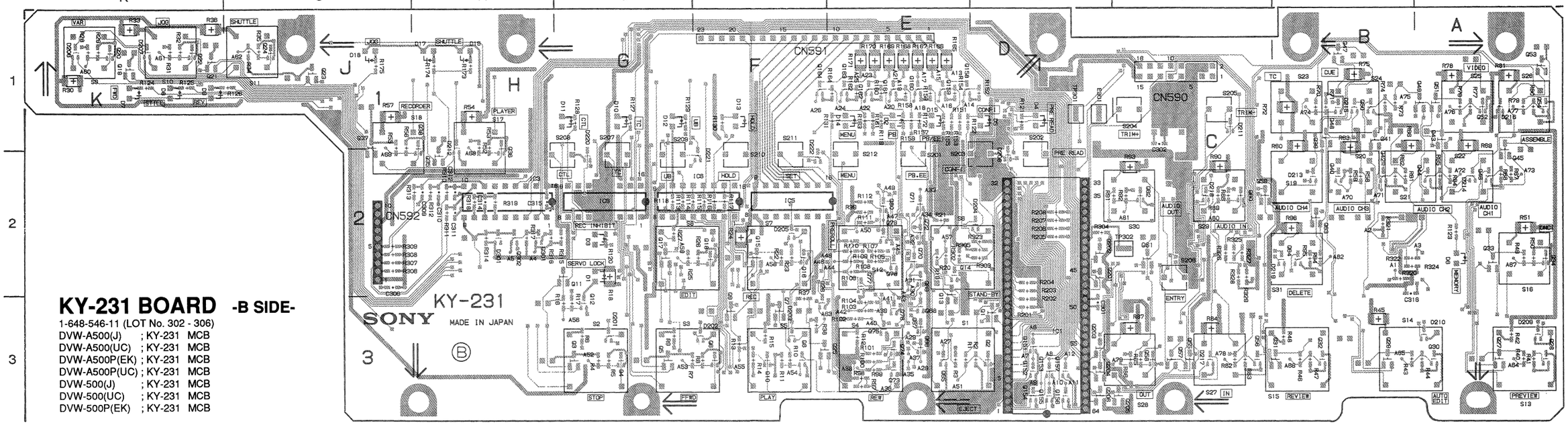
LOT NO. H-3



KY-231 BOARD -A SIDE-

1-648-546-11 (LOT No. 302 - 306)

DVW-A500(J)	; KY-231	MCB
DVW-A500(UC)	; KY-231	MCB
DVW-A500P(EK)	; KY-231	MCB
DVW-A500P(UC)	; KY-231	MCB
DVW-500(J)	; KY-231	MCB
DVW-500(UC)	; KY-231	MCB
DVW-500P(EK)	; KY-231	MCB



KY-231 BOARD -B SIDE-

1-648-546-11 (LOT No. 302 - 306)

DVW-A500(J)	; KY-231	MCB
DVW-A500(UC)	; KY-231	MCB
DVW-A500P(EK)	; KY-231	MCB
DVW-A500P(UC)	; KY-231	MCB
DVW-500(J)	; KY-231	MCB
DVW-500(UC)	; KY-231	MCB
DVW-500P(EK)	; KY-231	MCB

KY-231B ; Lower panel function control

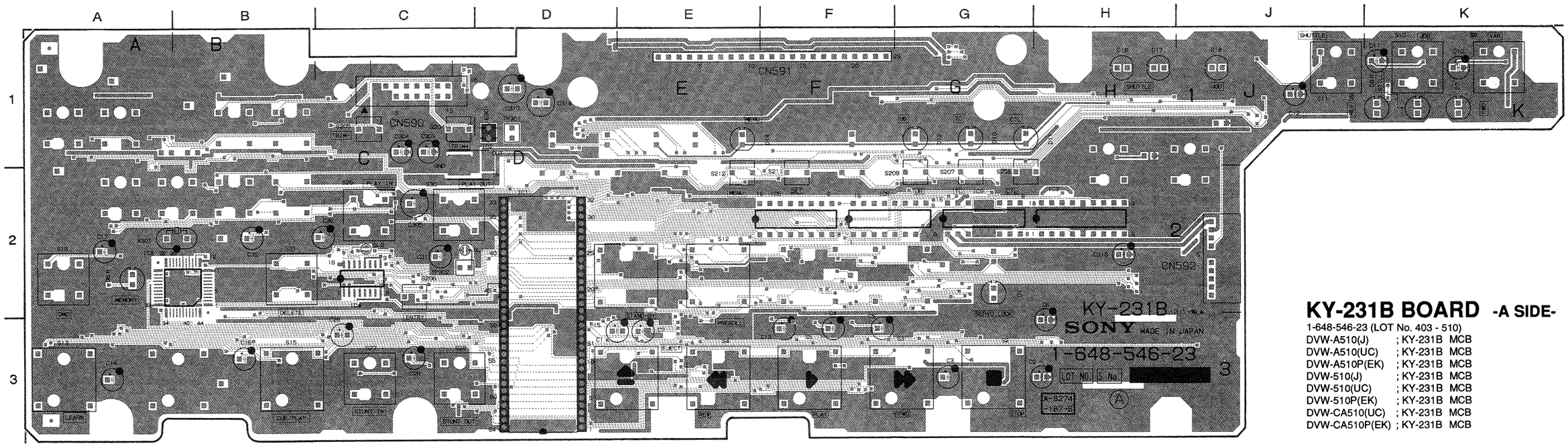
(Board's Lot No. 403 through 510)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

KY-231B(1-648-546-23)

CN590	C-1	✱Q61	C-2
CN592	H-2	✱Q62	C-2
		✱Q63	B-2
D1	G-2	✱Q64	B-2
D6	A-2	✱Q65	E-3
D7	K-1	✱Q66	E-3
D8	K-1	✱Q67	E-3
D9	K-1	✱Q68	E-3
D10	G-1	✱Q69	E-2
D11	H-1	✱Q70	E-2
D12	G-1	✱Q71	E-2
D14	E-1	✱Q72	E-2
D16	H-1	✱Q73	E-3
D17	H-1	✱Q74	E-3
D18	J-1	✱Q75	E-3
✱D201	G-3	✱Q76	E-3
✱D202	F-3	✱Q78	E-2
✱D203	F-3	✱Q79	E-2
✱D204	D-2	✱Q80	E-2
✱D206	K-1	✱Q151	D-3
✱D207	K-1	✱Q152	D-3
✱D209	A-3	✱Q153	D-3
✱D210	A-3	✱Q154	D-3
✱D211	C-1	✱Q155	D-3
✱D217	C-3	✱Q156	D-3
✱D218	C-2	✱Q157	D-3
✱D219	B-2	✱Q158	E-1
✱D220	G-2	✱Q159	E-1
✱D221	F-2	✱Q160	E-1
✱D222	F-1	✱Q161	E-1
✱D301	H-2	✱Q162	E-1
		✱Q163	E-1
E301	D-1	✱Q164	F-1
		✱Q201	D-2
IC1	D-2	✱Q202	D-2
IC3	H-2	✱Q203	D-3
IC4	C-2	✱Q204	D-3
IC5	F-2	✱Q205	C-3
IC6	F-2	✱Q206	D-3
IC8	A-2	✱Q301	H-2
IC9	G-2	✱Q302	H-2
✱Q1	D-3	S1	D-3
✱Q2	D-3	S2	G-3
✱Q3	G-3	S3	G-3
✱Q4	G-3	S4	E-3
✱Q5	G-3	S5	F-3
✱Q6	F-3	S6	E-2
✱Q7	F-3	S9	K-1
✱Q8	F-3	S10	K-1
✱Q9	F-3	S11	J-1
✱Q10	F-3	S12	E-2
✱Q11	G-2	S13	A-3
✱Q12	G-3	S15	B-3
✱Q13	E-3	S16	A-2
✱Q14	E-2	S27	C-3
✱Q19	K-1	S28	C-3
✱Q20	K-1	S29	C-2
✱Q21	K-1	S30	C-2
✱Q22	K-1	S31	B-2
✱Q23	J-1	S204	C-1
✱Q24	J-1	S205	C-1
✱Q25	E-3	S206	C-2
✱Q26	F-2	S207	G-2
✱Q27	A-3	S208	G-2
✱Q28	A-3	S209	F-2
✱Q31	B-3	S211	F-2
✱Q32	B-3	S212	E-2
✱Q33	A-2		
✱Q34	A-2	SL1	C-2
✱Q55	C-3	SL2	C-2
✱Q56	C-3		
✱Q57	C-3	TP301	D-1
✱Q58	C-3	TP302	C-2
✱Q59	C-2		
✱Q60	C-2	X301	A-2

✱ : B SIDE

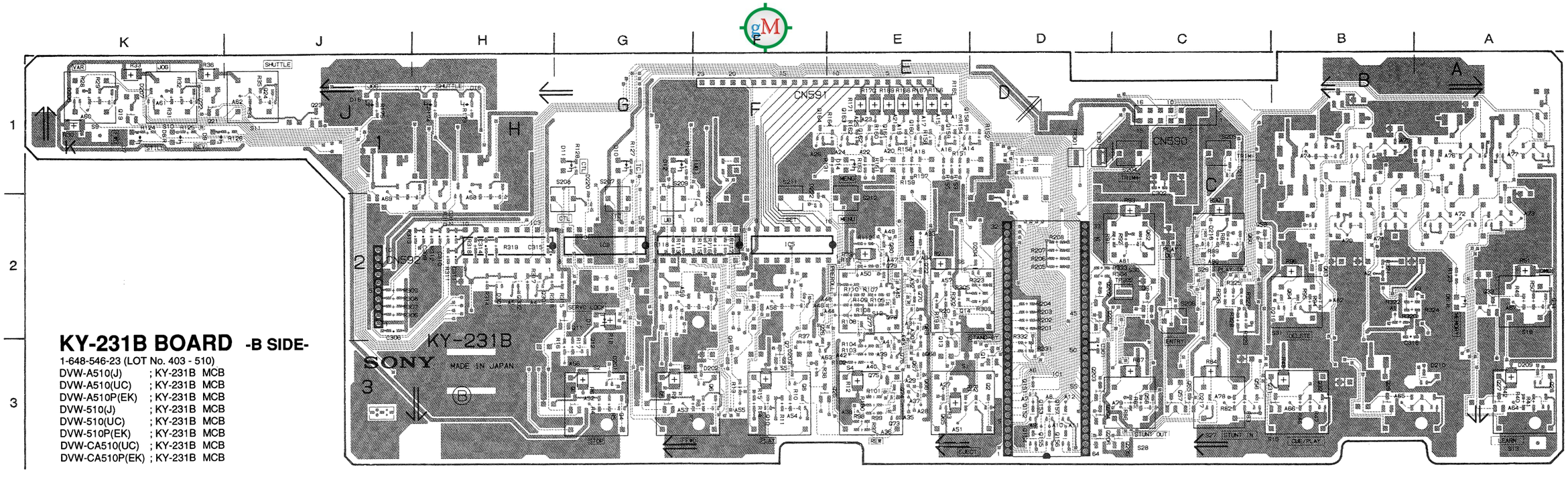
LOT NO. H-3



KY-231B BOARD -A SIDE-

1-648-546-23 (LOT No. 403 - 510)

DVW-A510(J)	; KY-231B MCB
DVW-A510(UC)	; KY-231B MCB
DVW-A510P(EK)	; KY-231B MCB
DVW-510(J)	; KY-231B MCB
DVW-510(UC)	; KY-231B MCB
DVW-510P(EK)	; KY-231B MCB
DVW-CA510(UC)	; KY-231B MCB
DVW-CA510P(EK)	; KY-231B MCB



KY-231B BOARD -B SIDE-

1-648-546-23 (LOT No. 403 - 510)

DVW-A510(J)	; KY-231B MCB
DVW-A510(UC)	; KY-231B MCB
DVW-A510P(EK)	; KY-231B MCB
DVW-510(J)	; KY-231B MCB
DVW-510(UC)	; KY-231B MCB
DVW-510P(EK)	; KY-231B MCB
DVW-CA510(UC)	; KY-231B MCB
DVW-CA510P(EK)	; KY-231B MCB

KY-231B ; Lower panel function control

(Board's Lot No. 307 through 402)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

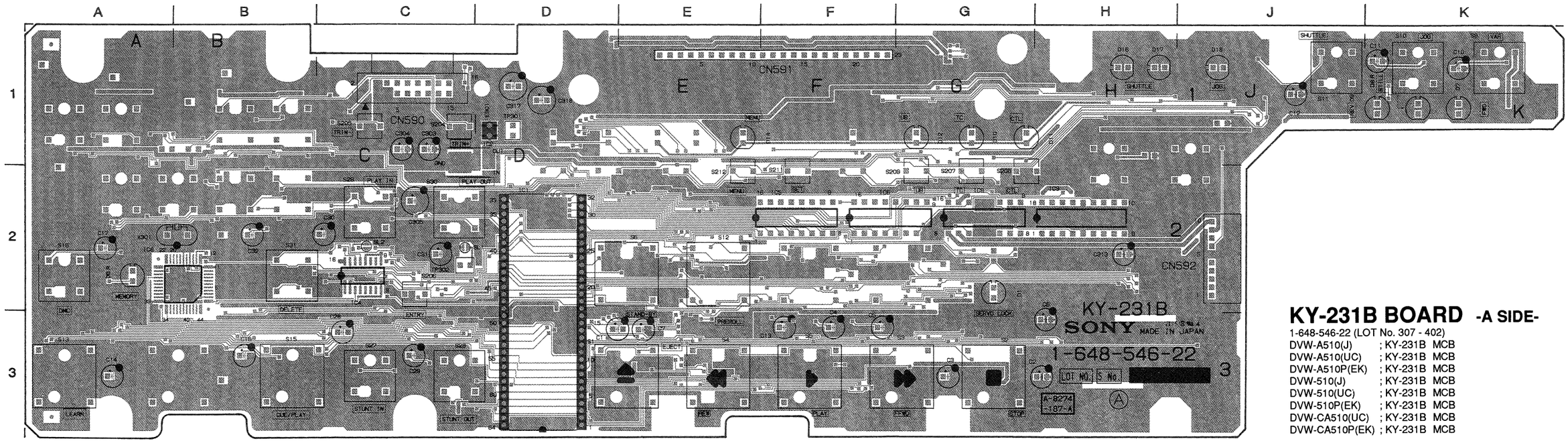
KY-231B(1-648-546-22)

CN590	C-1	✱Q61	C-2
CN592	H-2	✱Q62	C-2
		✱Q63	B-2
D1	G-2	✱Q64	B-2
D6	A-2	✱Q65	E-3
D7	K-1	✱Q66	E-3
D8	K-1	✱Q67	E-3
D9	K-1	✱Q68	E-3
D10	G-1	✱Q69	E-2
D11	H-1	✱Q70	E-2
D12	G-1	✱Q71	E-2
D14	E-1	✱Q72	E-2
D16	H-1	✱Q73	E-3
D17	H-1	✱Q74	E-3
D18	J-1	✱Q75	E-3
✱D201	G-3	✱Q76	E-3
✱D202	F-3	✱Q78	E-2
✱D203	F-3	✱Q79	E-2
✱D204	D-2	✱Q80	E-2
✱D206	K-1	✱Q151	D-3
✱D207	K-1	✱Q152	D-3
✱D209	A-3	✱Q153	D-3
✱D210	A-3	✱Q154	D-3
✱D211	C-1	✱Q155	D-3
✱D217	C-3	✱Q156	D-3
✱D218	C-2	✱Q157	D-3
✱D219	B-2	✱Q158	E-1
✱D220	G-2	✱Q159	E-1
✱D221	F-2	✱Q160	E-1
✱D222	F-1	✱Q161	E-1
✱D301	H-2	✱Q162	E-1
		✱Q163	E-1
E301	D-1	✱Q164	F-1
		✱Q201	D-2
IC1	D-2	✱Q202	D-2
IC3	H-2	✱Q203	D-3
IC4	C-2	✱Q204	D-3
IC5	F-2	✱Q205	C-3
IC6	F-2	✱Q206	D-3
IC8	A-2	✱Q301	H-2
IC9	G-2	✱Q302	H-2

✱Q1	D-3	S1	D-3
✱Q2	D-3	S2	G-3
✱Q3	G-3	S3	G-3
✱Q4	G-3	S4	E-3
✱Q5	G-3	S5	F-3
✱Q6	F-3	S6	E-2
✱Q7	F-3	S9	K-1
✱Q8	F-3	S10	K-1
✱Q9	F-3	S11	J-1
✱Q10	F-3	S12	E-2
✱Q11	G-2	S13	A-3
✱Q12	G-3	S15	B-3
✱Q13	E-3	S16	A-2
✱Q14	E-2	S27	C-3
✱Q19	K-1	S28	C-3
✱Q20	K-1	S29	C-2
✱Q21	K-1	S30	C-2
✱Q22	K-1	S31	B-2
✱Q23	J-1	S204	C-1
✱Q24	J-1	S205	C-1
✱Q25	E-3	S206	C-2
✱Q26	F-2	S207	G-2
✱Q27	A-3	S208	G-2
✱Q28	A-3	S209	F-2
✱Q31	B-3	S211	F-2
✱Q32	B-3	S212	E-2
✱Q33	A-2		
✱Q34	A-2	SL1	C-2
✱Q55	C-3	SL2	C-2
✱Q56	C-3		
✱Q57	C-3	TP301	D-1
✱Q58	C-3	TP302	C-2
✱Q59	C-2		
✱Q60	C-2	X301	A-2

✱ : B SIDE

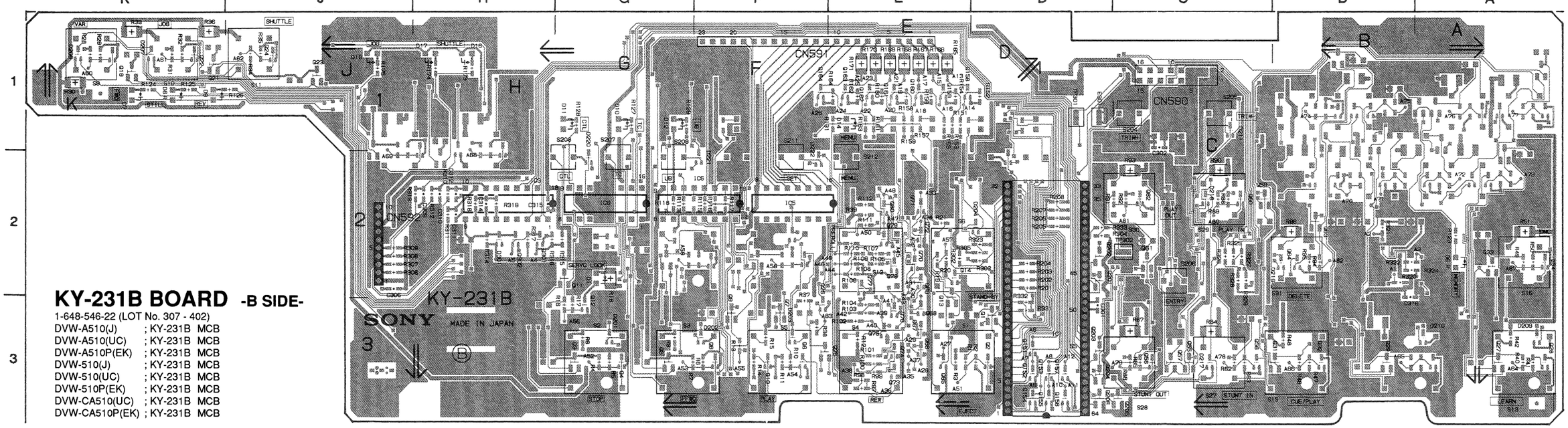
LOT NO. H-3



KY-231B BOARD -A SIDE-

1-648-546-22 (LOT No. 307 - 402)

DVW-A510(J)	; KY-231B MCB
DVW-A510(UC)	; KY-231B MCB
DVW-A510P(EK)	; KY-231B MCB
DVW-510(J)	; KY-231B MCB
DVW-510(UC)	; KY-231B MCB
DVW-510P(EK)	; KY-231B MCB
DVW-CA510(UC)	; KY-231B MCB
DVW-CA510P(EK)	; KY-231B MCB



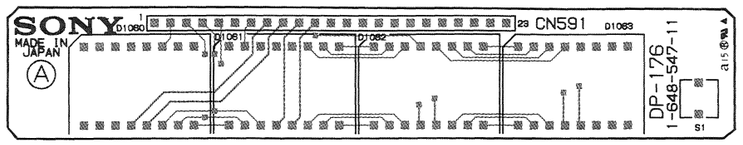
KY-231B BOARD -B SIDE-

1-648-546-22 (LOT No. 307 - 402)

DVW-A510(J)	; KY-231B MCB
DVW-A510(UC)	; KY-231B MCB
DVW-A510P(EK)	; KY-231B MCB
DVW-510(J)	; KY-231B MCB
DVW-510(UC)	; KY-231B MCB
DVW-510P(EK)	; KY-231B MCB
DVW-CA510(UC)	; KY-231B MCB
DVW-CA510P(EK)	; KY-231B MCB

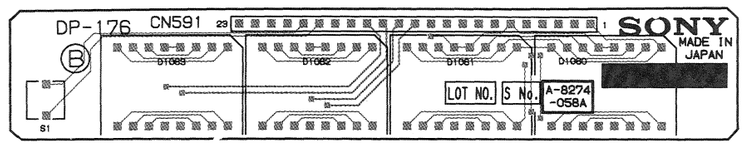
DP-176/176B ; Time counter dispaly

(Board's Lot No. 302 and higher)
All DVWs
BKDW-514
BKDW-515



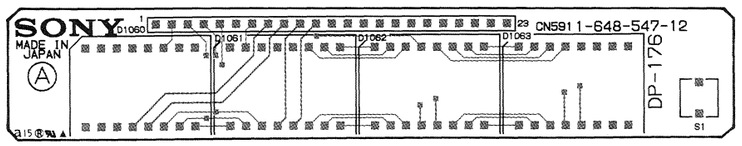
DP-176 BOARD -A SIDE-

1-648-547-11(LOT No. 302 - 306)
DVW-A500(J) ; DP-176 MCB
DVW-A500(UC) ; DP-176 MCB
DVW-A500P(EK) ; DP-176 MCB
DVW-A500P(UC) ; DP-176 MCB
DVW-500(J) ; DP-176 MCB
DVW-500(UC) ; DP-176 MCB
DVW-500P(EK) ; DP-176 MCB



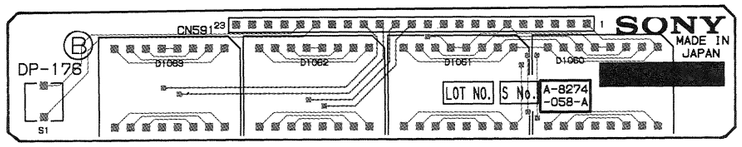
DP-176 BOARD -B SIDE-

1-648-547-11(LOT No. 302 - 306)
DVW-A500(J) ; DP-176 MCB
DVW-A500(UC) ; DP-176 MCB
DVW-A500P(EK) ; DP-176 MCB
DVW-A500P(UC) ; DP-176 MCB
DVW-500(J) ; DP-176 MCB
DVW-500(UC) ; DP-176 MCB
DVW-500P(EK) ; DP-176 MCB



DP-176/176B BOARD -A SIDE-

1-648-547-12/22 (LOT No. 307 -)
BKDW-514 ; DP-176 MCB
DVW-A500(J) ; DP-176 MCB
DVW-A500(UC) ; DP-176 MCB
DVW-A500P(EK) ; DP-176 MCB
DVW-A500P(UC) ; DP-176 MCB
DVW-500(J) ; DP-176 MCB
DVW-500(UC) ; DP-176 MCB
DVW-500P(EK) ; DP-176 MCB
DVW-500P(UC) ; DP-176 MCB
DVW-A510(J) ; DP-176B MCB
DVW-A510(UC) ; DP-176B MCB
DVW-A510P(EK) ; DP-176B MCB
DVW-510(J) ; DP-176B MCB
DVW-510(UC) ; DP-176B MCB
DVW-510P(EK) ; DP-176B MCB
DVW-CA510(J) ; DP-176B MCB
DVW-CA510(UC) ; DP-176B MCB
DVW-CA510P(EK) ; DP-176B MCB

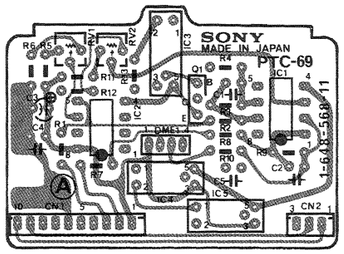


DP-176/176B BOARD -B SIDE-

1-648-547-12/22 (LOT No. 307 -)
BKDW-514 ; DP-176 MCB
DVW-A500(J) ; DP-176 MCB
DVW-A500(UC) ; DP-176 MCB
DVW-A500P(EK) ; DP-176 MCB
DVW-A500P(UC) ; DP-176 MCB
DVW-500(J) ; DP-176 MCB
DVW-500(UC) ; DP-176 MCB
DVW-500P(EK) ; DP-176 MCB
DVW-500P(UC) ; DP-176 MCB
DVW-A510(J) ; DP-176B MCB
DVW-A510(UC) ; DP-176B MCB
DVW-A510P(EK) ; DP-176B MCB
DVW-510(J) ; DP-176B MCB
DVW-510(UC) ; DP-176B MCB
DVW-510P(EK) ; DP-176B MCB
DVW-CA510(J) ; DP-176B MCB
DVW-CA510(UC) ; DP-176B MCB
DVW-CA510P(EK) ; DP-176B MCB

PTC-69 ; Search dial sensor, Dial solenoid connection

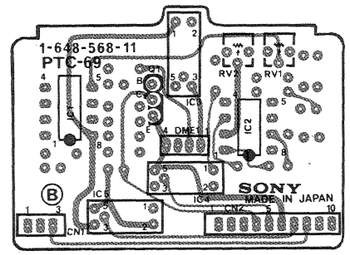
(Board's Lot No. 302 and higher)
All DVWs
BKDW-514
BKDW-515



PTC-69 BOARD -A SIDE-

1-648-568-11, 12

BKDW-514	; PTC-69	MCB
BKDW-515	; PTC-69	MCB
DVW-A500(J)	; PTC-69	MCB
DVW-A500(UC)	; PTC-69	MCB
DVW-A500P(EK)	; PTC-69	MCB
DVW-A500P(UC)	; PTC-69	MCB
DVW-500(J)	; PTC-69	MCB
DVW-500(UC)	; PTC-69	MCB
DVW-500P(EK)	; PTC-69	MCB
DVW-500P(UC)	; PTC-69	MCB
DVW-A510(J)	; PTC-69	MCB
DVW-A510(UC)	; PTC-69	MCB
DVW-A510P(EK)	; PTC-69	MCB
DVW-510(J)	; PTC-69	MCB
DVW-510(UC)	; PTC-69	MCB
DVW-510P(EK)	; PTC-69	MCB
DVW-CA510(J)	; PTC-69	MCB
DVW-CA510(UC)	; PTC-69	MCB
DVW-CA510P(EK)	; PTC-69	MCB



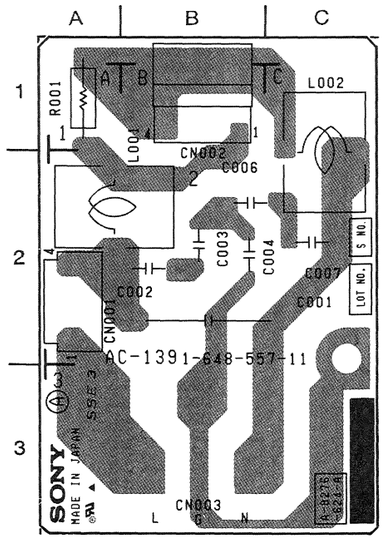
PTC-69 BOARD -B SIDE-

1-648-568-11, 12

BKDW-514	; PTC-69	MCB
BKDW-515	; PTC-69	MCB
DVW-A500(J)	; PTC-69	MCB
DVW-A500(UC)	; PTC-69	MCB
DVW-A500P(EK)	; PTC-69	MCB
DVW-A500P(UC)	; PTC-69	MCB
DVW-500(J)	; PTC-69	MCB
DVW-500(UC)	; PTC-69	MCB
DVW-500P(EK)	; PTC-69	MCB
DVW-500P(UC)	; PTC-69	MCB
DVW-A510(J)	; PTC-69	MCB
DVW-A510(UC)	; PTC-69	MCB
DVW-A510P(EK)	; PTC-69	MCB
DVW-510(J)	; PTC-69	MCB
DVW-510(UC)	; PTC-69	MCB
DVW-510P(EK)	; PTC-69	MCB
DVW-CA510(J)	; PTC-69	MCB
DVW-CA510(UC)	; PTC-69	MCB
DVW-CA510P(EK)	; PTC-69	MCB

AC-139/139B ; AC connector board with breaker for PAL models
AC-155/155B ; AC connector board with breaker for NTSC models

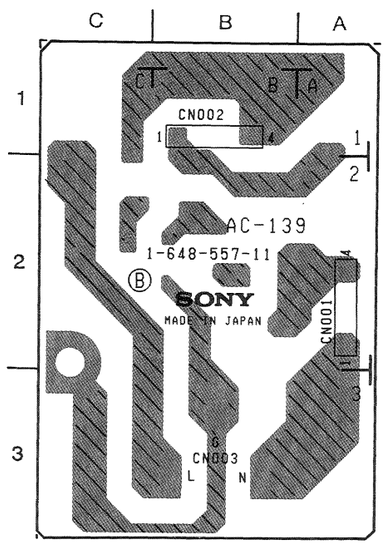
(Board's Lot No. 302 and higher)
All DVWs



AC-139/139B BOARD -A SIDE-

1-648-557-11/21 (LOT No. 302 -)

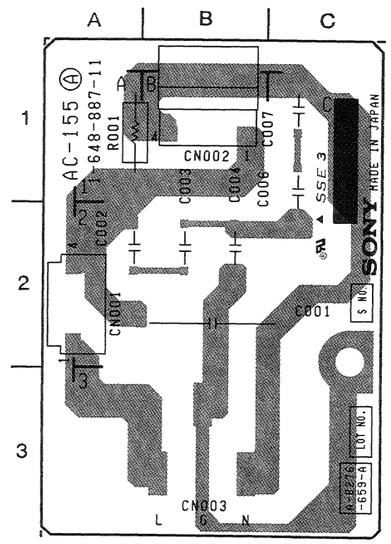
DVW-A500P(EK)	; AC-139	MCB
DVW-A500P(UC)	; AC-139	MCB
DVW-500P(EK)	; AC-139	MCB
DVW-500P(UC)	; AC-139	MCB
DVW-A510P(EK)	; AC-139B	MCB
DVW-510P(EK)	; AC-139B	MCB
DVW-CA510P(EK)	; AC-139B	MCB



AC-139/139B BOARD -B SIDE-

1-648-557-11/21 (LOT No. 302 -)

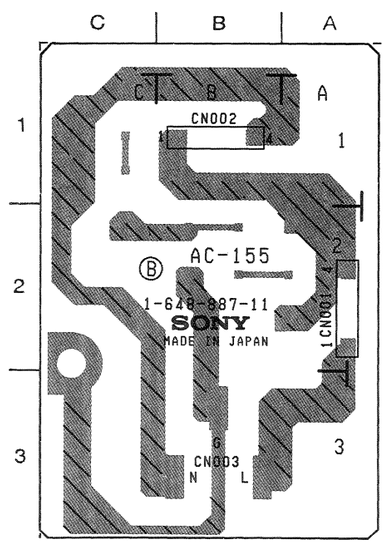
DVW-A500P(EK)	; AC-139	MCB
DVW-A500P(UC)	; AC-139	MCB
DVW-500P(EK)	; AC-139	MCB
DVW-500P(UC)	; AC-139	MCB
DVW-A510P(EK)	; AC-139B	MCB
DVW-510P(EK)	; AC-139B	MCB
DVW-CA510P(EK)	; AC-139B	MCB



AC-155/155B BOARD -A SIDE-

1-648-887-11/21 (LOT No. 302 -)

DVW-A500(J)	; AC-155	MCB
DVW-A500(UC)	; AC-155	MCB
DVW-500(J)	; AC-155	MCB
DVW-500(UC)	; AC-155	MCB
DVW-A510(J)	; AC-155B	MCB
DVW-A510(UC)	; AC-155B	MCB
DVW-510(J)	; AC-155B	MCB
DVW-510(UC)	; AC-155B	MCB
DVW-CA510(J)	; AC-155B	MCB
DVW-CA510(UC)	; AC-155B	MCB



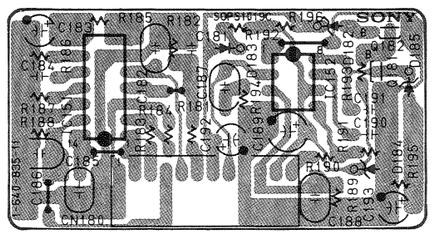
AC-155/155B BOARD -B SIDE-

1-648-887-11/21 (LOT No. 302 -)

DVW-A500(J)	; AC-155	MCB
DVW-A500(UC)	; AC-155	MCB
DVW-500(J)	; AC-155	MCB
DVW-500(UC)	; AC-155	MCB
DVW-A510(J)	; AC-155B	MCB
DVW-A510(UC)	; AC-155B	MCB
DVW-510(J)	; AC-155B	MCB
DVW-510(UC)	; AC-155B	MCB
DVW-CA510(J)	; AC-155B	MCB
DVW-CA510(UC)	; AC-155B	MCB

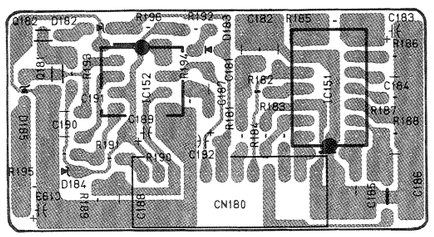
SOPS-1019C ; Switching regulator
SOPS-1042S ; Switching regulator

(Board's Lot No. 302 and higher)
All DVWs



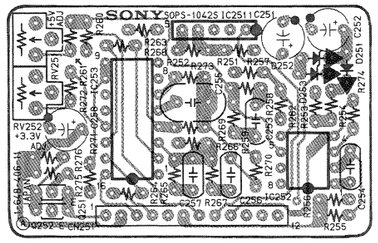
SOPS-1019C BOARD -A SIDE-

1-640-835-11
All DVWs



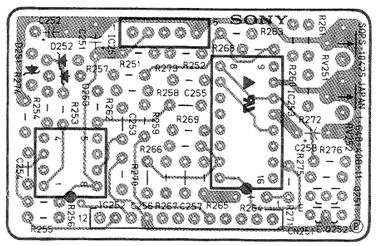
SOPS-1019C BOARD -B SIDE-

1-640-835-11
All DVWs



SOPS-1042S BOARD -A SIDE-

1-648-406-11
All DVWs

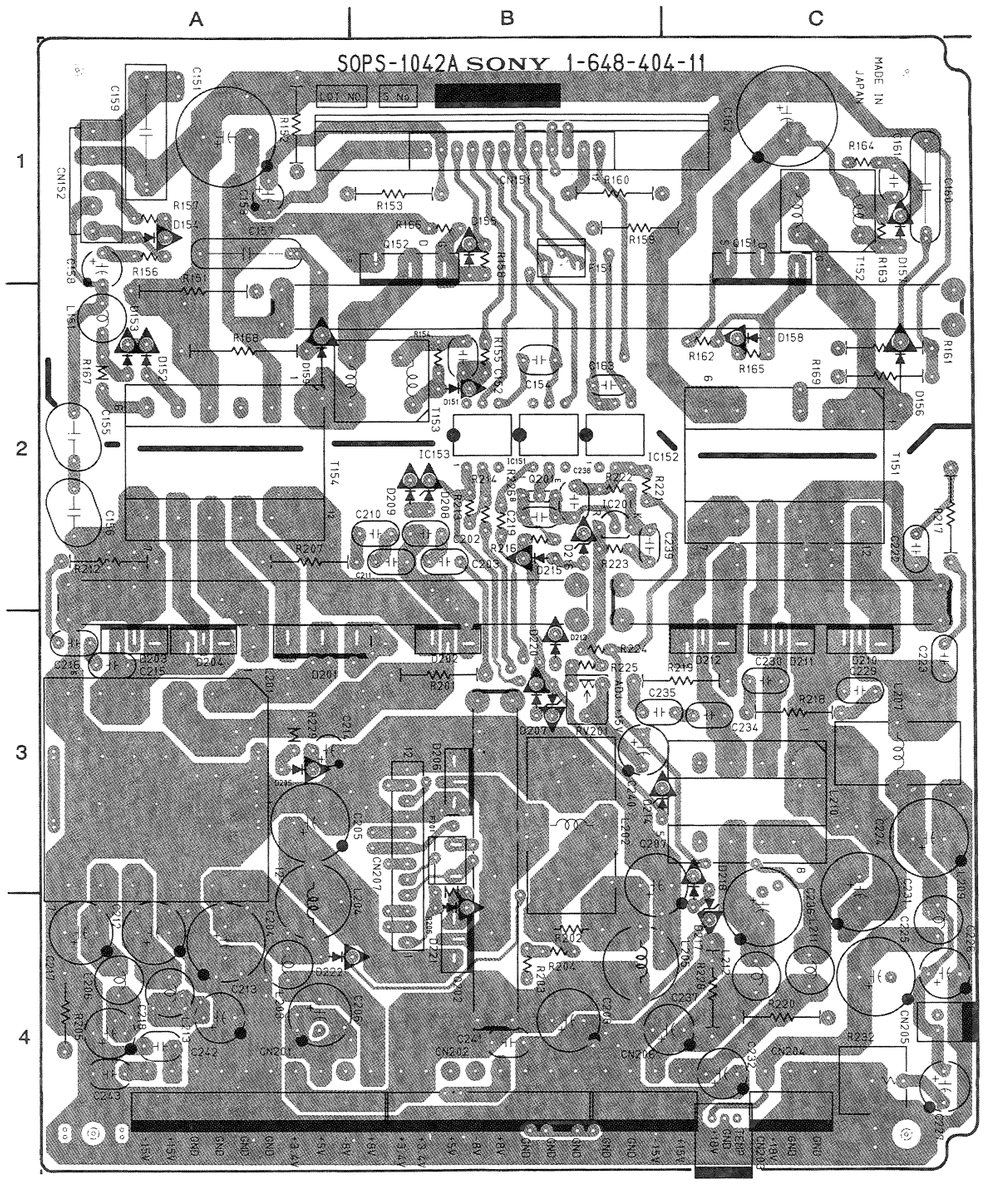


SOPS-1042S BOARD -B SIDE-

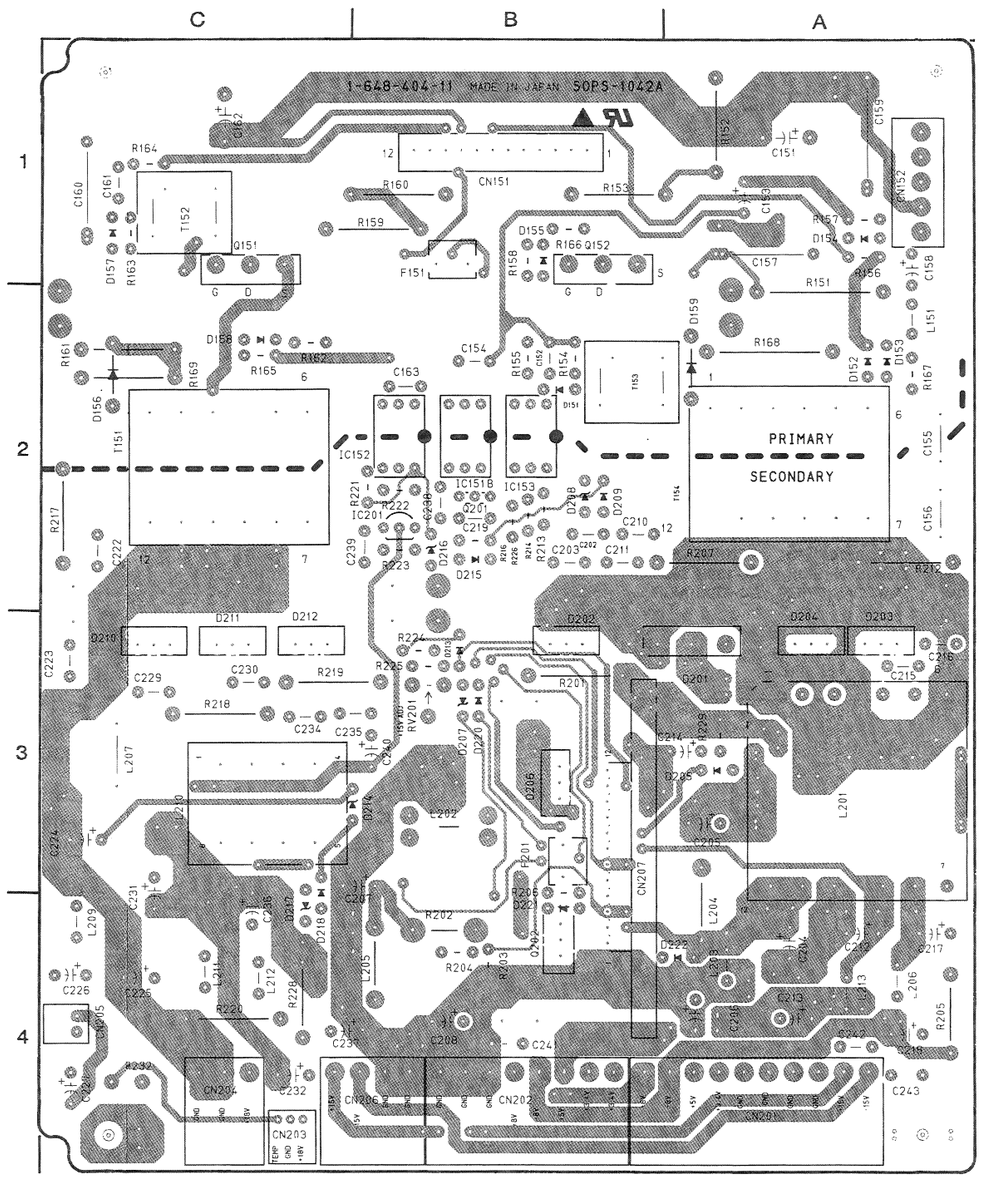
1-648-406-11
All DVWs

SOPS-1042A ; Switching regulator (inc. SOPS-1019C/1042S boards)

(Board's Lot No. 302 and higher)
All DVWs



SOPS-1042A BOARD -A SIDE-
1-648-404-11 (LOT No.302 -)
All DVWs



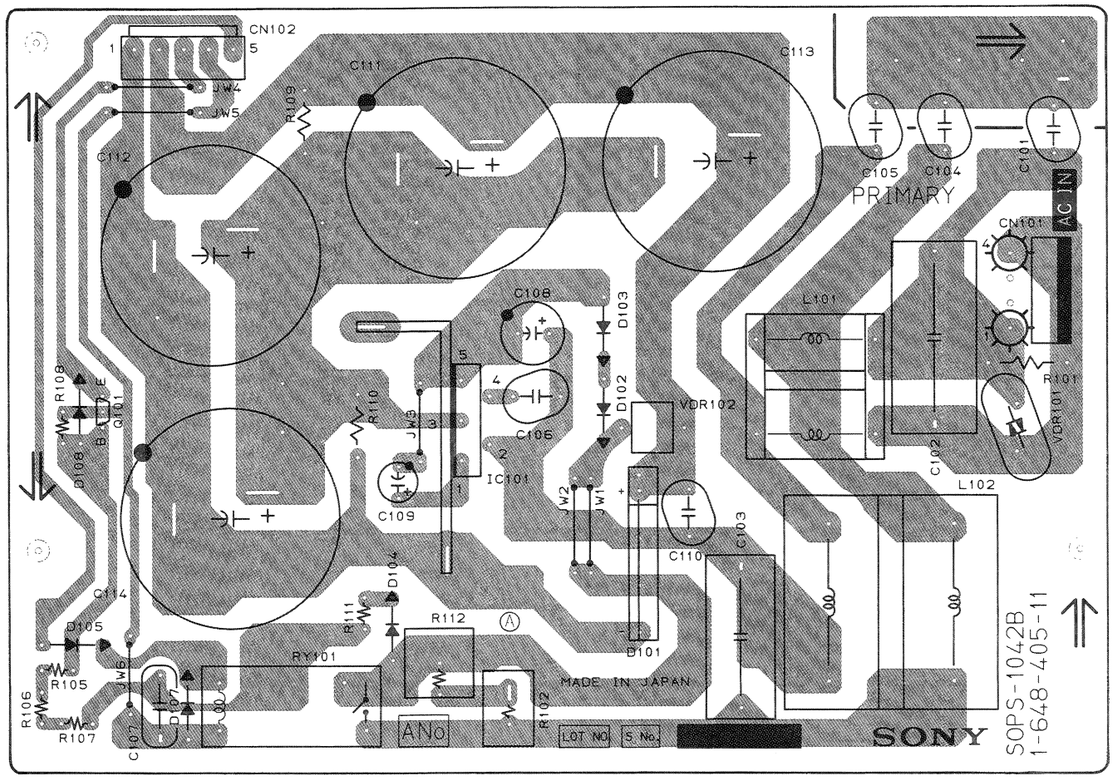
SOPS-1042A BOARD -B SIDE-
1-648-404-11 (LOT No.302 -)
All DVWs

SOPS-1042A(1-648-404-11)

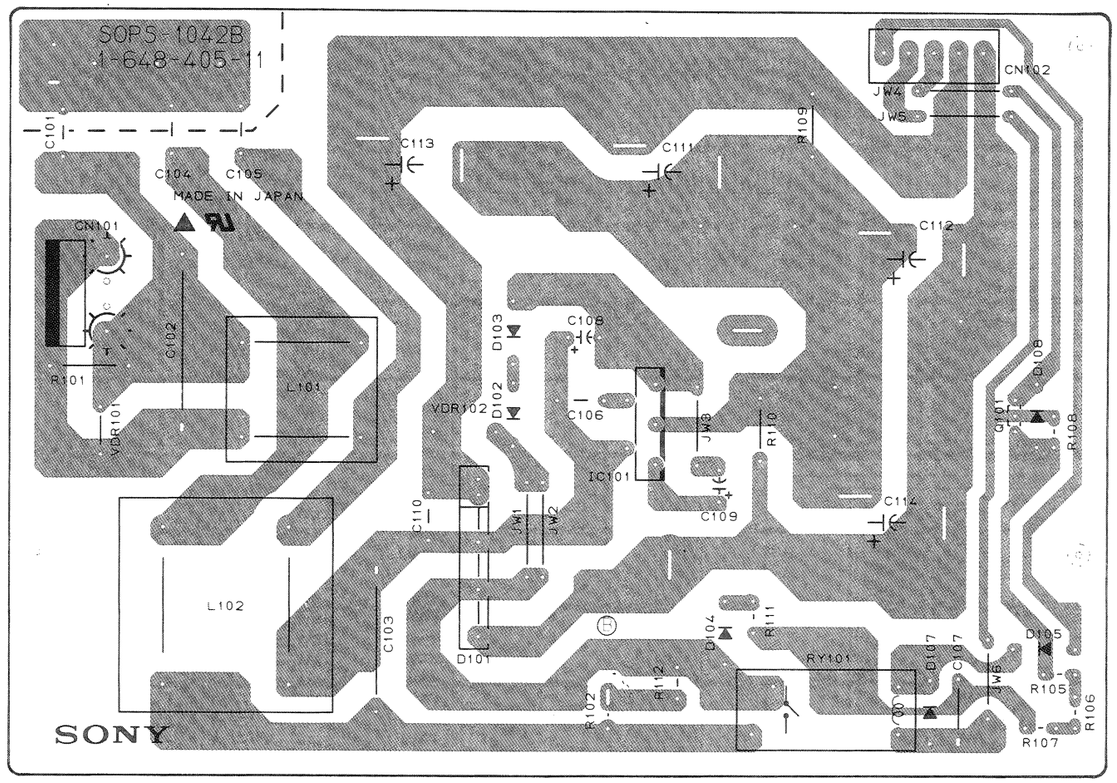
CN151	B-1
CN152	A-1
CN201	A-4
CN202	B-4
CN203	C-4
CN204	C-4
CN205	C-4
CN206	B-4
CN207	B-3
D151	B-2
D152	A-2
D153	A-2
D154	A-1
D155	B-1
D156	C-2
D157	C-1
D158	C-2
D159	A-2
D201	A-3
D202	B-3
D203	A-3
D204	A-3
D205	A-3
D206	B-3
D207	B-3
D208	B-2
D209	B-2
D210	C-3
D211	C-3
D212	C-3
D213	B-3
D214	B-3
D215	B-2
D216	B-2
D217	C-4
D218	C-3
D220	B-3
D221	B-4
D222	A-4
F151	B-1
F201	B-3
IC151	B-2
IC152	B-2
IC153	B-2
IC201	B-2
Q151	C-1
Q152	B-1
Q201	B-2
Q202	B-4
RV201	B-3
T151	C-2
T152	C-1
T153	B-2
T154	A-2
LOT NO.	B-1

SOPS-1042B ; Switching regulator (AC-DC) for SOPS-1042 type

(Board's Lot No. 302 and higher)
All DVWs



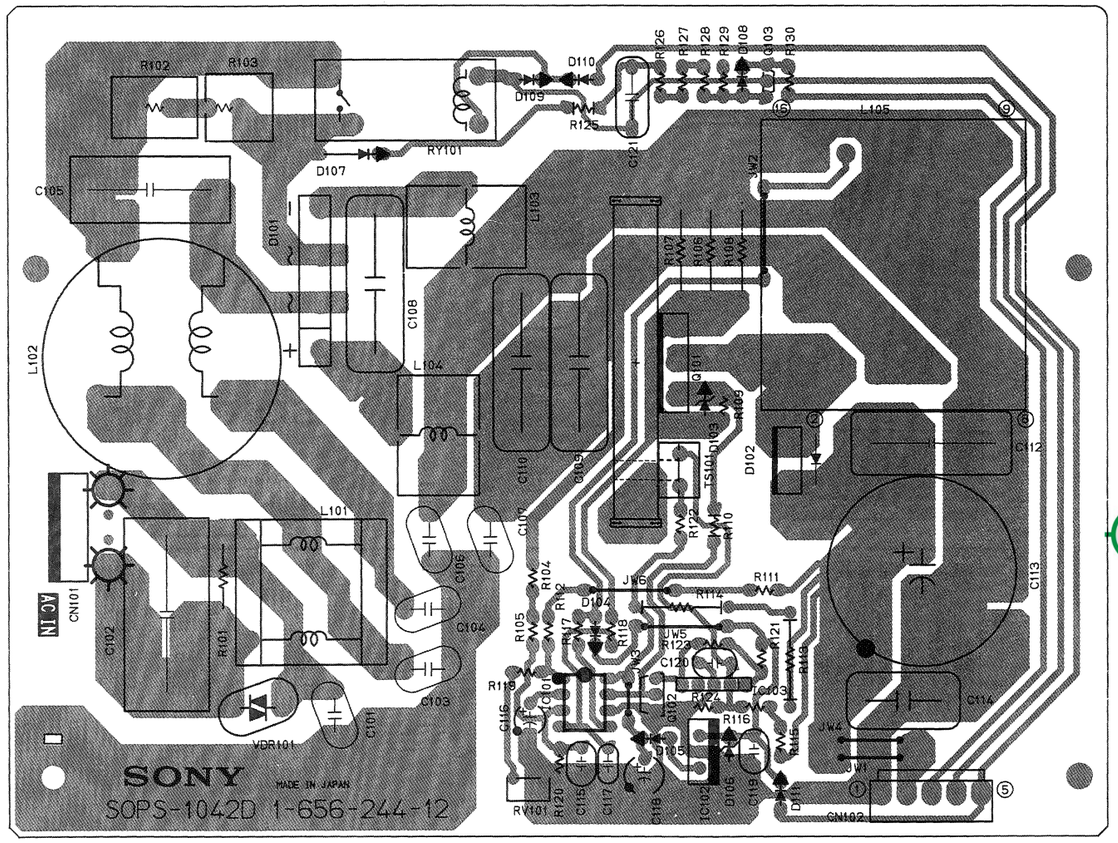
SOPS-1042B BOARD -A SIDE-
1-648-405-11
All DVWs
For SOPS-1042 type (Part No. 1-412-831-11)



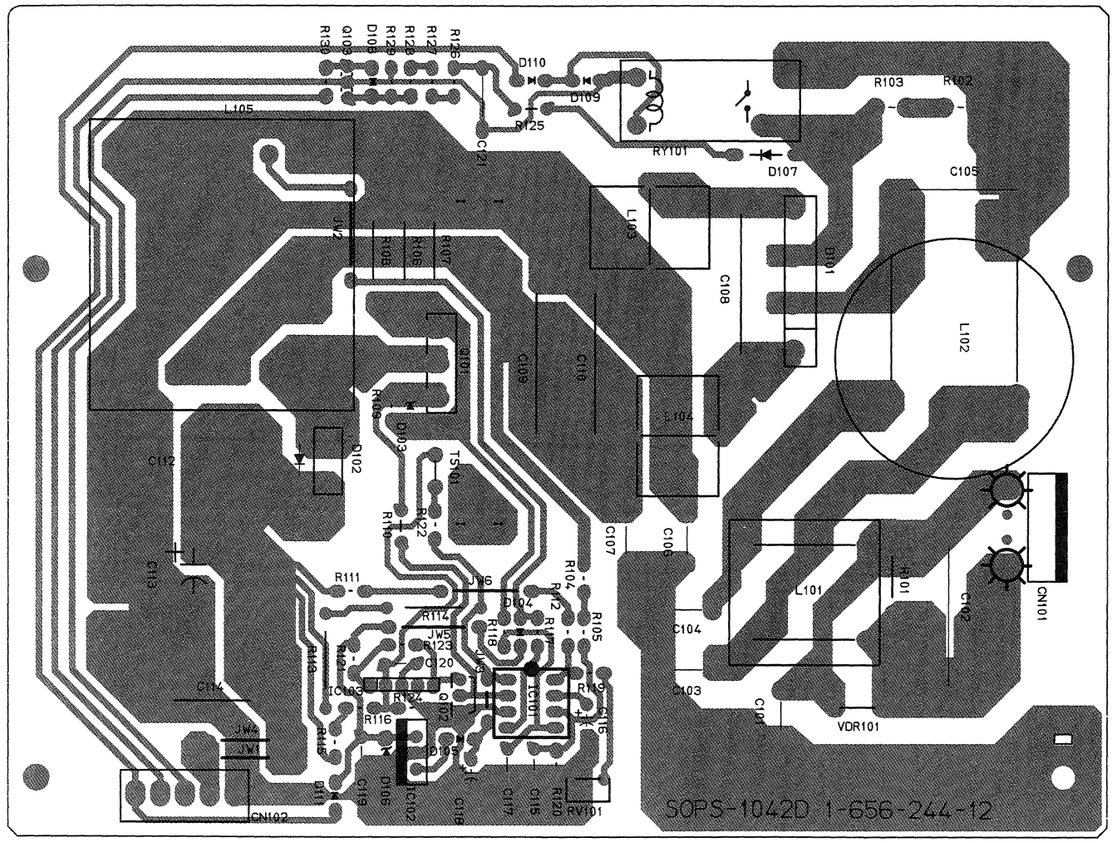
SOPS-1042B BOARD -B SIDE-
1-648-405-11
All DVWs
For SOPS-1042 type (Part No. 1-412-831-11)

SOPS-1042D ; Switching regulator (AC-DC) for SOPS-1042 (A) type

(Board's Lot No. 302 and higher)
All DVWs



SOPS-1042D BOARD -A SIDE-
1-656-244-11, 12
All DVWs
For SOPS-1042(A) type (Part No. 1-412-831-21)



SOPS-1042D BOARD -B SIDE-
1-656-244-11, 12
All DVWs
For SOPS-1042(A) type (Part No. 1-412-831-21)

MB-441 ; Mother board and Remote control connectors
(CONTROL PANEL, REMOTE 1 IN/OUT, RS-232C, VIDEO CONTROL)

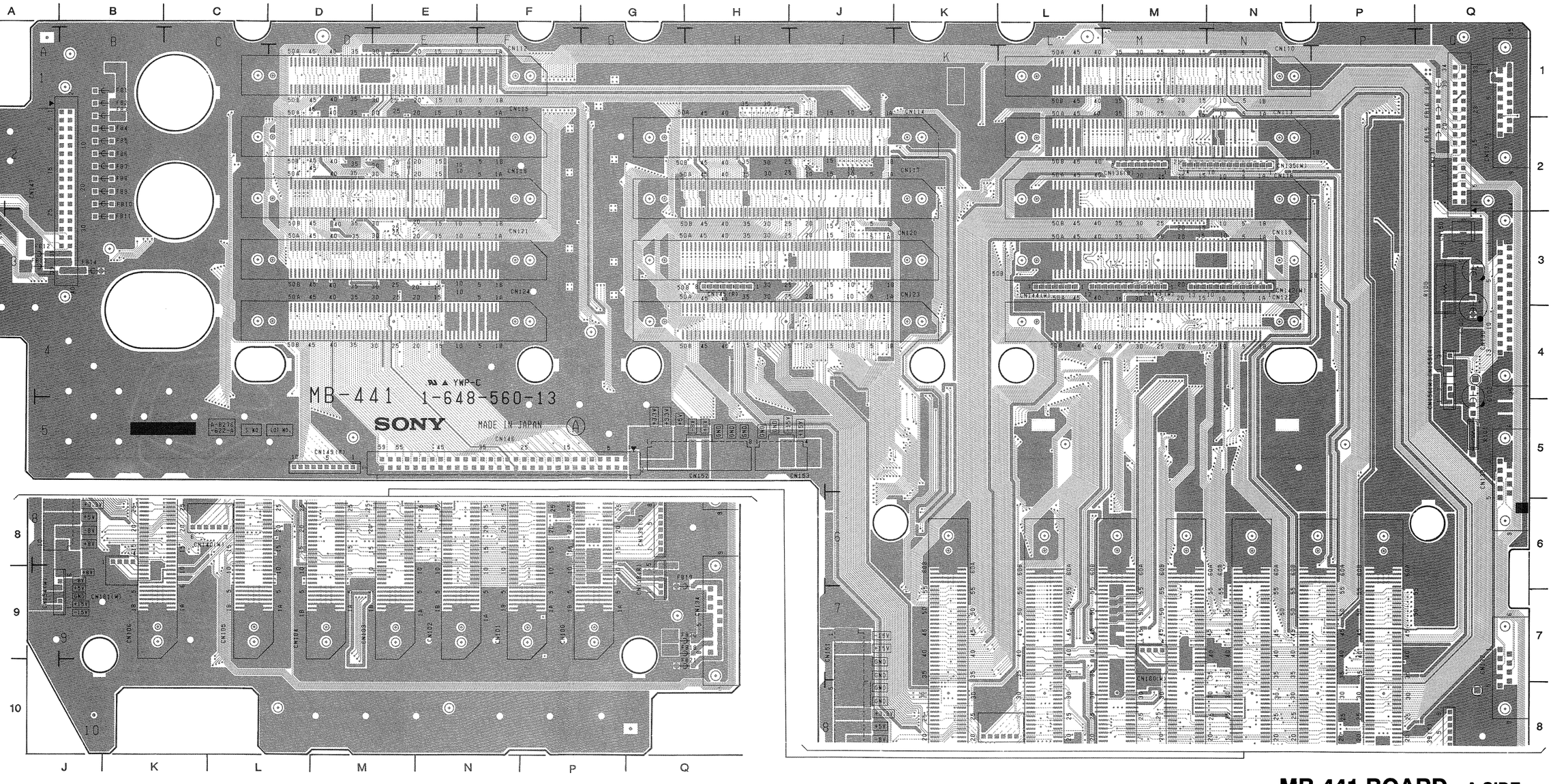
(Board's Lot No.403 and higher)
All DVWs

MB-441(1-648-560-13)

CN100	P-9	FB1	B-1
CN101	N-9	FB2	B-1
CN102	N-9	FB3	B-2
CN103	M-9	FB4	B-2
CN104	L-9	FB5	B-2
CN105	L-9	FB6	B-2
CN106	K-9	FB7	B-2
CN110	N-1	FB8	B-2
CN112	F-1	FB9	B-2
CN113	N-1	FB10	B-2
CN114	K-1	FB11	B-3
CN115	F-1	FB12	A-3
CN116	N-2	FB13	A-3
CN117	K-2	FB14	B-3
CN118	F-2	FB15	Q-2
CN119	N-3	FB16	Q-1
CN120	K-3	FB17	Q-1
CN121	F-3	FB18	Q-9
CN122	N-3	FB19	Q-9
CN123	K-3	FB20	Q-9
CN124	F-3	FB21	Q-10
CN130	Q-4		
CN131	Q-2	R100	Q-3
CN132	Q-7	R101	Q-5
CN133	Q-5		
CN134	Q-9		
✱CN135	N-2		
✱CN136	M-2		
CN137	Q-2		
CN138	Q-9		
CN139	Q-8		
CN140	K-8		
✱CN142	N-3		
✱CN143	M-3		
✱CN144	L-3		
✱CN145	H-3		
CN146	F-5		
CN147	A-2		
CN148	A-3		
CN149	D-5		
CN150	Q-3		
CN151	J-8		
CN152	H-5		
CN153	H-5		
CN154	J-9		
CN155	Q-4		
CN156	Q-5		
CN160	M-7		
CN161	J-9		

✱ : B SIDE

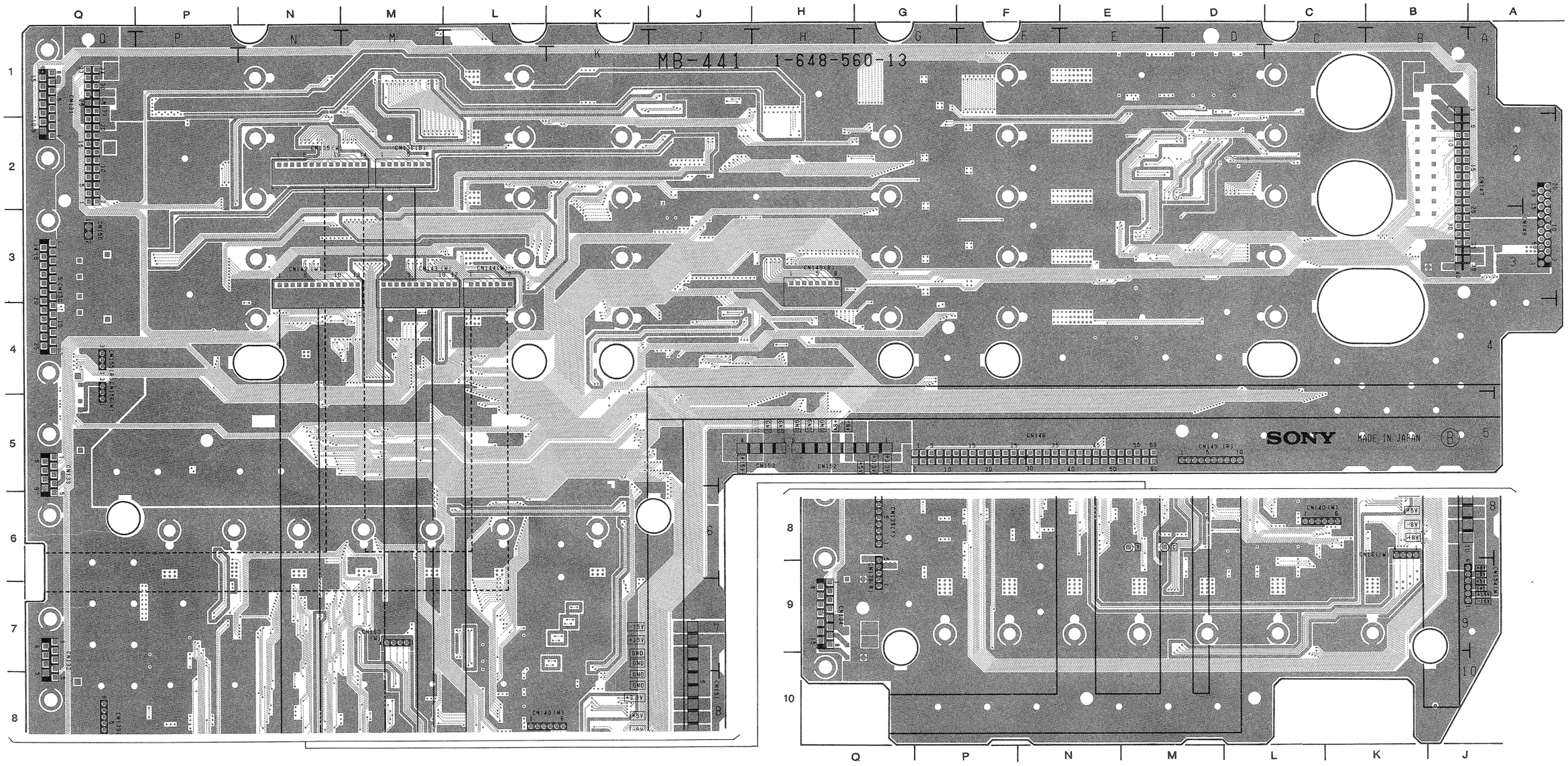
LOT NO. D-5



MB-441 BOARD -A SIDE-

1-648-560-13 (LOT No.403 -)

DVW-A500(J)	; MB-441A	MCB
DVW-A500(UC)	; MB-441A	MCB
DVW-A500P(EK)	; MB-441A	MCB
DVW-A500P(UC)	; MB-441A	MCB
DVW-500(J)	; MB-441	MCB
DVW-500(UC)	; MB-441	MCB
DVW-500P(EK)	; MB-441	MCB
DVW-500P(UC)	; MB-441	MCB
DVW-A510(J)	; MB-441BA	MCB
DVW-A510(UC)	; MB-441BA	MCB
DVW-A510P(EK)	; MB-441BA	MCB
DVW-510(J)	; MB-441B	MCB
DVW-510(UC)	; MB-441B	MCB
DVW-510P(EK)	; MB-441B	MCB
DVW-CA510(J)	; MB-441BA	MCB
DVW-CA510(UC)	; MB-441BA	MCB
DVW-CA510P(EK)	; MB-441BA	MCB



MB-441 BOARD -B SIDE-

1-648-560-13 (LOT No.403 -)

DVW-A500(J)	; MB-441A	MCB
DVW-A500(UC)	; MB-441A	MCB
DVW-A500P(EK)	; MB-441A	MCB
DVW-A500P(UC)	; MB-441A	MCB
DVW-500(J)	; MB-441	MCB
DVW-500(UC)	; MB-441	MCB
DVW-500P(EK)	; MB-441	MCB
DVW-500P(UC)	; MB-441	MCB
DVW-A510(J)	; MB-441BA	MCB
DVW-A510(UC)	; MB-441BA	MCB
DVW-A510P(EK)	; MB-441BA	MCB
DVW-510(J)	; MB-441B	MCB
DVW-510(UC)	; MB-441B	MCB
DVW-510P(EK)	; MB-441B	MCB
DVW-CA510(J)	; MB-441BA	MCB
DVW-CA510(UC)	; MB-441BA	MCB
DVW-CA510P(EK)	; MB-441BA	MCB

1-123 (c)

MB-441 ; Mother board and Remote control connectors (CONTROL PANEL, REMOTE 1 IN/OUT, RS-232C, VIDEO CONTROL)

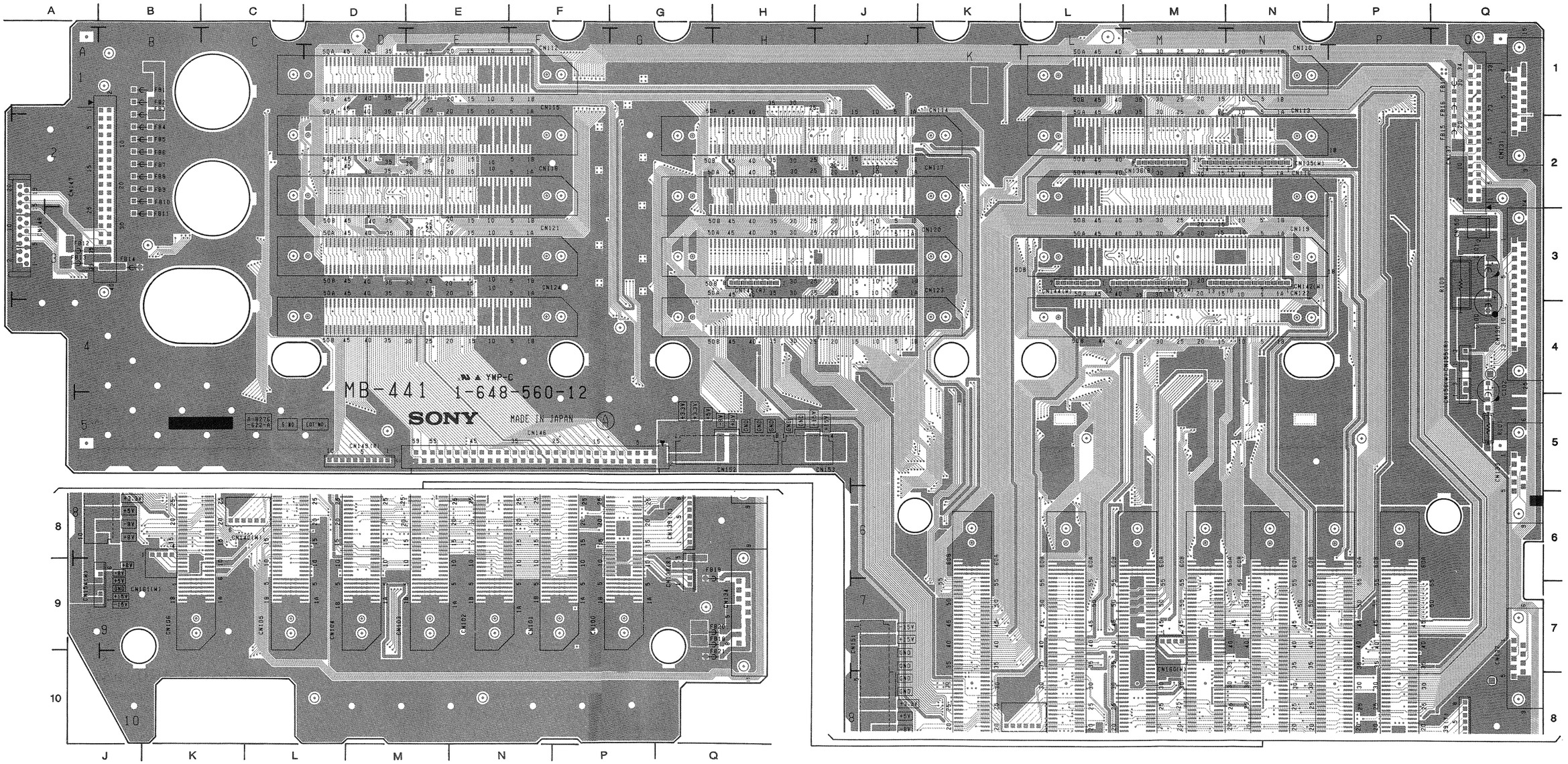
(Board's Lot No.307 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

MB-441(1-648-560-12)

CN100	P-9	FB1	B-1
CN101	N-9	FB2	B-1
CN102	N-9	FB3	B-2
CN103	M-9	FB4	B-2
CN104	L-9	FB5	B-2
CN105	L-9	FB6	B-2
CN106	K-9	FB7	B-2
CN110	N-1	FB8	B-2
CN112	F-1	FB9	B-2
CN113	N-1	FB10	B-2
CN114	K-1	FB11	B-3
CN115	F-1	FB12	A-3
CN116	N-2	FB13	A-3
CN117	K-2	FB14	B-3
CN118	F-2	FB15	Q-2
CN119	N-3	FB16	Q-1
CN120	K-3	FB17	Q-1
CN121	F-3	FB18	Q-9
CN122	N-3	FB19	Q-9
CN123	K-3	FB20	Q-9
CN124	F-3	FB21	Q-10
CN130	Q-4		
CN131	Q-2	R100	Q-3
CN132	Q-7	R101	Q-5
CN133	Q-5		
CN134	Q-9		
✱CN135	N-2		
✱CN136	M-2		
CN137	Q-2		
CN138	Q-9		
CN139	Q-8		
CN140	K-8		
✱CN142	N-3		
✱CN143	M-3		
✱CN144	L-3		
✱CN145	H-3		
CN146	F-5		
CN147	A-2		
CN148	A-3		
CN149	D-5		
CN150	Q-3		
CN151	J-8		
CN152	H-5		
CN153	H-5		
CN154	J-9		
CN155	Q-4		
CN156	Q-5		
CN160	M-7		
CN161	J-9		

✱ : B SIDE

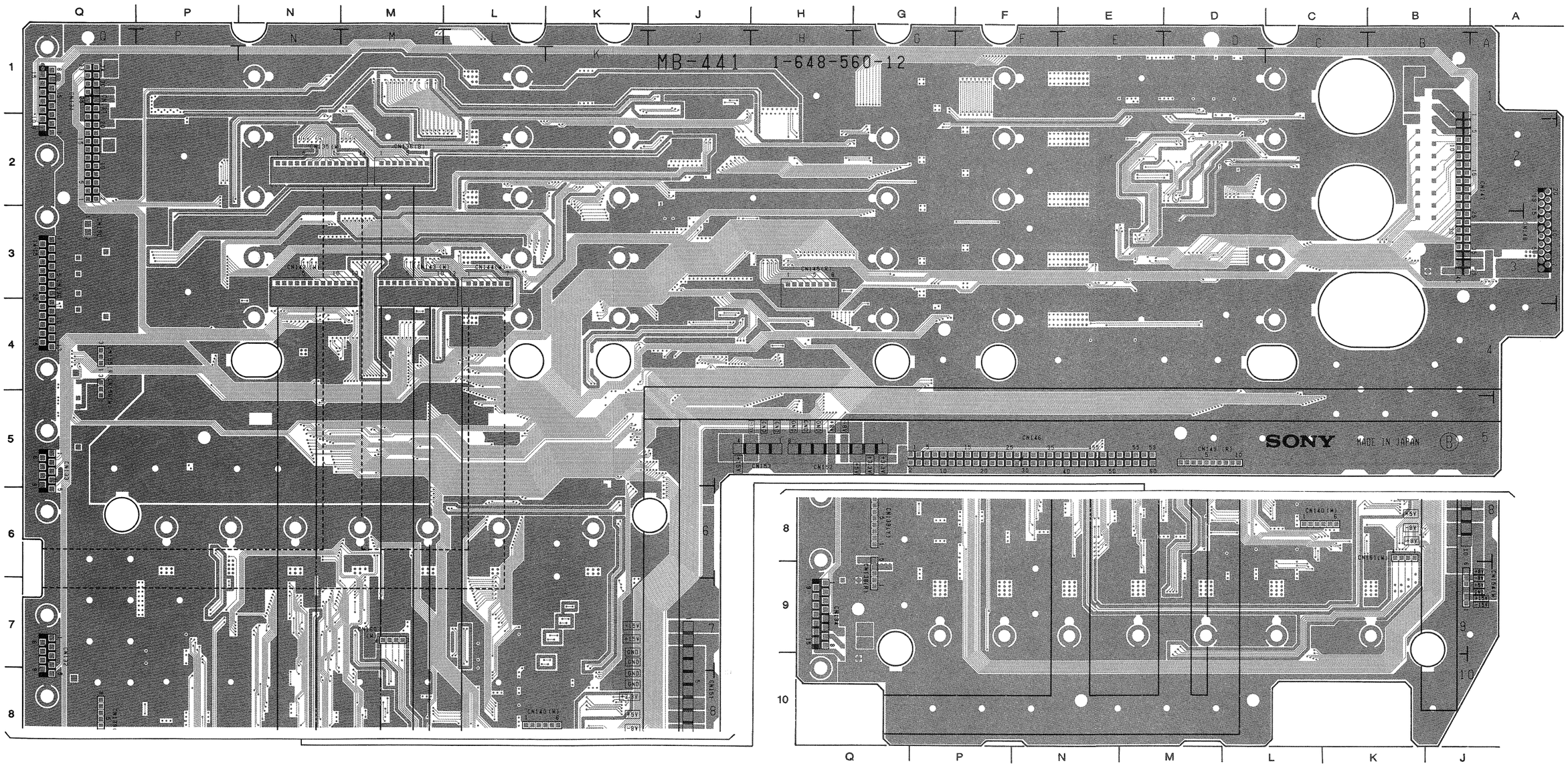
LOT NO. D-5



MB-441 BOARD -A SIDE-

1-648-560-12 (LOT No. 307 - 402)

DVW-A500(J)	; MB-441A	MCB
DVW-A500(UC)	; MB-441A	MCB
DVW-A500P(EK)	; MB-441A	MCB
DVW-500(J)	; MB-441	MCB
DVW-500(UC)	; MB-441	MCB
DVW-500P(EK)	; MB-441	MCB
DVW-A510(J)	; MB-441BA	MCB
DVW-A510(UC)	; MB-441BA	MCB
DVW-A510P(EK)	; MB-441BA	MCB
DVW-510(J)	; MB-441B	MCB
DVW-510(UC)	; MB-441B	MCB
DVW-510P(EK)	; MB-441B	MCB
DVW-CA510(UC)	; MB-441BA	MCB
DVW-CA510P(EK)	; MB-441BA	MCB



MB-441 BOARD -B SIDE-

1-648-560-12 (LOT No. 307 - 402)

DVW-A500(J)	; MB-441A	MCB
DVW-A500(UC)	; MB-441A	MCB
DVW-A500P(EK)	; MB-441A	MCB
DVW-500(J)	; MB-441	MCB
DVW-500(UC)	; MB-441	MCB
DVW-500P(EK)	; MB-441	MCB
DVW-A510(J)	; MB-441BA	MCB
DVW-A510(UC)	; MB-441BA	MCB
DVW-A510P(EK)	; MB-441BA	MCB
DVW-510(J)	; MB-441B	MCB
DVW-510(UC)	; MB-441B	MCB
DVW-510P(EK)	; MB-441B	MCB
DVW-CA510(UC)	; MB-441BA	MCB
DVW-CA510P(EK)	; MB-441BA	MCB

MB-441 ; Mother board and Remote control connectors (CONTROL PANEL, REMOTE 1 IN/OUT, RS-232C, VIDEO CONTROL)

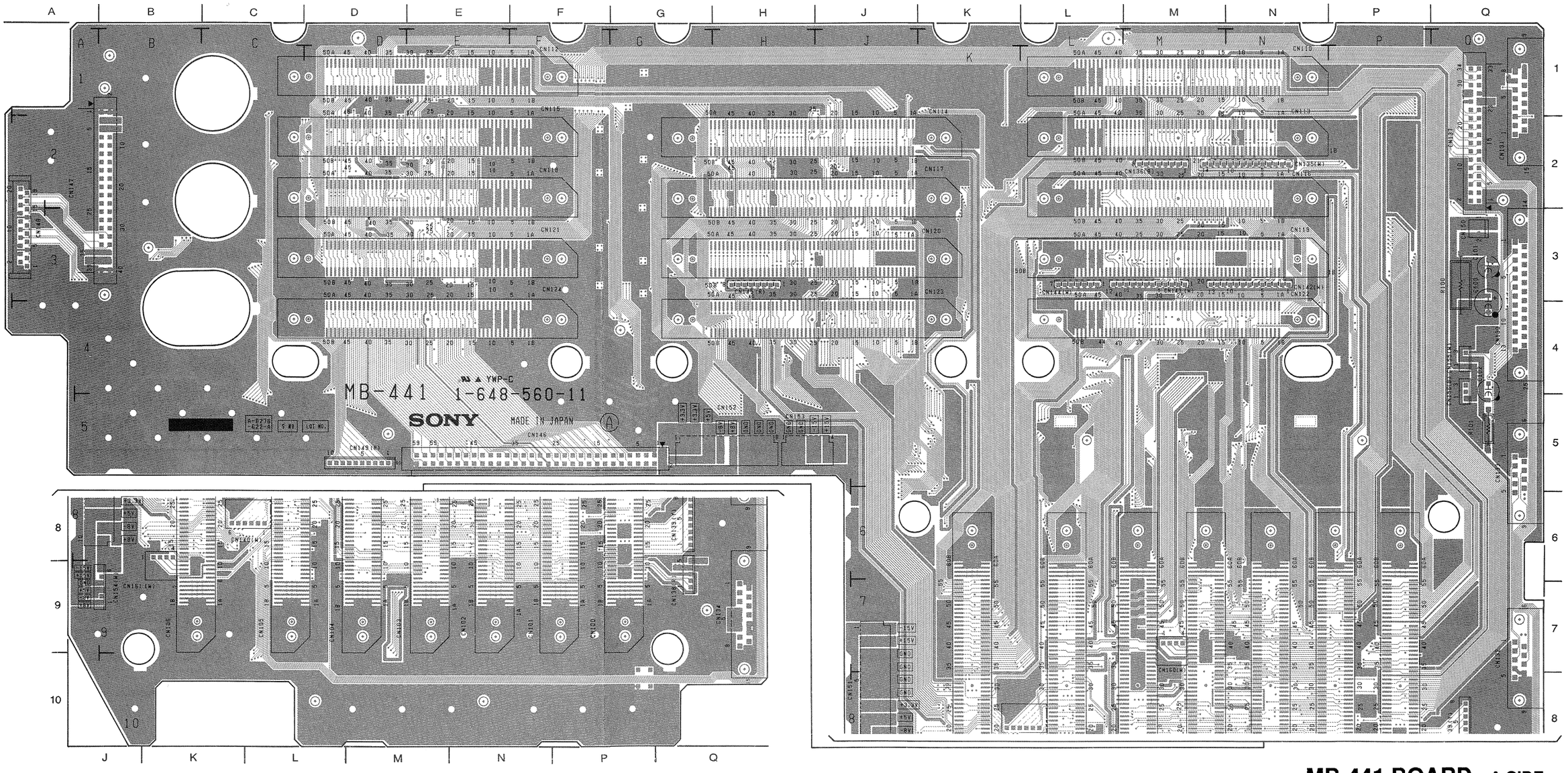
(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

MB-441(1-648-560-11)

CN100	P-9
CN101	N-9
CN102	N-9
CN103	M-9
CN104	L-9
CN105	L-9
CN106	K-9
CN110	N-1
CN112	F-1
CN113	N-1
CN114	K-1
CN115	F-1
CN116	N-2
CN117	K-2
CN118	F-2
CN119	N-3
CN120	K-3
CN121	F-3
CN122	N-3
CN123	K-3
CN124	F-3
CN130	Q-4
CN131	Q-2
CN132	Q-7
CN133	Q-5
CN134	Q-9
✱CN135	N-2
✱CN136	M-2
CN137	Q-2
CN138	Q-9
CN139	Q-8
CN140	K-8
✱CN142	N-3
✱CN143	M-3
✱CN144	L-3
✱CN145	H-3
CN146	F-5
CN147	A-2
CN148	A-3
CN149	D-5
CN150	Q-3
CN151	J-8
CN152	H-5
CN153	H-5
CN154	J-9
CN155	Q-4
CN156	Q-5
CN160	M-7
CN161	J-9
R100	Q-3
R101	Q-5

✱ : B SIDE

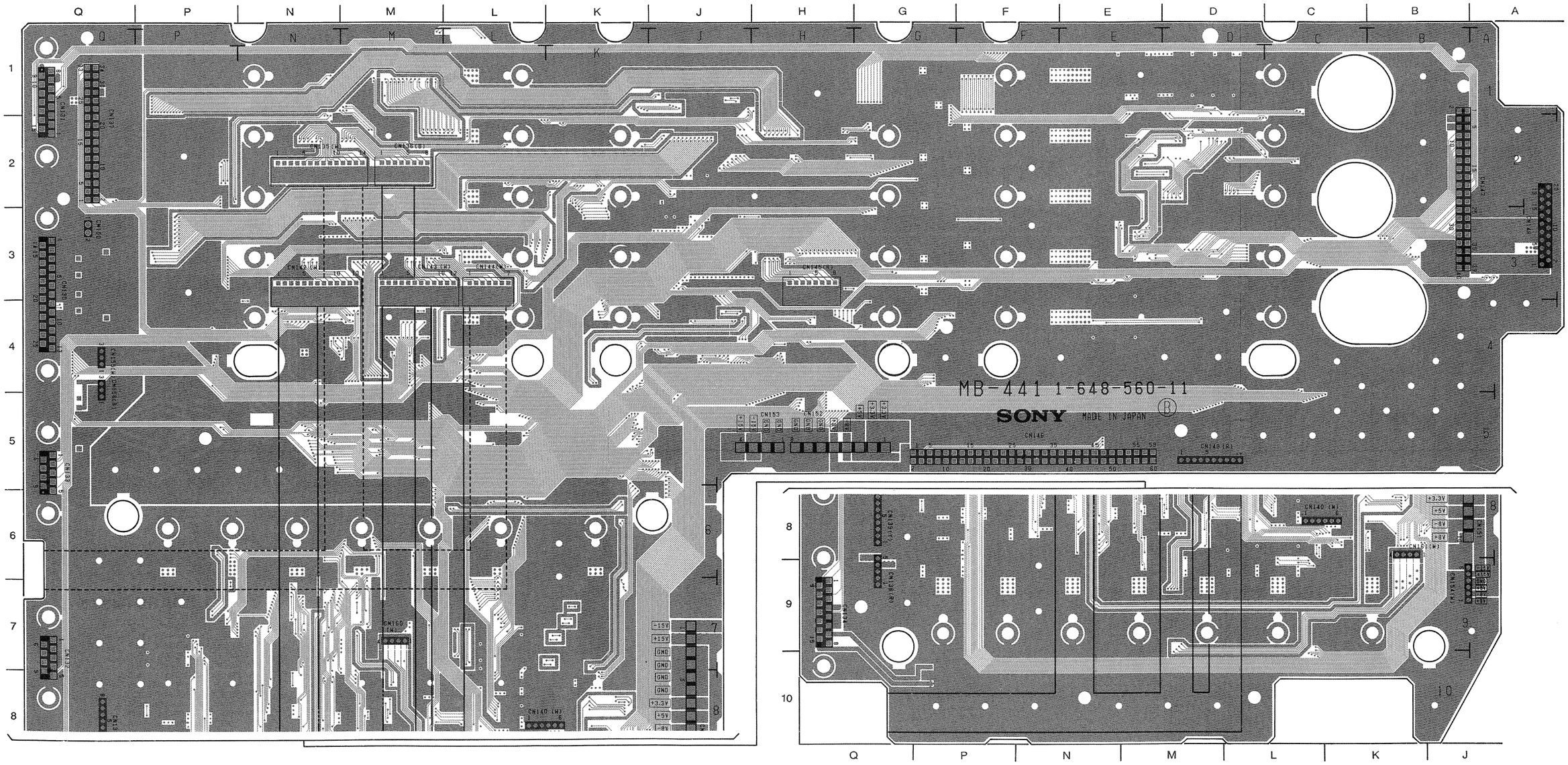
LOT NO. D-5



MB-441 BOARD -A SIDE-

1-648-560-11 (LOT No.302 - 306)

DVW-A500(J)	; MB-441A	MCB
DVW-A500(UC)	; MB-441A	MCB
DVW-A500P(EK)	; MB-441A	MCB
DVW-A500P(UC)	; MB-441A	MCB
DVW-500(J)	; MB-441	MCB
DVW-500(UC)	; MB-441	MCB
DVW-500P(EK)	; MB-441	MCB



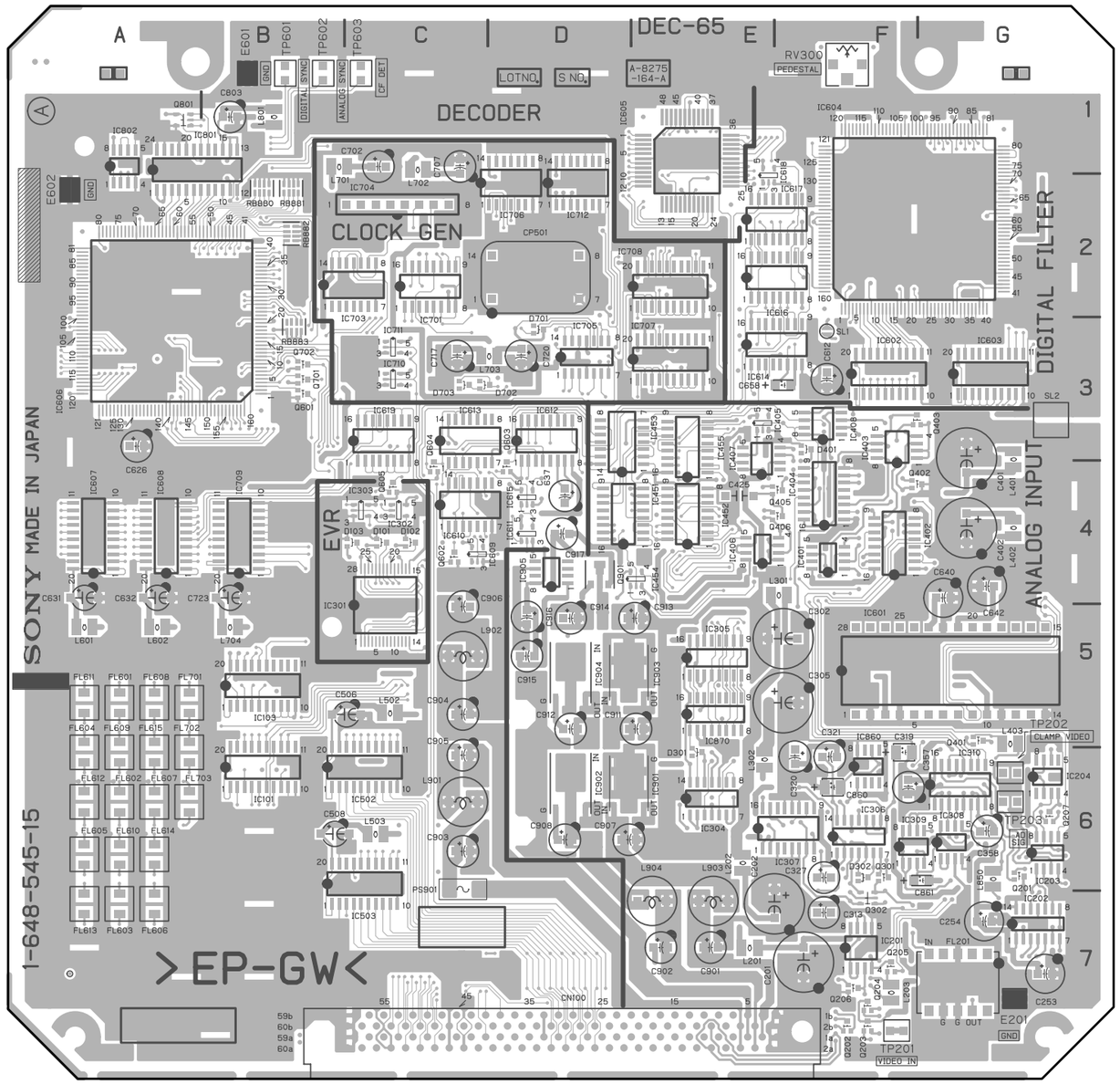
MB-441 BOARD -B SIDE-

1-648-560-11 (LOT No.302 - 306)

DVW-A500(J)	; MB-441A	MCB
DVW-A500(UC)	; MB-441A	MCB
DVW-A500P(EK)	; MB-441A	MCB
DVW-A500P(UC)	; MB-441A	MCB
DVW-500(J)	; MB-441	MCB
DVW-500(UC)	; MB-441	MCB
DVW-500P(EK)	; MB-441	MCB

DEC-65 ; Analog composite video decoder (Composite-component conversion, A/D conversion)

BKDW-505(UCJ) ; S/N 18181 and higher
BKDW-506(EK) ; S/N 15211 and higher
BKDW-506(UC) ; S/N 10271 and higher

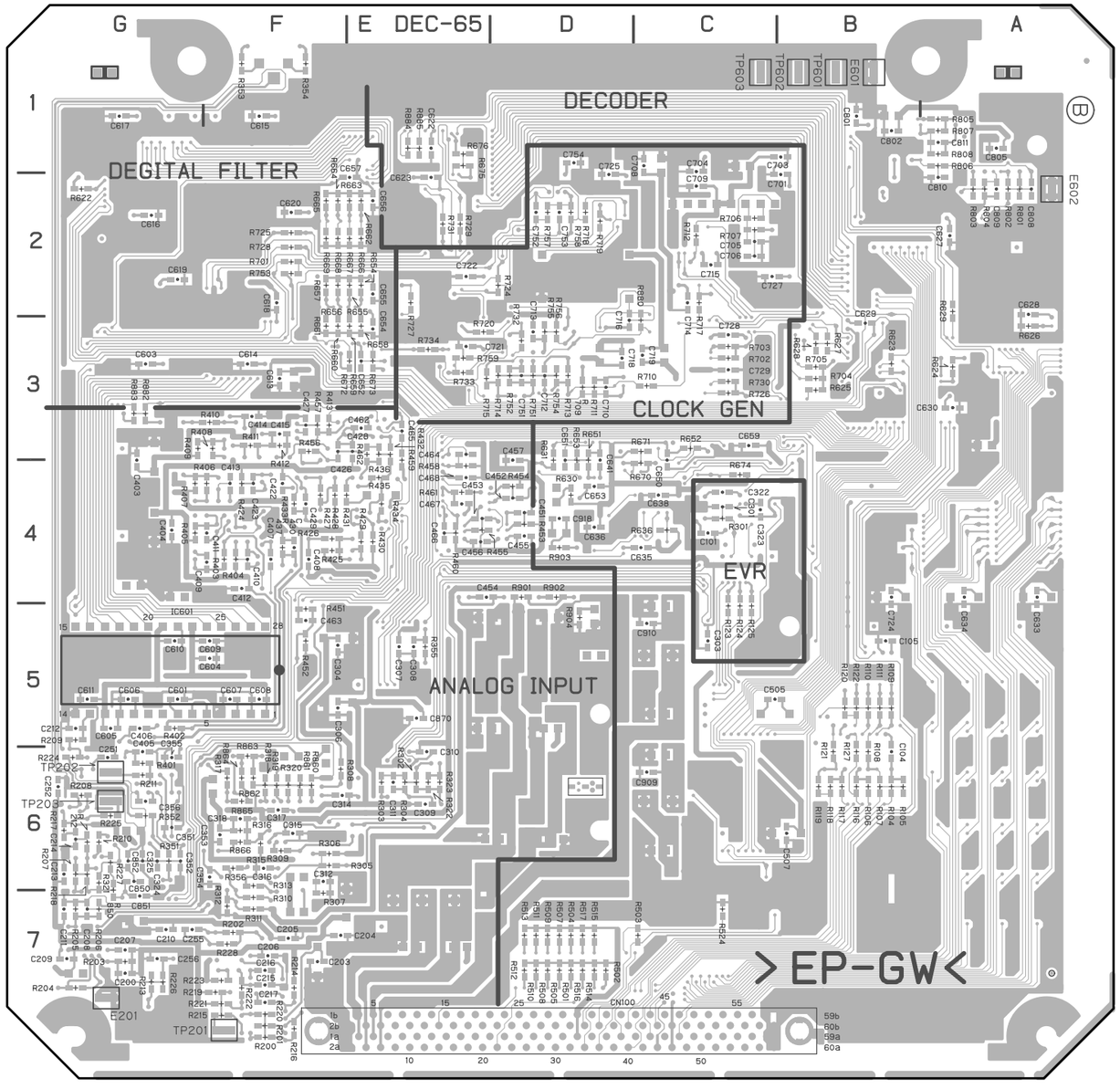


DEC-65 BOARD -A SIDE-

1-648-545-15
BKDW-505(UCJ) ; DEC-65 MCB ;#18181-
BKDW-506(EK) ; DEC-65P MCB ;#15211-
BKDW-506(UC) ; DEC-65PG MCB ;#10271-

DEC-65 (1-707-255-15)

CN100	D7	IC706	D2
		IC707	E3
CP501	D2	IC708	E2
		IC709	B4
D101	C4	IC710	C3
D102	C4	IC711	C3
D103	C4	IC712	D2
D301	E6	IC801	A2
D302	F6	IC802	A2
D401	F3	IC860	F6
D701	D3	IC870	E5
D702	C3	IC901	D6
D703	C3	IC902	D6
		IC903	D5
E201	G7	IC904	D5
E601	B1	IC905	D4
E602	A2		
		PS901	C6
FL201	G7		
FL601	A5	Q201	G6
FL602	A6	Q202	F7
FL603	A7	Q203	F7
FL604	A6	Q204	F7
FL605	A6	Q205	F7
FL606	A7	Q206	F7
FL607	A6	Q207	G6
FL608	A5	Q301	F6
FL609	A6	Q302	F7
FL610	A6	Q401	G5
FL611	A5	Q402	F4
FL612	A6	Q403	F3
FL613	A7	Q405	F4
FL614	A6	Q406	F4
FL615	A6	Q601	B3
FL701	A5	Q602	C4
FL702	A6	Q603	D4
FL703	A6	Q604	C4
		Q605	C4
IC101	B6	Q701	B3
IC103	B5	Q702	B3
IC201	F7	Q801	A1
IC202	G7	Q901	D4
IC203	G6		
IC204	G6	RB880	B2
IC301	C5	RB881	B2
IC302	C4	RB882	B2
IC303	C4	RB883	B3
IC304	E6		
IC305	E5	RV300	F1
IC306	F6		
IC307	E6	SL1	F3
IC308	G6		
IC309	F6	TP201	F7
IC310	G6	TP202	G6
IC401	F4	TP203	G6
IC402	F4	TP601	B1
IC403	F3	TP602	B1
IC404	F4	TP603	C1
IC405	E3		
IC406	F4		
IC407	F4		
IC408	F3		
IC451	E4		
IC452	E4		
IC453	E4		
IC454	E4		
IC455	E4		
IC502	B6		
IC503	B7		
IC601	F5		
IC602	F3		
IC603	G3		
IC604	F2		
IC605	E1		
IC606	A3		
IC607	A4		
IC608	A4		
IC609	C4		
IC610	C4		
IC611	D4		
IC612	D4		
IC613	C4		
IC614	E3		
IC615	D4		
IC616	E2		
IC617	E2		
IC618	E2		
IC619	C4		
IC701	C2		
IC703	B2		
IC704	C2		
IC705	D3		



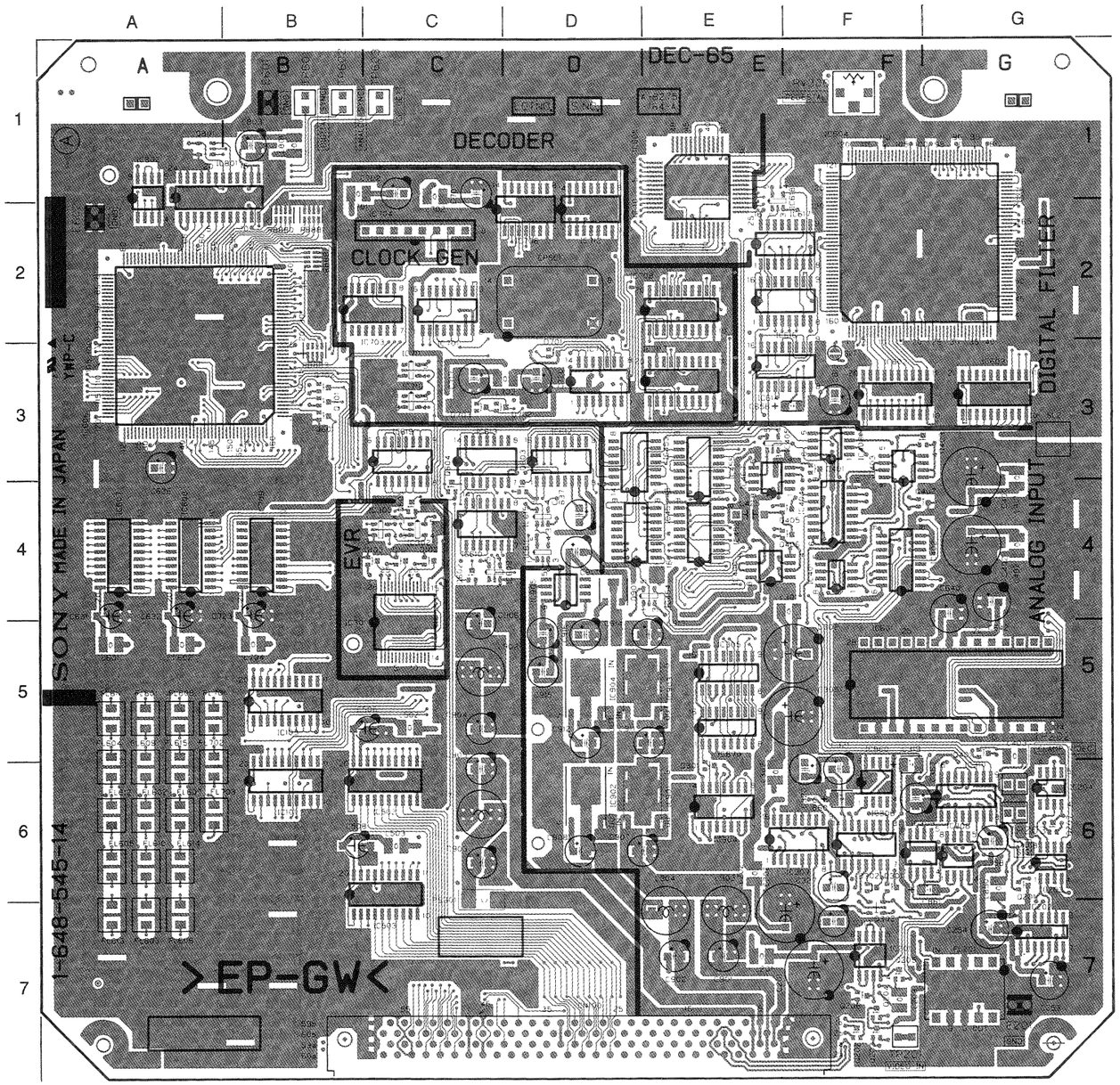
DEC-65 BOARD -B SIDE-

1-648-545-15

BKDW-505(UCJ) ; DEC-65 MCB ;#18181-
BKDW-506(EK) ; DEC-65P MCB ;#15211-
BKDW-506(UC) ; DEC-65PG MCB ;#10271-

DEC-65 ; Analog composite video decoder (Composite-component conversion, A/D conversion)

BKDW-505(UCJ)	;	S/N 14131 through 18180
BKDW-506(EK)	;	S/N 12931 through 15210
BKDW-506(UC)	;	S/N 10221 through 10270



DEC-65 BOARD -A SIDE-

1-648-545-14

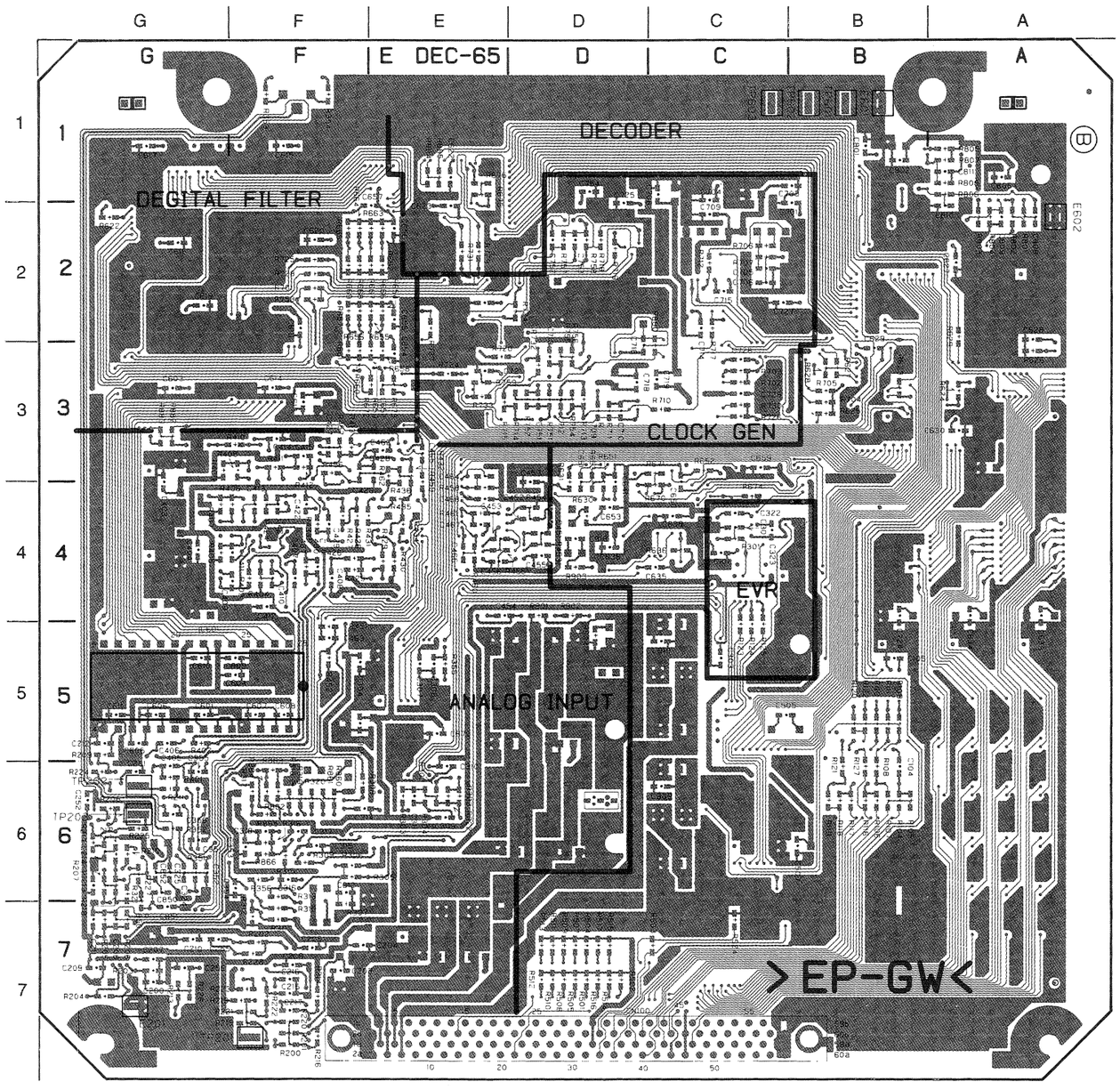
BKDW-505(UCJ) ; DEC-65 MCB ; #14131-18180
BKDW-506(EK) ; DEC-65P MCB ; #12931-15210
BKDW-506(UC) ; DEC-65PG MCB ; #10221-10270

DEC-65(1-648-545-14)

CN100	D-7	IC706	D-2
		IC707	E-3
CP501	D-2	IC708	E-2
		IC712	D-2
D101	C-4	IC801	A-2
D102	C-4	IC802	A-2
D103	C-4	IC860	F-6
D301	E-6	IC870	E-5
D302	F-6	IC901	D-6
D401	F-3	IC902	D-6
D701	D-3	IC903	D-5
D702	C-3	IC904	D-5
D703	C-3	IC905	D-4
E201	G-7	L201	E-7
E601	B-1	L202	E-6
E602	A-2	L203	F-7
		L301	F-4
FL201	G-7	L302	E-6
FL601	A-5	L401	G-3
FL602	A-6	L402	G-4
FL603	A-7	L403	G-5
FL604	A-6	L601	A-5
FL605	A-6	L602	A-5
FL606	A-7	L701	B-1
FL607	A-6	L703	D-3
FL608	A-5	L801	B-1
FL609	A-6	L850	G-6
FL610	A-6	L901	C-6
FL611	A-5	L902	C-5
FL612	A-6	L903	E-7
FL613	A-7	L904	E-7
FL614	A-6		
FL615	A-6	PS901	C-6
IC101	B-6	Q201	G-6
IC103	B-5	Q202	F-7
IC201	F-7	Q203	F-7
IC202	G-7	Q204	F-7
IC203	G-6	Q205	F-7
IC204	G-6	Q206	F-7
IC301	C-5	Q207	G-6
IC302	C-4	Q301	F-6
IC303	C-4	Q302	F-7
IC304	E-6	Q401	G-5
IC306	F-6	Q402	F-4
IC307	E-6	Q403	F-3
IC308	G-6	Q405	F-4
IC309	F-6	Q406	F-4
IC310	G-6	Q601	B-3
IC401	F-4	Q801	A-1
IC402	F-4	Q901	D-4
IC403	F-3		
IC404	F-4	RB880	B-2
IC405	E-3	RB881	B-2
IC406	F-4	RB882	B-2
IC407	F-4	RB883	B-3
IC408	F-3		
IC451	E-4	RV300	F-1
IC452	E-4		
IC453	E-4	TP201	F-7
IC454	E-4	TP202	G-6
IC455	E-4	TP203	G-6
IC601	F-5	TP601	B-1
IC602	F-3	TP602	B-1
IC603	G-3	TP603	C-1
IC604	F-2		
IC605	E-1		
IC606	A-3		
IC607	A-4		
IC608	A-4		
IC614	E-3		
IC616	E-2		
IC617	E-2		
IC618	E-2		
IC619	C-4		
IC705	D-3		

LOT NO. C-1

S NO. D-1



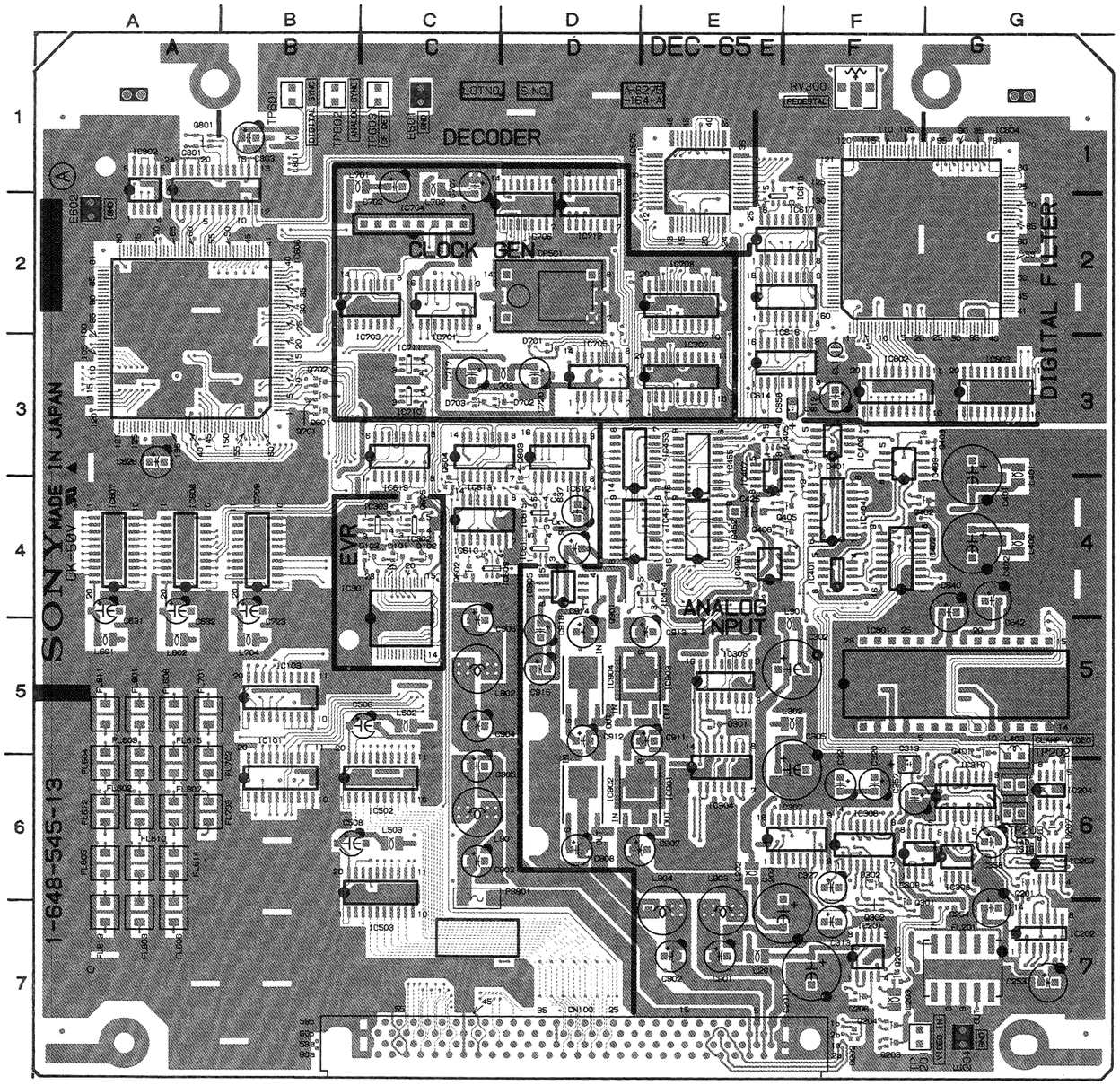
DEC-65 BOARD -B SIDE-

1-648-545-14

BKDW-505(UCJ) ; DEC-65 MCB ; #14131-18180
BKDW-506(EK) ; DEC-65P MCB ; #12931-15210
BKDW-506(UC) ; DEC-65PG MCB ; #10221-10270

DEC-65 ; Analog composite video decoder (Composite-component conversion, A/D conversion)

BKDW-505(UCJ)	;	S/N 11305 through 14130
BKDW-506(EK)	;	S/N 11201 through 12930
BKDW-506(UC)	;	S/N 10031 through 10220



DEC-65 BOARD -A SIDE-

1-648-545-13

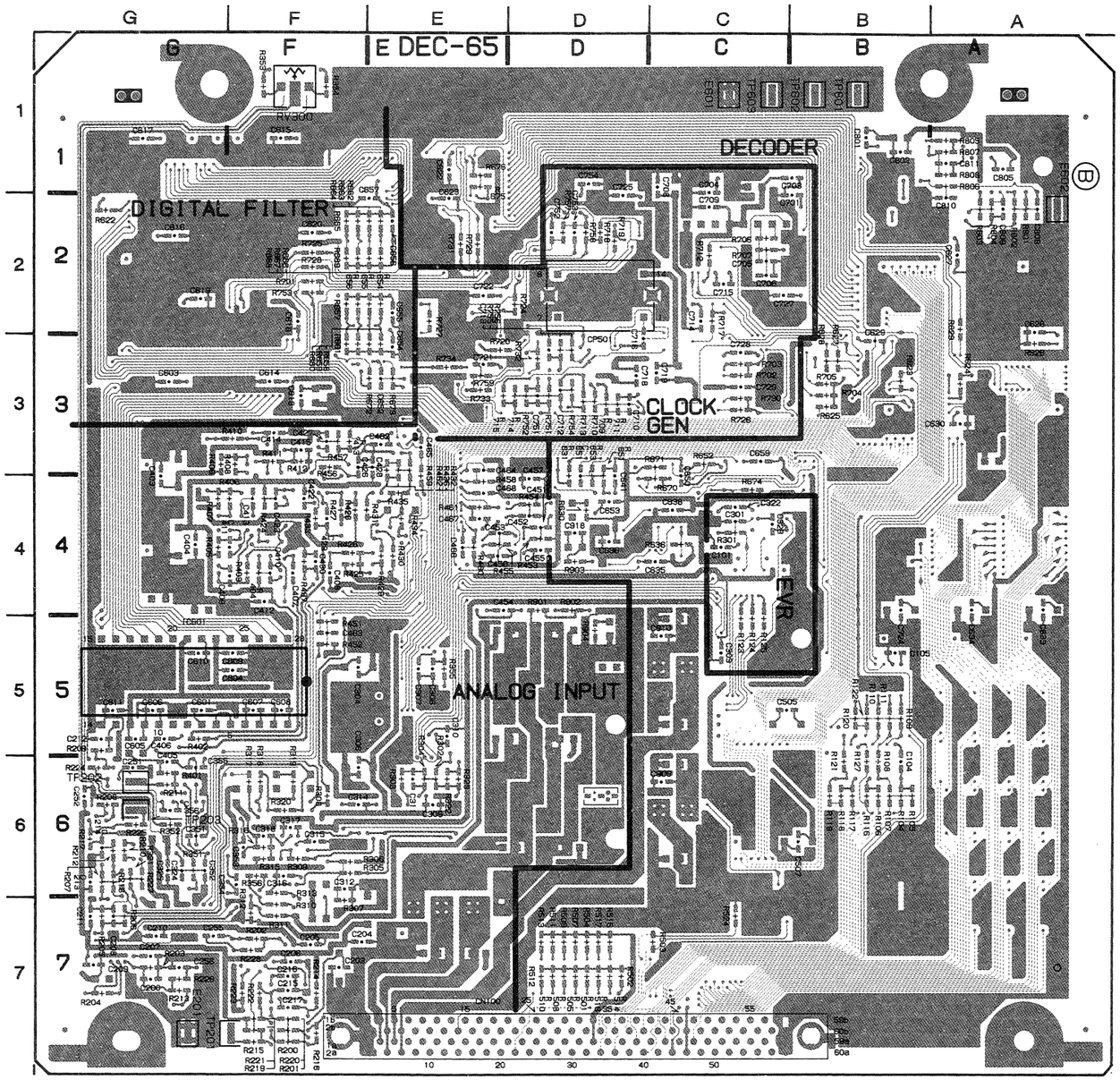
BKDW-505(UCJ) ; DEC-65 MCB ; #11305 -14130

BKDW-506(EK) ; DEC-65P MCB ; #11201 -12930

BKDW-506(UC) ; DEC-65PG MCB ; #10031 -10220

DEC-65(1-648-545-13)

CN100	D-7	IC608	A-4
		IC609	C-4
CP501	D-2	IC610	C-4
		IC611	D-4
D101	C-4	IC612	D-4
D102	C-4	IC613	C-3
D103	C-4	IC614	E-3
D301	E-5	IC615	D-4
D302	F-6	IC616	E-2
D401	F-3	IC617	E-2
D701	D-3	IC618	E-2
D702	D-3	IC619	C-3
D703	C-3	IC701	C-2
		IC703	B-2
E201	G-7	IC704	C-2
E601	C-1	IC705	D-3
E602	A-2	IC706	D-2
		IC707	E-3
FL201	G-7	IC708	E-2
FL601	A-5	IC709	B-4
FL602	A-6	IC710	C-3
FL603	A-7	IC711	C-3
FL604	A-6	IC712	D-2
FL605	A-6	IC801	A-1
FL606	A-7	IC802	A-1
FL607	A-6	IC901	E-6
FL608	A-5	IC902	E-6
FL609	A-6	IC903	E-5
FL610	A-6	IC904	E-5
FL611	A-5	IC905	D-4
FL612	A-6		
FL613	A-7	PS901	C-6
FL614	A-6		
FL615	A-6	Q201	G-7
FL701	A-5	Q202	F-7
FL702	A-6	Q203	F-7
FL703	A-6	Q204	F-7
		Q205	F-7
IC101	B-6	Q206	F-7
IC103	B-5	Q207	G-6
IC201	F-7	Q301	F-6
IC202	G-7	Q302	F-7
IC203	G-6	Q401	G-6
IC204	G-6	Q402	F-4
IC301	C-5	Q403	F-3
IC302	C-4	Q405	F-4
IC303	C-4	Q406	F-4
IC304	E-6	Q601	B-3
IC305	E-5	Q602	C-4
IC306	F-6	Q603	D-4
IC307	E-6	Q604	C-4
IC308	G-6	Q605	C-4
IC309	F-6	Q701	B-3
IC310	G-6	Q702	B-3
IC401	F-4	Q801	A-1
IC402	F-4	Q901	D-4
IC403	F-3		
IC404	F-4	RV300	F-1
IC405	E-3		
IC406	F-4	SL1	F-3
IC407	F-4		
IC408	F-3	TP201	F-7
IC451	E-4	TP202	G-6
IC452	E-4	TP203	G-6
IC453	E-4	TP601	B-1
IC454	E-4	TP602	B-1
IC455	E-4	TP603	C-1
IC502	B-6		
IC503	B-7		
IC601	F-5		
IC602	F-3		
IC603	G-3		
IC604	G-1		
IC605	E-1		
IC606	A-3		
IC607	A-4		
LOT NO.	C-1		
S NO.	D-1		



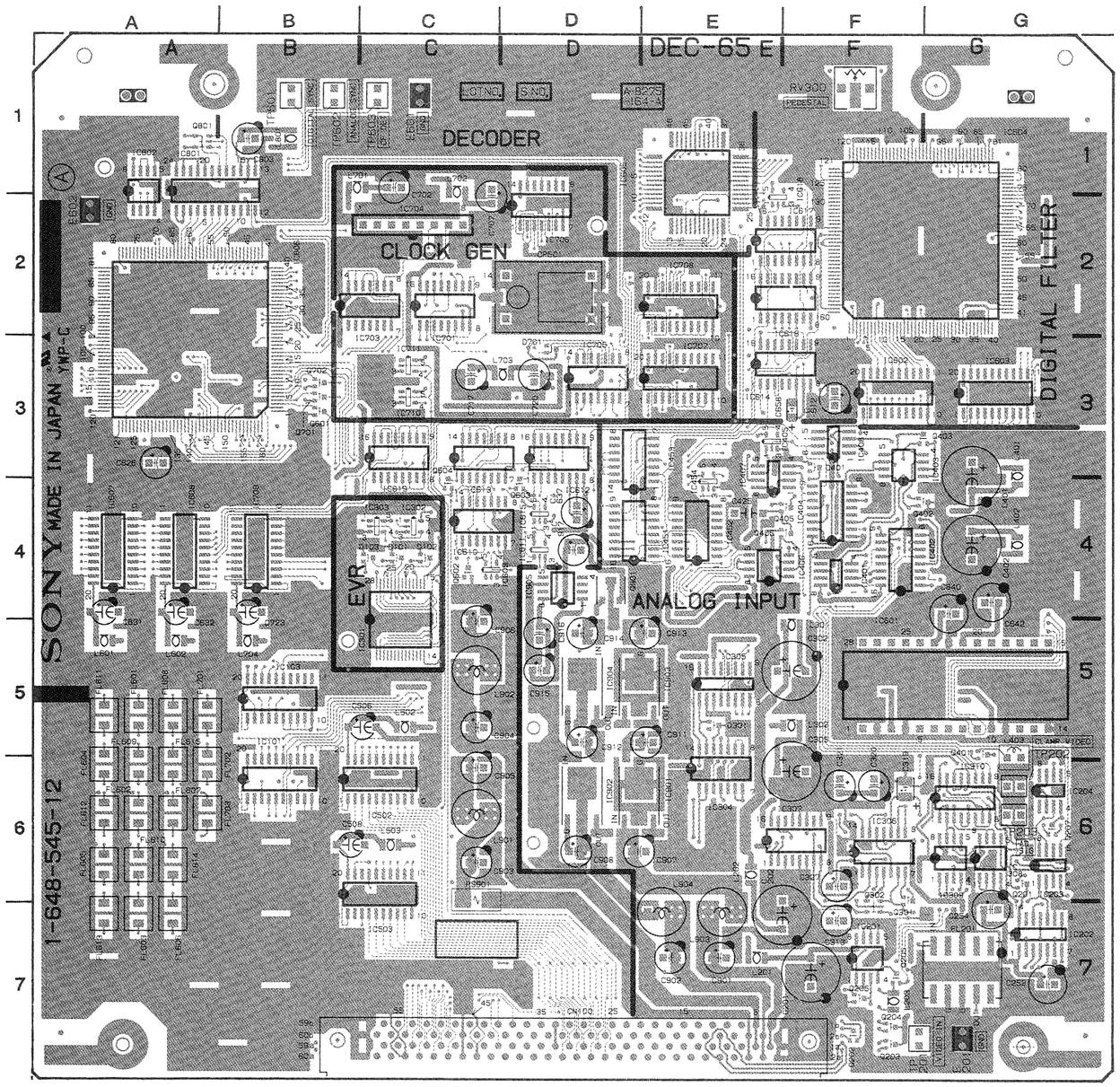
DEC-65 BOARD -B SIDE-

1-648-545-13

BKDW-505(UCJ) ; DEC-65 MCB ; #11305-14130
BKDW-506(EK) ; DEC-65P MCB ; #11201-12930
BKDW-506(UC) ; DEC-65PG MCB ; #10031-10220

DEC-65 ; Analog composite video decoder (Composite-component conversion, A/D conversion)

BKDW-505(UCJ)	**;**	**S/N 10701 through 11304**
BKDW-506(EK)	**;**	**S/N 10751 through 11200**
BKDW-506(UC)	**;**	**S/N 10021 through 10030**



DEC-65 BOARD -A SIDE-

1-648-545-12

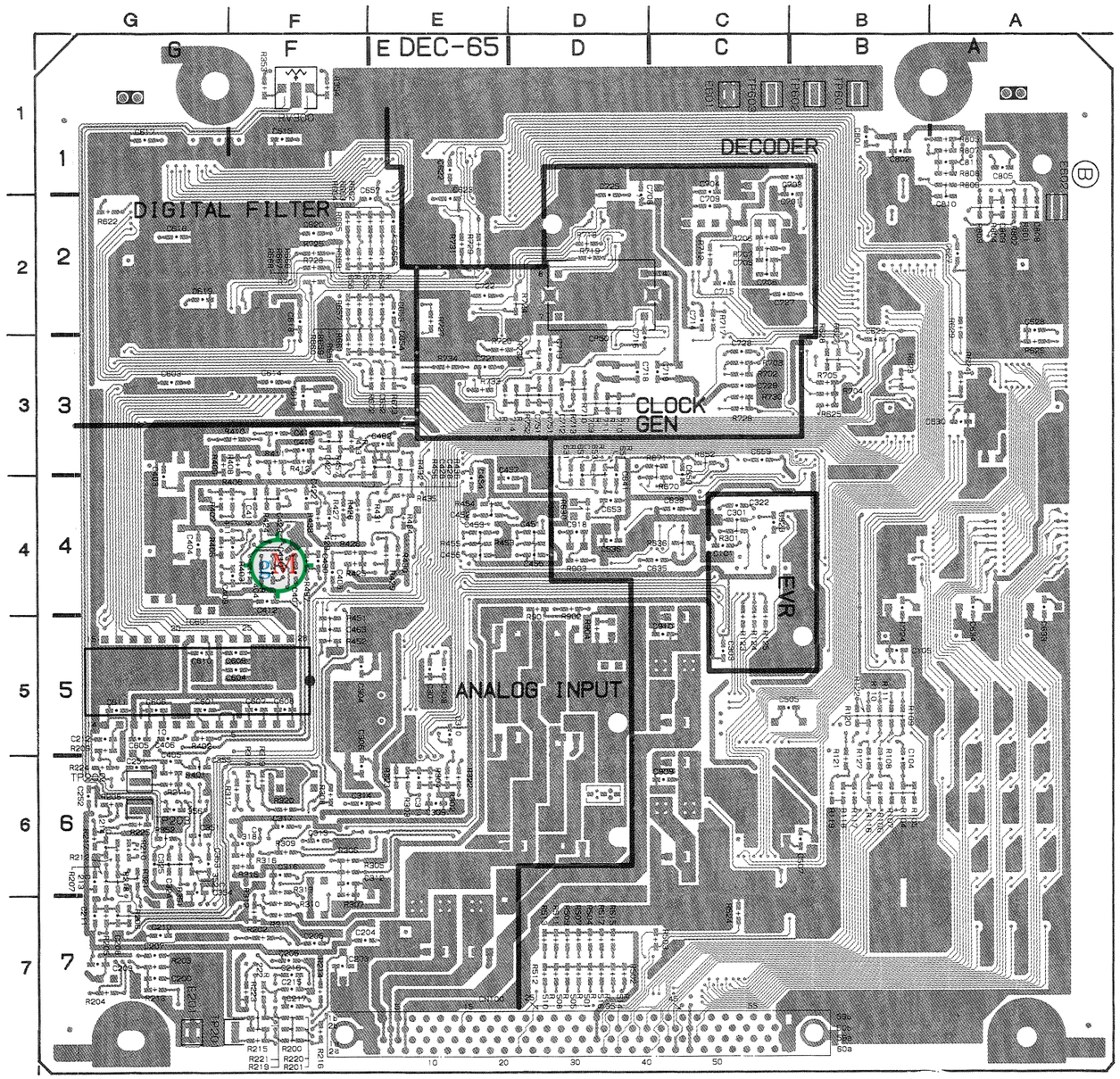
BKDW-505(UCJ) ; DEC-65 MCB ; #10701 - #11304
BKDW-506(EK) ; DEC-65P MCB ; #10751 - #11200
BKDW-506(UC) ; DEC-65PG MCB ; #10021 - #10030

DEC-65(1-648-545-12)

CN100	D-7	IC612	D-4
		IC613	C-3
CP501	D-2	IC614	E-3
		IC615	D-4
D101	C-4	IC616	E-2
D102	C-4	IC617	E-2
D103	C-4	IC618	E-2
D301	E-5	IC619	C-3
D401	F-3	IC701	C-2
D701	D-3	IC703	B-2
		IC704	C-2
E201	G-7	IC705	D-3
E601	C-1	IC706	D-2
E602	A-2	IC707	E-3
		IC708	E-2
FL201	G-7	IC709	B-4
FL601	A-5	IC710	C-3
FL602	A-6	IC711	C-3
FL603	A-7	IC801	A-1
FL604	A-6	IC802	A-1
FL605	A-6	IC901	E-6
FL606	A-7	IC902	E-6
FL607	A-6	IC903	E-5
FL608	A-5	IC904	E-5
FL609	A-6	IC905	D-4
FL610	A-6		
FL611	A-5	PS901	C-6
FL612	A-6		
FL613	A-7	Q201	G-7
FL614	A-6	Q202	F-7
FL615	A-6	Q203	F-7
FL701	A-5	Q204	F-7
FL702	A-6	Q205	F-7
FL703	A-6	Q206	F-7
		Q207	G-6
IC101	B-6	Q301	F-6
IC103	B-5	Q302	F-7
IC201	F-7	Q401	G-6
IC202	G-7	Q402	F-4
IC203	G-6	Q403	F-3
IC204	G-6	Q405	F-4
IC301	C-5	Q406	F-4
IC302	C-4	Q601	B-3
IC303	C-4	Q602	C-4
IC304	E-6	Q603	D-4
IC305	E-5	Q604	C-4
IC306	F-6	Q701	B-3
IC307	E-6	Q702	B-3
IC308	G-6	Q801	A-1
IC309	G-6	Q901	D-4
IC310	G-6		
IC401	F-4	RV300	F-1
IC402	F-4		
IC403	F-3	TP201	F-7
IC404	F-4	TP202	G-6
IC405	E-3	TP203	G-6
IC406	F-4	TP601	B-1
IC407	F-4	TP602	B-1
IC408	F-3	TP603	C-1
IC451	E-4		
IC452	E-4		
IC453	E-4		
IC454	E-4		
IC502	B-6		
IC503	B-7		
IC601	F-5		
IC602	F-3		
IC603	G-3		
IC604	G-1		
IC605	E-1		
IC606	A-3		
IC607	A-4		
IC608	A-4		
IC609	C-4		
IC610	C-4		
IC611	D-4		

LOT NO. C-1

S NO. D-1



DEC-65 BOARD -B SIDE-

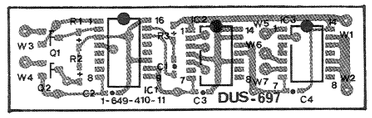
1-648-545-12

BKDW-505(UCJ) ; DEC-65 MCB ; #10701 - #11304
BKDW-506(EK) ; DEC-65P MCB ; #10751 - #11200
BKDW-506(UC) ; DEC-65PG MCB ; #10021 - #10030

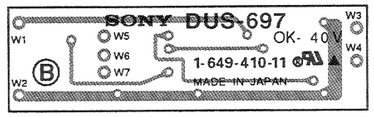
DEC-65, DUS-697/719/722 BKDW-505/506

DEC-65 ; Analog composite video decoder (Composite-component conversion, A/D conversion)
DUS-697/719/722

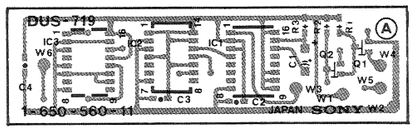
BKDW-505(UCJ)	;	S/N 10001 through 10700
BKDW-506(EK)	;	S/N 10001 through 10750
BKDW-506(UC)	;	S/N 10001 through 10020



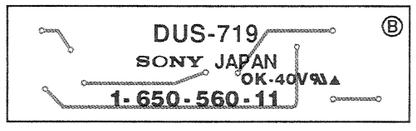
DUS-697 BOARD -A SIDE-
1-649-410-11
for BKDW-506 only



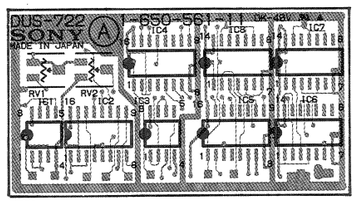
DUS-697 BOARD -B SIDE-
1-649-410-11
for BKDW-506 only



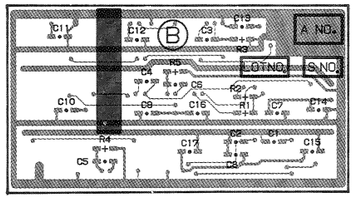
DUS-719 BOARD -A SIDE-
1-650-560-11



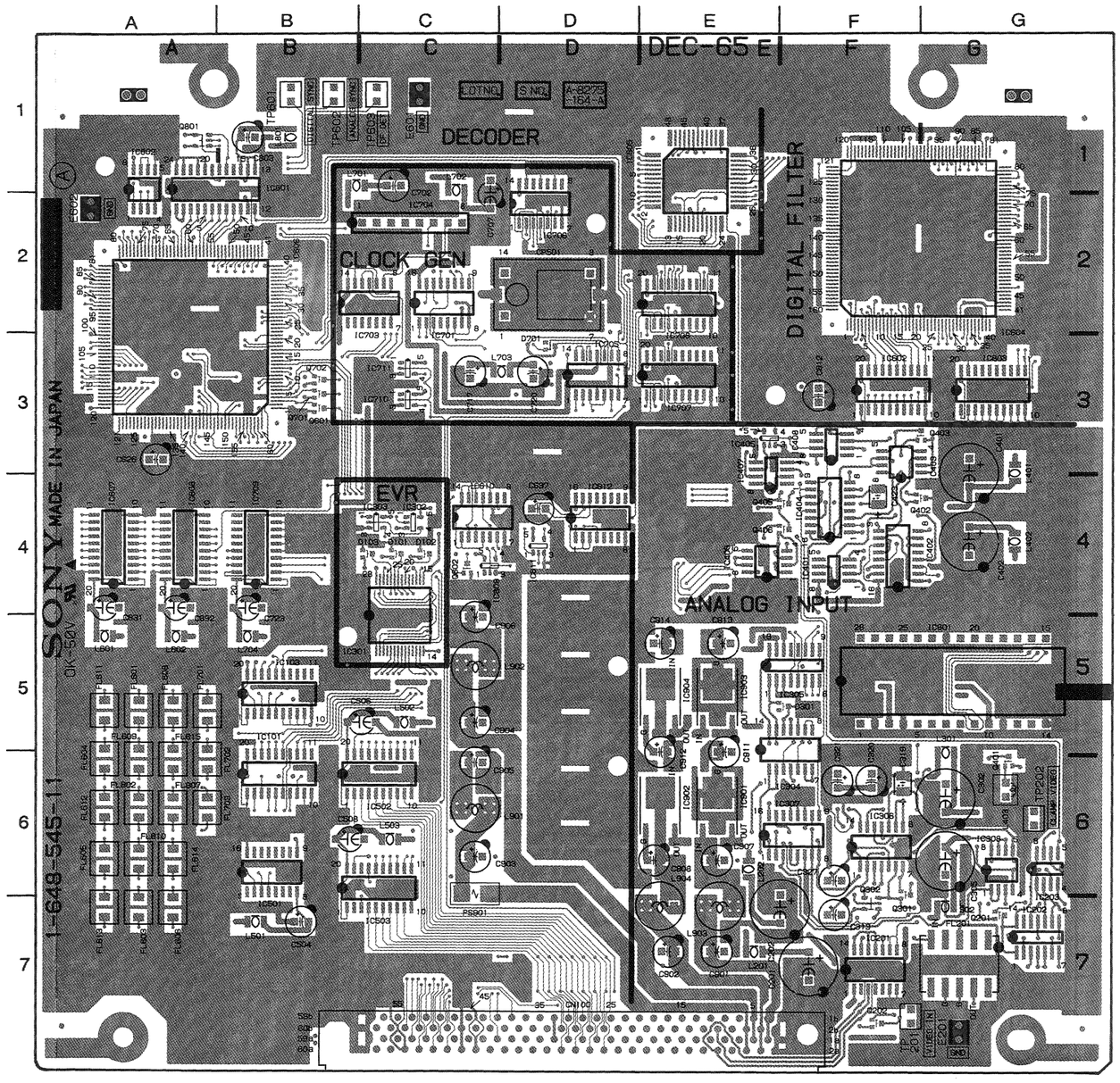
DUS-719 BOARD -B SIDE-
1-650-560-11



DUS-722 BOARD -A SIDE-
1-650-561-11



DUS-722 BOARD -B SIDE-
1-650-561-11

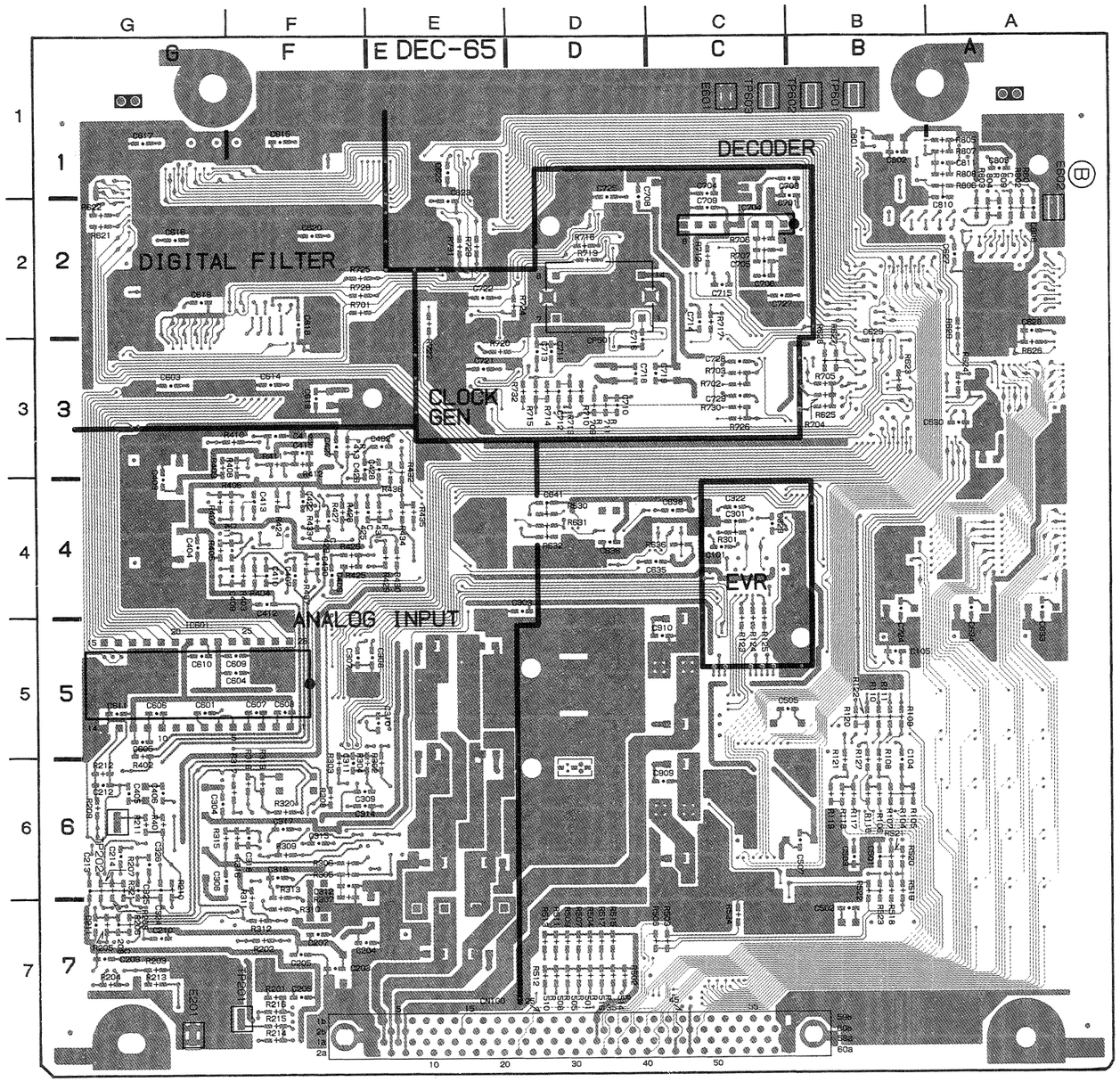


DEC-65 BOARD -A SIDE-
1-648-545-11
BKDW-505(UCJ) ; DEC-65 MCB ; #10001 - #10700
BKDW-506(EK) ; DEC-65P MCB ; #10001 - #10750
BKDW-506(UC) ; DEC-65PG MCB ; #10001 - #10020

1-124 (a)

DEC-65(1-648-545-11)

CN100	D-7	IC708	E-2
		IC709	B-4
CP501	D-2	IC710	C-3
		IC711	C-3
D101	C-4	IC801	A-1
D102	C-4	IC802	A-1
D103	C-4	IC901	E-6
D301	F-5	IC902	E-6
D701	D-3	IC903	E-5
		IC904	E-5
E201	G-7		
E601	C-1	PS901	C-6
E602	A-2		
		Q201	G-7
FL201	G-7	Q202	F-7
FL601	A-5	Q301	F-6
FL602	A-6	Q302	F-7
FL603	A-7	Q401	G-6
FL604	A-6	Q402	F-4
FL605	A-6	Q403	F-3
FL606	A-7	Q405	F-4
FL607	A-6	Q406	F-4
FL608	A-5	Q601	B-3
FL609	A-6	Q602	C-4
FL610	A-6	Q701	B-3
FL611	A-5	Q702	B-3
FL612	A-6	Q801	A-1
FL613	A-7		
FL614	A-6	TP201	F-7
FL615	A-6	TP202	G-6
FL701	A-5	TP601	B-1
FL702	A-6	TP602	B-1
FL703	A-6	TP603	C-1
IC101	B-6		
IC103	B-5		
IC201	F-7		
IC202	G-7		
IC203	G-6		
IC301	C-5		
IC302	C-4		
IC303	C-4		
IC304	E-6		
IC305	E-5		
IC306	F-6		
IC307	E-6		
IC308	G-6		
IC401	F-4		
IC402	F-4		
IC403	F-3		
IC404	F-4		
IC405	E-3		
IC406	F-4		
IC407	F-4		
IC408	F-3		
IC501	B-6		
IC502	B-6		
IC503	B-7		
IC601	F-5		
IC602	F-3		
IC603	G-3		
IC604	G-2		
IC605	E-1		
IC606	A-3		
IC607	A-4		
IC608	A-4		
IC609	C-4		
IC610	C-4		
IC611	D-4		
IC612	D-4		
IC701	C-2		
IC703	B-2		
IC704	C-2		
IC705	D-3		
IC706	D-2		
IC707	E-3		
LOT NO.	C-1		
S NO.	D-1		



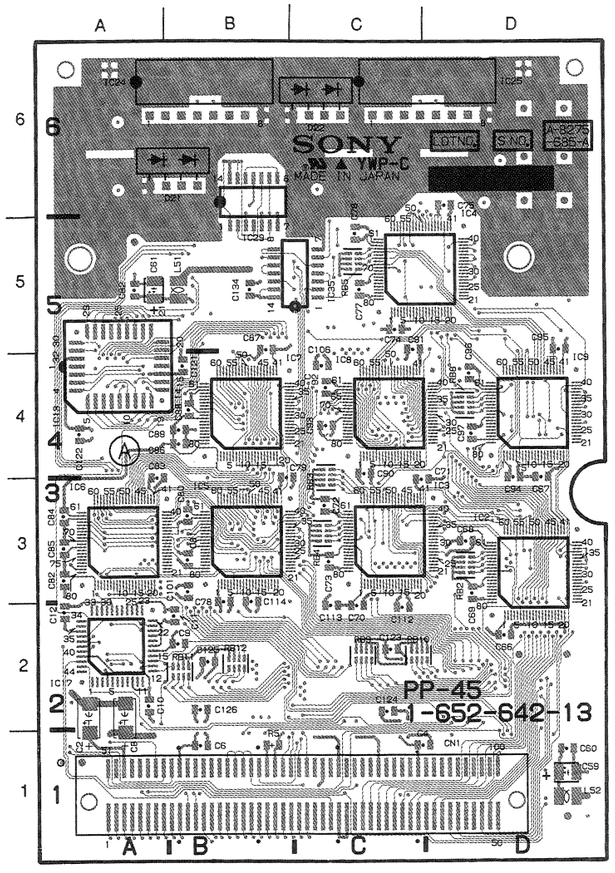
DEC-65 BOARD -B SIDE-

1-648-545-11

BKDW-505(UCJ) ; DEC-65 MCB ; #10001 - #10700
BKDW-506(EK) ; DEC-65P MCB ; #10001 - #10750
BKDW-506(UC) ; DEC-65PG MCB ; #10001 - #10020

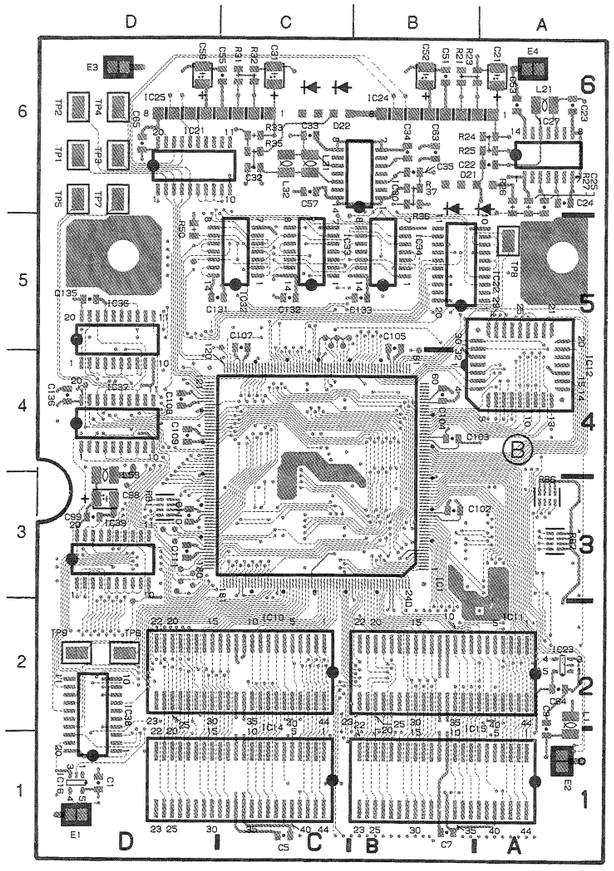
PP-45 ; Audio program play

BKDW-507



PP-45 BOARD -A SIDE-

1-652-642-13
BKDW-507 ; PP-45 MCB ; #10001 -



PP-45 BOARD -B SIDE-

1-652-642-13
BKDW-507 ; PP-45 MCB ; #10001 -

PP-45 (1-652-642-13)

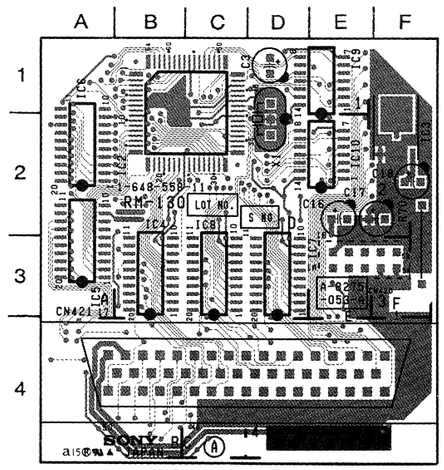
CN1	D-1
D21	B-6
D22	B-6
✱E1	D-1
✱E2	A-1
✱E3	D-6
✱E4	A-6
✱IC1	B-3
✱IC2	D-3
✱IC3	C-3
✱IC4	D-5
✱IC5	B-3
✱IC6	A-3
✱IC7	B-4
✱IC8	C-4
✱IC9	D-4
✱IC10	C-2
✱IC11	B-2
✱IC12	A-4
IC13	A-4
✱IC14	C-1
✱IC15	B-1
✱IC16	D-1
IC17	A-2
✱IC21	D-6
✱IC22	B-5
✱IC23	A-2
IC24	A-6
IC25	D-6
✱IC27	A-6
IC29	B-6
✱IC30	B-6
✱IC32	C-5
✱IC33	C-5
✱IC34	B-5
IC35	C-5
✱IC36	D-5
✱IC37	D-4
✱IC38	D-2
✱IC39	D-3
✱RB1	D-3
RB2	D-3
RB3	C-3
RB4	C-3
RB5	C-5
✱RB6	A-3
✱RB7	A-3
RB8	D-4
RB9	C-2
RB10	C-2
RB11	B-2
RB12	B-2
✱TP1	D-6
✱TP2	D-6
✱TP3	D-6
✱TP4	D-6
✱TP5	D-6
✱TP6	D-2
✱TP7	D-6
✱TP8	A-5
✱TP9	D-2

✱ : B SIDE

LOT NO.	D-6
S NO.	D-6

RM-130 ; Parallel (50P) interface

BKDW-509



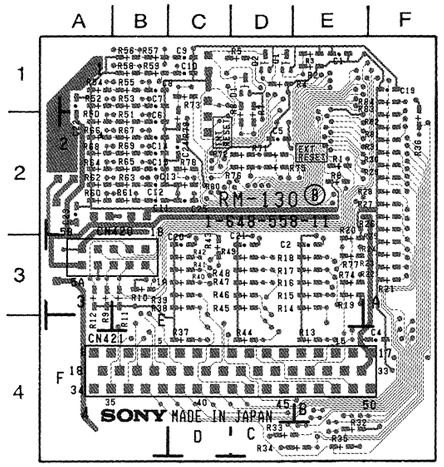
RM-130 BOARD -A SIDE-
1-648-558-11
BKDW-509 ; RM-130 MCB ; #10001 -

RM-130(1-648-558-11)

✱CN420	E-3
CN421	D-4
✱D1	C-1
IC2	C-1
IC3	F-2
IC4	B-3
IC5	A-3
IC6	A-2
IC7	D-3
IC8	C-3
IC9	E-1
IC10	E-2
✱Q1	C-1
✱Q2	C-1
X1	D-2

✱ : B SIDE

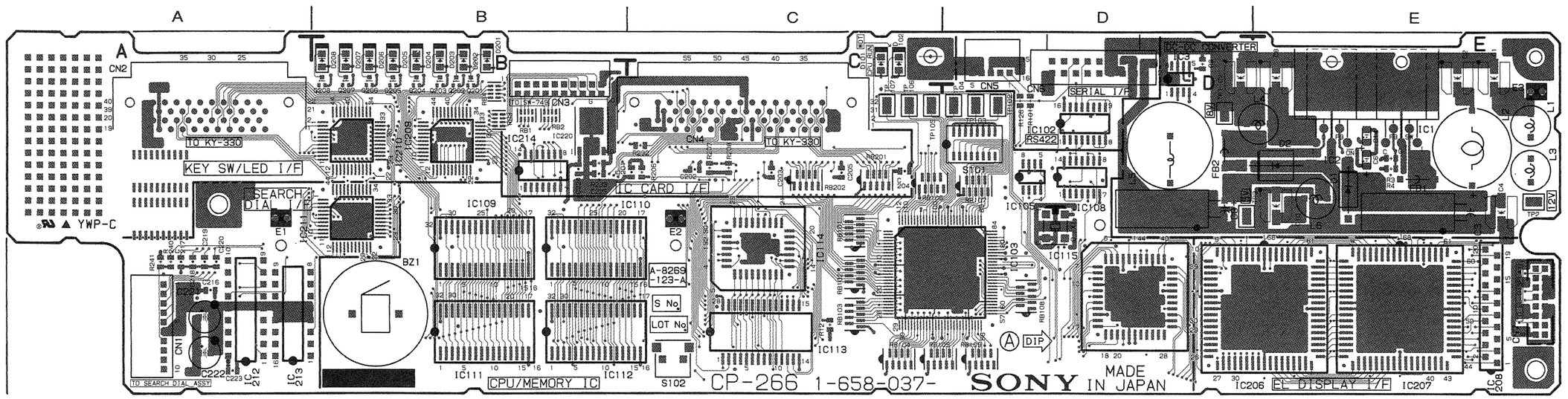
LOT NO.	C-2
S NO.	D-2



RM-130 BOARD -B SIDE-
1-648-558-11
BKDW-509 ; RM-130 MCB ; #10001 -

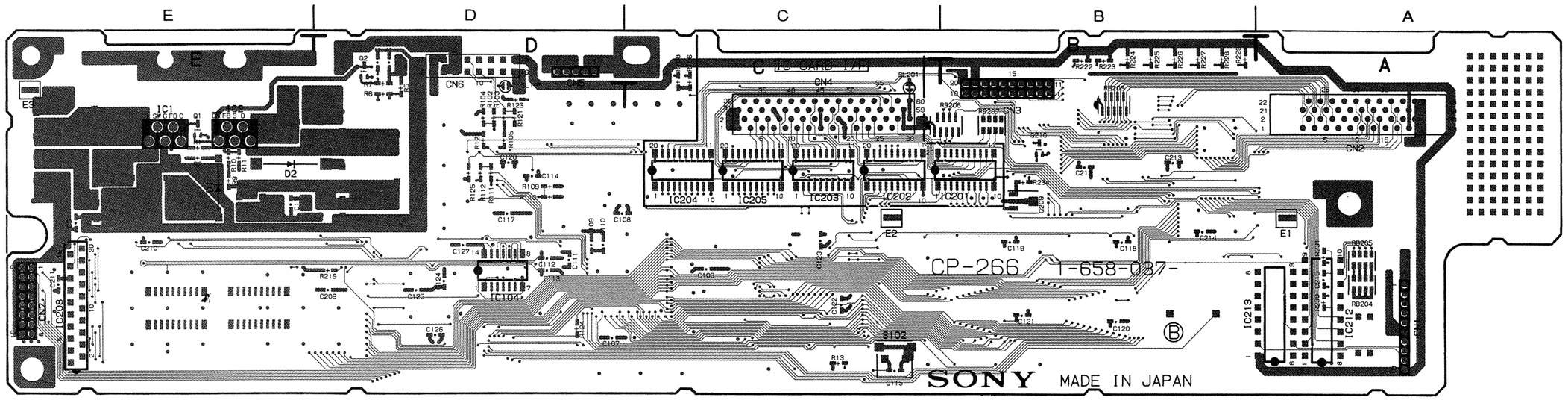
CP-266; Panel control CPU, EL control, PIO, Memory card I/F

BKDW-515



CP-266 BOARD -A SIDE-

1-658-037-11,12
BKDW-515 ; CP-266 MCB ; #10001-



CP-266 BOARD -B SIDE-

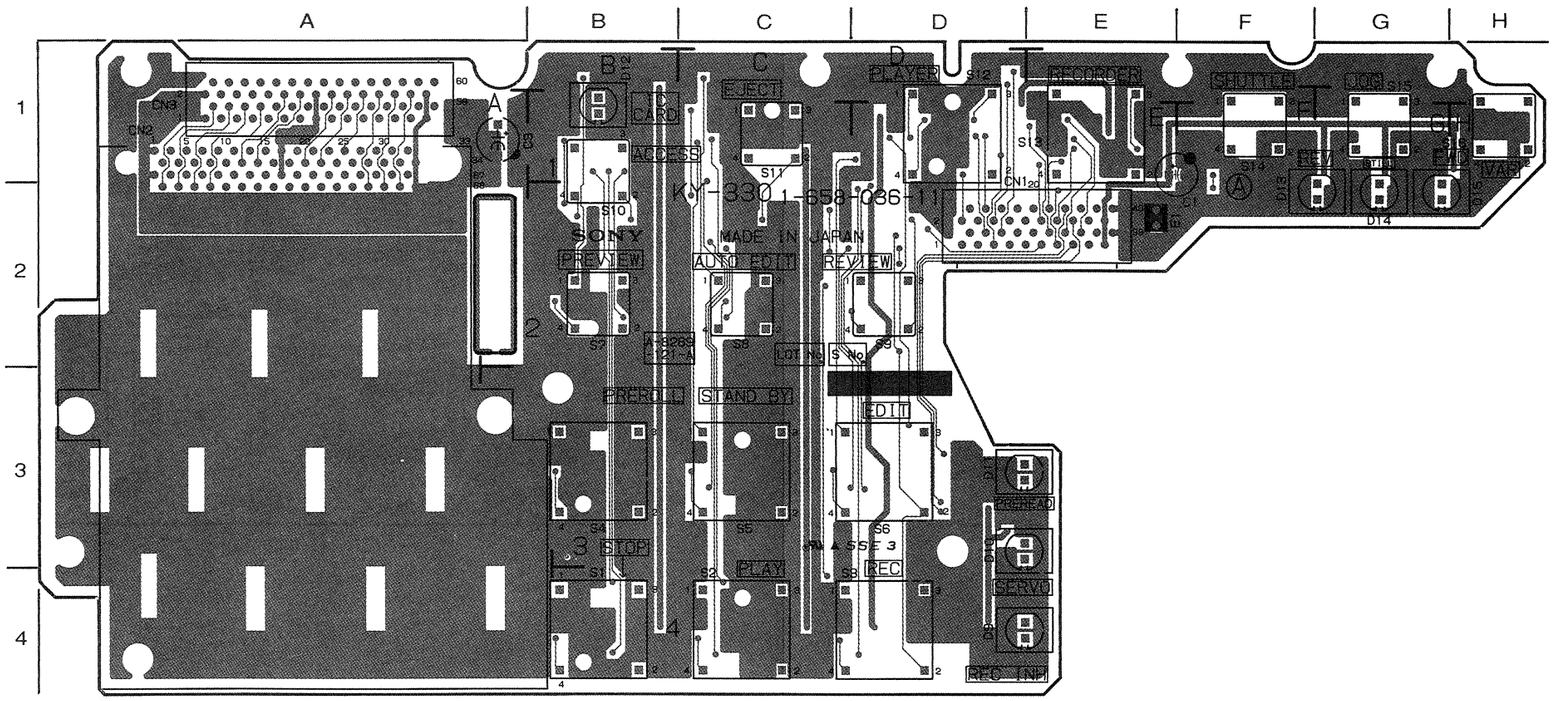
1-658-037-11,12
BKDW-515 ; CP-266 MCB ; #10001-

CP-266 (1-658-037-11,12)

BZ1	B-1	FB2	D-1	* IC203	C-1	L4	E-1	RB108	D-1
				* IC204	C-1	L5	D-1	RB109	D-1
CN1	A-1	IC1	E-1	* IC205	C-1	L6	E-1	RB201	C-1
CN2	A-1	IC2	E-1	IC206	E-1			RB202	C-1
CN3	B-1	IC3	D-1	IC207	E-1	* Q1	E-1	* RB203	B-1
CN4	C-1	IC102	D-1	IC208	E-1	* Q2	D-1	* RB204	A-1
CN5	D-1	IC103	C-1	IC209	B-1	* Q209	B-1	* RB205	A-1
CN6	D-1	* IC104	D-1	IC210	B-1	* Q210	B-1	* RB206	B-1
CN7	E-1	IC105	D-1	IC211	B-1			* RB207	B-1
		IC108	D-1	IC212	A-1	RB1	B-1		
D1	E-1	IC109	B-1	IC213	A-1	RB2	B-1	S101	D-1
D2	E-1	IC110	B-1	IC214	B-1	RB3	B-1	S102	C-1
D101	C-1	IC111	B-1	IC220	B-1	RB4	B-1		
D102	C-1	IC112	B-1			RB101	C-1	TP1	D-1
		IC113	C-1	IS114	C-1	RB102	C-1	TP2	E-1
E1	A-1	IC114	C-1	IS115	D-1	RB103	C-1	TP3	D-1
E2	C-1	IC115	D-1			RB104	C-1		
E3	E-1	IC116	C-1	L1	E-1	RB105	C-1	X1	D-1
		* IC201	C-1	L2	E-1	RB106	C-1		
FB1	E-1	* IC202	C-1	L3	E-1	RB107	D-1	* : B SIDE	
								LOT NO.	C-1

KY-330; Editing operation/Tape transeport control, Memory card connector

BKDW-515

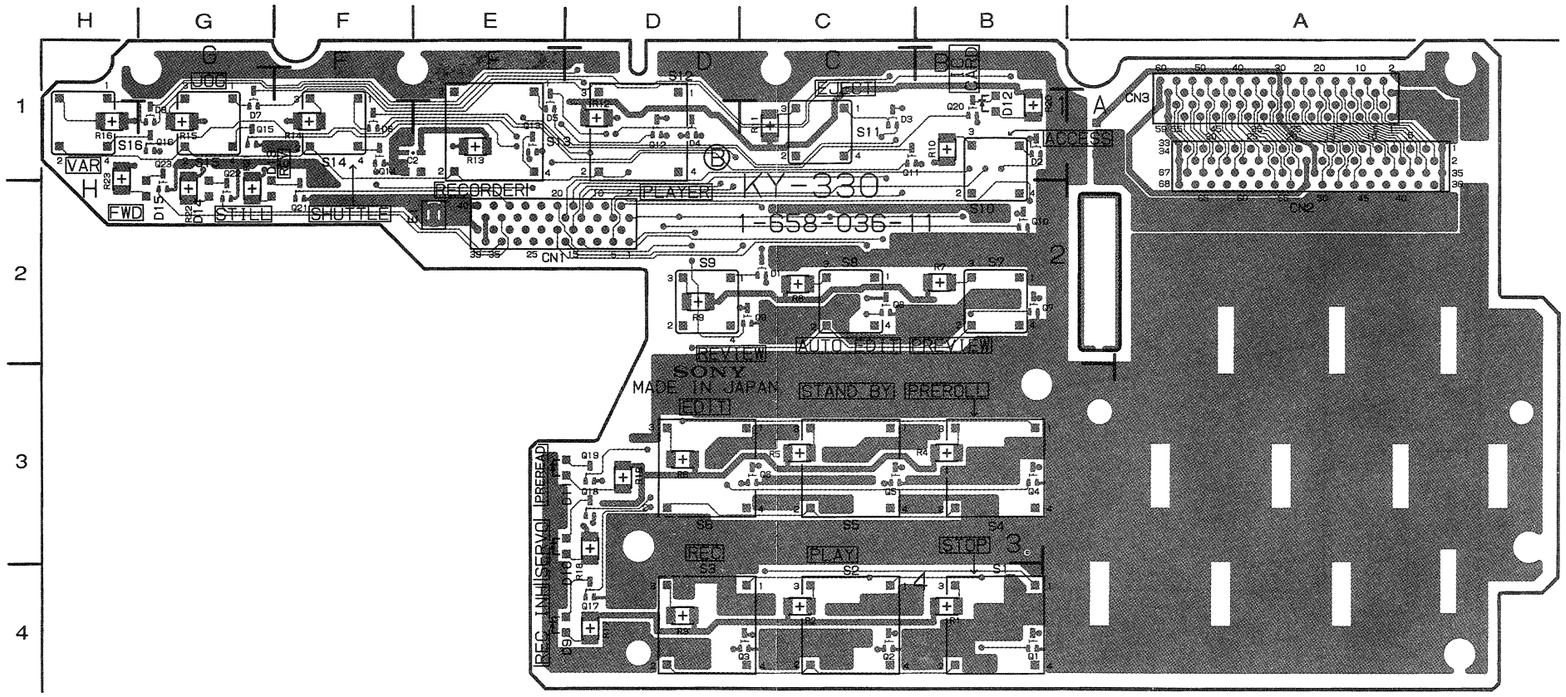


KY-330 BOARD -A SIDE-

1-658-036-11
BKDW-515 ; KY-330 MCB ; #10001-

KY-330 (1-658-036-11)

CN1	E-2	* Q11	C-1
CN2	A-1	* Q12	D-1
CN3	A-1	* Q13	E-1
		* Q14	F-1
* D1	C-2	* Q15	G-1
* D2	B-1	* Q16	G-1
* D3	C-1	* Q17	D-4
* D4	D-1	* Q18	D-3
* D5	E-1	* Q19	D-3
* D6	F-1	* Q20	B-1
* D7	G-1	* Q21	F-2
* D8	G-1	* Q22	G-2
D9	D-4	* Q23	G-2
D10	D-3		
D11	D-3	S1	B-4
D12	B-1	S2	C-4
D13	G-2	S3	D-4
D14	G-2	S4	B-3
D15	G-2	S5	C-3
		S6	D-3
E1	E-2	S7	B-2
		S8	C-2
* Q1	B-4	S9	D-2
* Q2	C-4	S10	B-1
* Q3	C-4	S11	C-1
* Q4	B-3	S12	D-1
* Q5	C-3	S13	E-1
* Q6	C-3	S14	F-1
* Q7	B-2	S15	G-1
* Q8	C-2	S16	H-1
* Q9	C-2		
* Q10	B-2	* : B SIDE	
		LOT NO.	C-2

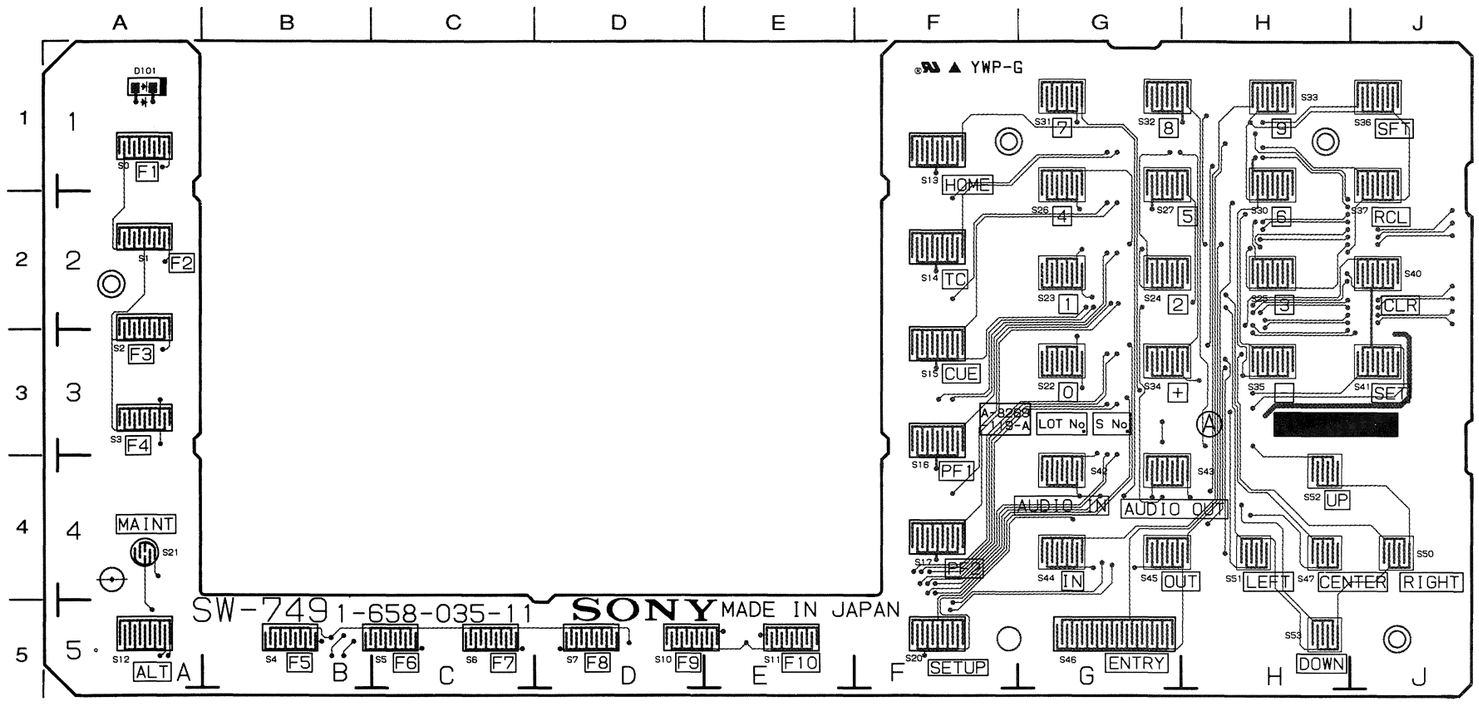


KY-330 BOARD -B SIDE-

1-658-036-11
BKDW-515 ; KY-330 MCB ; #10001-

SW-749; Function control

BKDW-515



SW-749 BOARD -A SIDE-

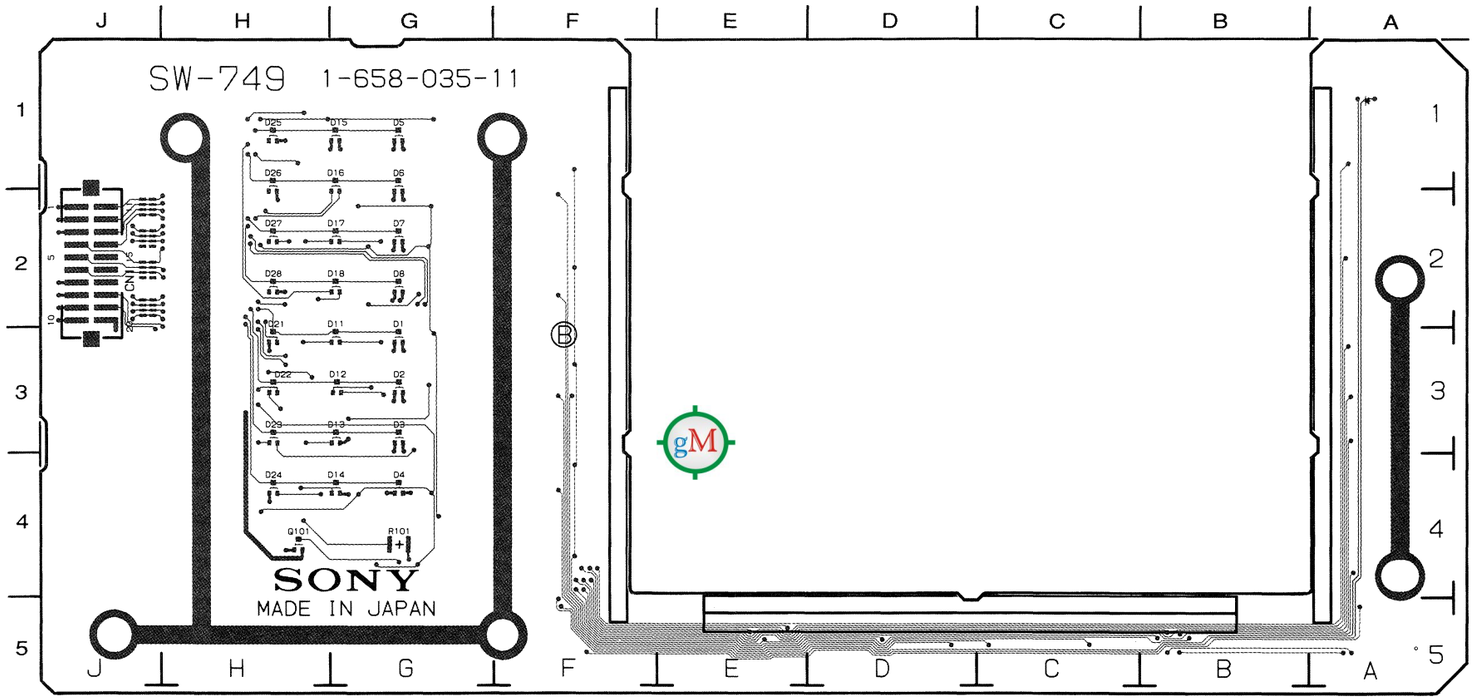
1-658-035-11
BKDW-515 ; SW-749 MCB ; #10001-

SW-749 (1-658-035-11)

* CN1	J-2
* D1	G-3
* D2	G-3
* D3	G-3
* D4	G-1
* D6	G-1
* D7	G-2
* D8	G-2
* D11	G-3
* D12	G-3
* D13	G-3
* D14	G-4
* D15	G-1
* D16	G-1
* D17	G-2
* D18	G-2
* D21	H-3
* D22	H-3
* D23	H-3
* D24	H-4
* D25	H-1
* D26	H-1
* D27	H-2
* D28	H-2
D101	A-1
* Q101	H-4

* : B SIDE

LOT NO. G-3



SW-749 BOARD **-B SIDE-**

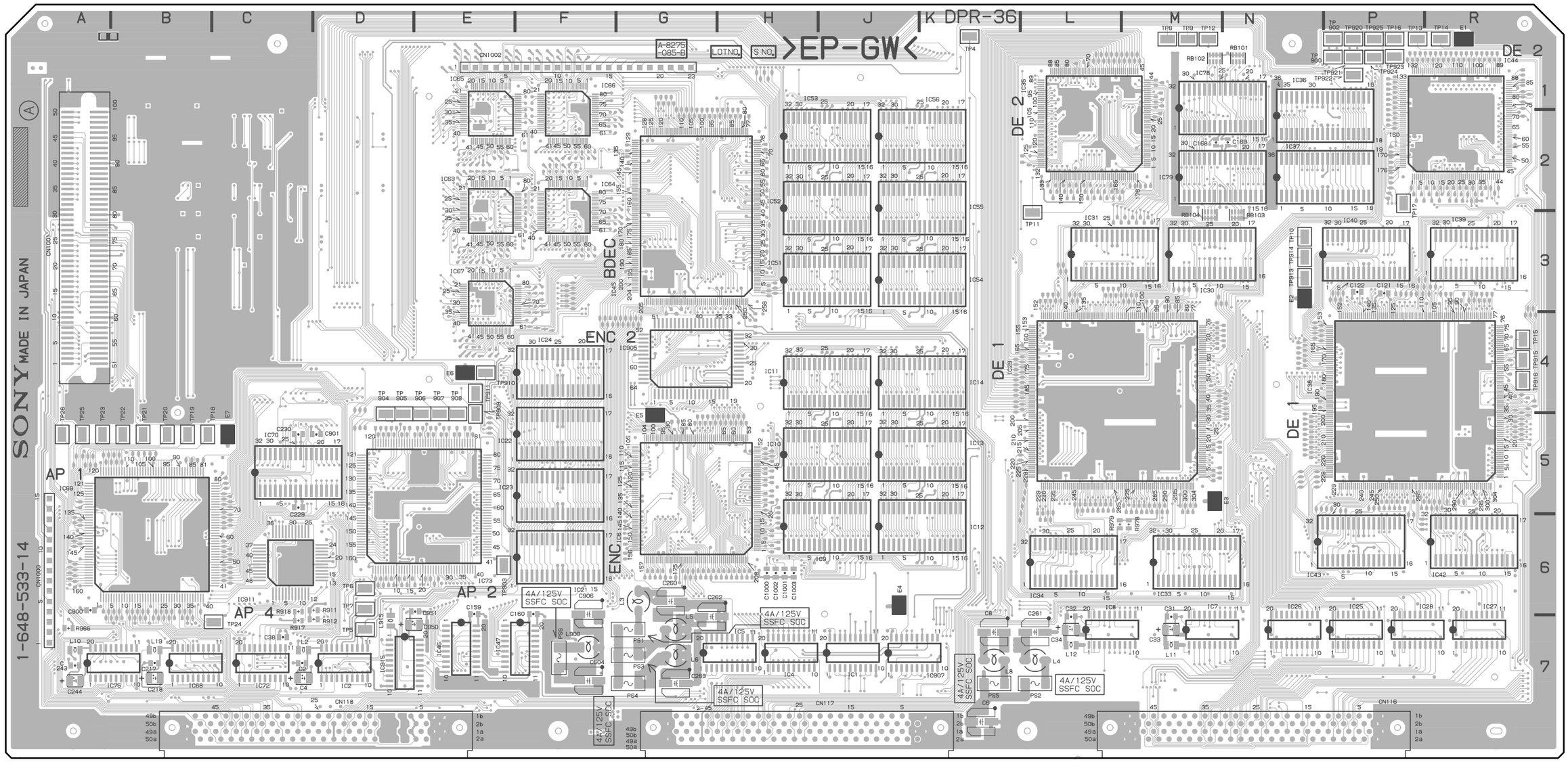
1-658-035-11
BKDW-515 ; SW-749 MCB ; #10001-

DPR-36 ; Digital data processor (Encode/Decode, Error correction)

(Board's Lot No. 812 and higher)
All recorder models

DPR-36 (1-648-533-14)

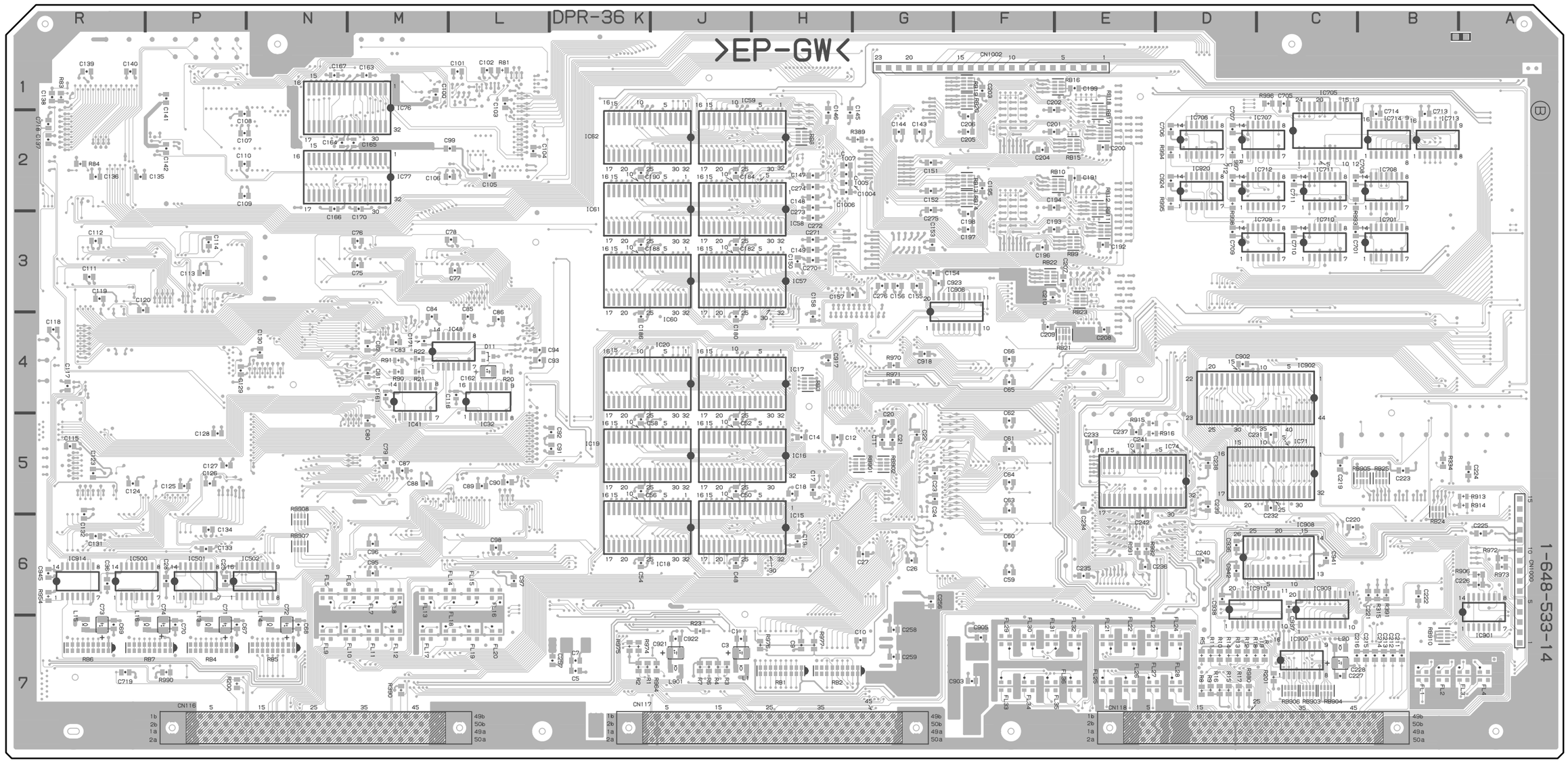
CN116	N7	IC54	J3	TP4	K1
CN117	H7	IC55	J3	TP5	D7
CN118	D7	IC56	J2	TP6	D6
CN1001	A3	IC57	*H3	TP7	D6
		IC58	*H2	TP8	M1
E1	R1	IC59	*H2	TP9	M1
E2	N3	IC60	*J3	TP10	N3
E3	M5	IC61	*J2	TP11	L3
E4	J6	IC62	*J2	TP12	M1
E5	G5	IC63	E3	TP13	P1
E6	E4	IC64	F3	TP14	R1
E7	C5	IC65	E2	TP15	R4
		IC66	F2	TP16	P1
FL1	*B7	IC67	E3	TP17	P2
FL3	*A7	IC68	B7	TP18	B5
FL4	*A7	IC69	B6	TP19	B5
FL5	*N6	IC72	C7	TP20	B5
FL6	*M6	IC73	E5	TP21	B5
FL7	*M6	IC74	*D5	TP22	B5
FL8	*M6	IC75	A7	TP23	A5
FL9	*N7	IC76	*M1	TP24	C7
FL10	*M7	IC77	*M2	TP25	A5
FL11	*M7	IC78	M2	TP26	A5
FL12	*M7	IC79	M2	TP900	P1
FL13	*M6	IC500	*R6	TP902	P1
FL14	*L6	IC501	*P6	TP903	E6
FL15	*L6	IC502	*P6	TP904	D5
FL16	*L6	IC701	*B3	TP905	D5
FL17	*M7	IC705	*C2	TP906	E5
FL18	*L7	IC706	*D2	TP907	E5
FL21	*E7	IC707	*D2	TP908	E5
FL22	*E7	IC708	*B2	TP909	E5
FL23	*E7	IC709	*D3	TP910	E4
FL24	*D7	IC710	*C3	TP911	E4
FL25	*E7	IC711	*C2	TP913	N3
FL26	*E7	IC712	*D2	TP914	N3
FL27	*E7	IC713	*B2	TP915	R4
FL28	*D7	IC714	*B2	TP916	R4
FL29	*F7	IC900	*C7	TP920	P1
FL30	*F7	IC901	*A7	TP921	P1
FL31	*F7	IC902	*C4	TP922	P1
FL32	*E7	IC905	G4	TP923	P1
FL33	*F7	IC906	*G4	TP924	P1
FL34	*F7	IC907	J7	TP925	P1
FL35	*F7	IC910	*D7		
FL36	*E7	IC911	C6	*:B SIDE	
		IC914	*R6		
IC1	J7	IC915	D7		
IC2	D7	IC920	*D2		
IC4	H7				
IC5	G7	PS1	G7		
IC6	G5	PS2	L7		
IC7	M7	PS3	G7		
IC8	L7	PS4	G7		
IC9	H6	PS5	K7		
IC10	H5	PS6	F7		
IC11	H4				
IC12	J6	RB1	*H7		
IC13	J5	RB2	*H7		
IC14	J4	RB3	*H4		
IC15	*H5	RB4	*P7		
IC16	*H5	RB5	*N7		
IC17	*H4	RB6	*R7		
IC18	*J5	RB7	*P7		
IC19	*J5	RB8	*H2		
IC20	*J4	RB9	*E3		
IC21	F6	RB10	*E2		
IC22	F5	RB11	*E3		
IC23	F6	RB12	*E2		
IC24	F4	RB13	*F2		
IC25	P7	RB14	*F2		
IC26	N7	RB15	*E2		
IC27	R7	RB16	*E1		
IC28	P7	RB17	*E2		
IC29	L4	RB18	*E2		
IC30	M3	RB19	*F1		
IC31	L3	RB20	*F1		
IC33	M6	RB21	*E4		
IC34	L6	RB22	*F3		
IC35	L2	RB23	*E3		
IC38	P4	RB24	*B5		
IC39	R3	RB25	*B5		
IC40	P3	RB101	N1		
IC42	R6	RB102	M1		
IC43	P6	RB103	N3		
IC44	R2	RB104	M3		
IC45	G3	RB903	*C7		
IC46	E7	RB904	*C7		
IC47	E7	RB905	*B5		
IC51	H3	RB906	*C7		
IC52	H3	RB907	*N6		
IC53	H2	RB910	*B7		



DPR-36 BOARD -A SIDE-

1-648-533-14 (LOT No. 812 -)

DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36	MCB
DVW-A500P(UC)	; DPR-36	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36	MCB
DVW-500P(UC)	; DPR-36	MCB



DPR-36 BOARD -B SIDE-

1-648-533-14 (LOT No. 812 -)

DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36	MCB
DVW-A500P(UC)	; DPR-36	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36	MCB
DVW-500P(UC)	; DPR-36	MCB

DPR-36 ; Digital data processor (Encode/Decode, Error correction)

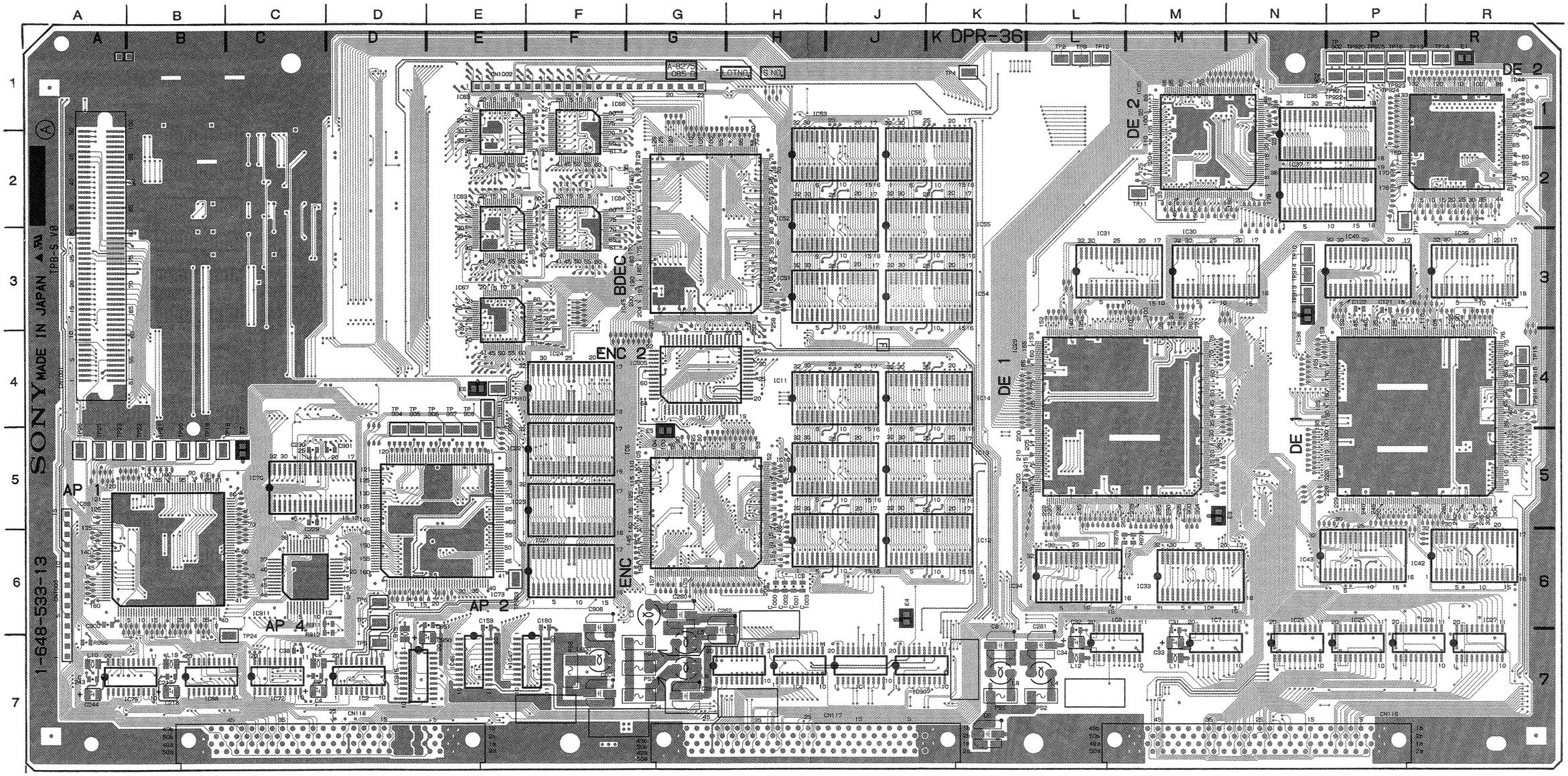
(Board's Lot No. 409 through 811)
All recorder models

DPR-36(1-648-533-13)

CN116	N-7	✱IC17	H-4	✱IC714	B-2	TP15	R-4
CN117	H-7	✱IC18	J-5	✱IC900	C-7	TP16	P-1
CN118	D-7	✱IC19	J-5	✱IC901	A-7	TP17	P-2
CN1000	A-6	✱IC20	J-4	✱IC902	C-4	TP18	B-5
CN1001	A-3	IC21	F-6	IC905	G-4	TP19	B-5
CN1002	F-1	IC22	F-5	✱IC906	G-3	TP20	B-5
		IC23	F-6	IC907	J-7	TP21	B-5
E1	R-1	IC24	F-4	✱IC908	D-6	TP22	B-5
E2	N-3	IC25	P-7	✱IC909	C-7	TP23	A-5
E3	M-5	IC26	N-7	✱IC910	D-7	TP24	C-7
E4	J-6	IC27	R-7	IC911	C-6	TP25	A-5
E5	G-5	IC28	P-7	✱IC914	R-6	TP26	A-5
E6	E-4	IC29	L-4	IC915	D-7	TP900	P-1
E7	C-5	IC30	M-3	✱IC920	D-2	TP902	P-1
		IC31	L-3			TP903	E-6
✱FL1	B-7	IC33	M-6	PS1	G-7	TP904	D-5
✱FL2	B-7	IC34	L-6	PS2	L-7	TP905	D-5
✱FL3	A-7	IC35	M-2	PS3	G-7	TP906	E-5
✱FL4	A-7	IC36	N-2	PS4	G-7	TP907	E-5
✱FL5	N-6	IC37	N-2	PS5	K-7	TP908	E-5
✱FL6	M-6	IC38	P-4	PS6	F-7	TP909	E-5
✱FL7	M-6	IC39	R-3			TP910	E-4
✱FL8	M-6	IC40	P-3	✱RB1	H-7	TP911	E-4
✱FL9	N-7	IC42	R-6	✱RB2	H-7	TP913	N-3
✱FL10	M-7	IC43	P-6	✱RB3	H-4	TP914	N-3
✱FL11	M-7	IC44	R-2	✱RB4	P-7	TP915	R-4
✱FL12	M-7	IC45	G-3	✱RB5	N-7	TP916	R-4
✱FL13	M-6	IC46	E-7	✱RB6	R-7	TP920	P-1
✱FL14	L-6	IC47	E-7	✱RB7	P-7	TP921	P-1
✱FL15	L-6	IC51	H-3	✱RB8	H-2	TP922	P-1
✱FL16	L-6	IC52	H-3	✱RB9	E-3	TP923	P-1
✱FL17	M-7	IC53	H-2	✱RB10	E-2	TP924	P-1
✱FL18	L-7	IC54	J-3	✱RB11	E-3	TP925	P-1
✱FL19	L-7	IC55	J-3	✱RB12	E-2		
✱FL20	L-7	IC56	J-2	✱RB13	F-2		
✱FL21	E-7	✱IC57	H-3	✱RB14	F-2		
✱FL22	E-7	✱IC58	H-2	✱RB15	E-2		
✱FL23	D-7	✱IC59	H-2	✱RB16	E-1		
✱FL24	D-7	✱IC60	J-3	✱RB17	E-2		
✱FL25	E-7	✱IC61	J-2	✱RB18	E-2		
✱FL26	E-7	✱IC62	J-2	✱RB19	F-1		
✱FL27	D-7	IC63	E-3	✱RB20	F-1		
✱FL28	D-7	IC64	F-3	✱RB21	E-4		
✱FL29	F-7	IC65	E-2	✱RB22	F-3		
✱FL30	F-7	IC66	F-2	✱RB23	E-3		
✱FL31	E-7	IC67	E-3	✱RB24	B-5		
✱FL32	E-7	IC68	B-7	✱RB25	B-5		
✱FL33	F-7	IC69	B-6	✱RB901	G-5		
✱FL34	F-7	IC70	C-5	✱RB902	G-5		
✱FL35	E-7	✱IC71	C-5	✱RB903	C-7		
✱FL36	E-7	IC72	C-7	✱RB904	C-7		
		IC73	E-6	✱RB905	B-5		
IC1	J-7	✱IC74	D-5	✱RB906	C-7		
IC2	D-7	IC75	A-7	✱RB907	N-6		
IC4	H-7	✱IC500	R-6	✱RB908	N-5		
IC5	G-7	✱IC501	P-6				
IC6	G-5	✱IC502	P-6	TP4	K-1		
IC7	M-7	✱IC701	B-3	TP5	D-7		
IC8	L-7	✱IC705	C-2	TP6	D-6		
IC9	H-6	✱IC706	D-2	TP7	D-6		
IC10	H-5	✱IC707	D-2	TP8	L-1		
IC11	H-4	✱IC708	B-2	TP9	L-1		
IC12	J-6	✱IC709	D-3	TP10	N-3		
IC13	J-5	✱IC710	C-3	TP11	M-2		
IC14	J-4	✱IC711	C-2	TP12	L-1		
✱IC15	H-5	✱IC712	D-2	TP13	P-1		
✱IC16	H-5	✱IC713	B-2	TP14	R-1		

✱ : B SIDE

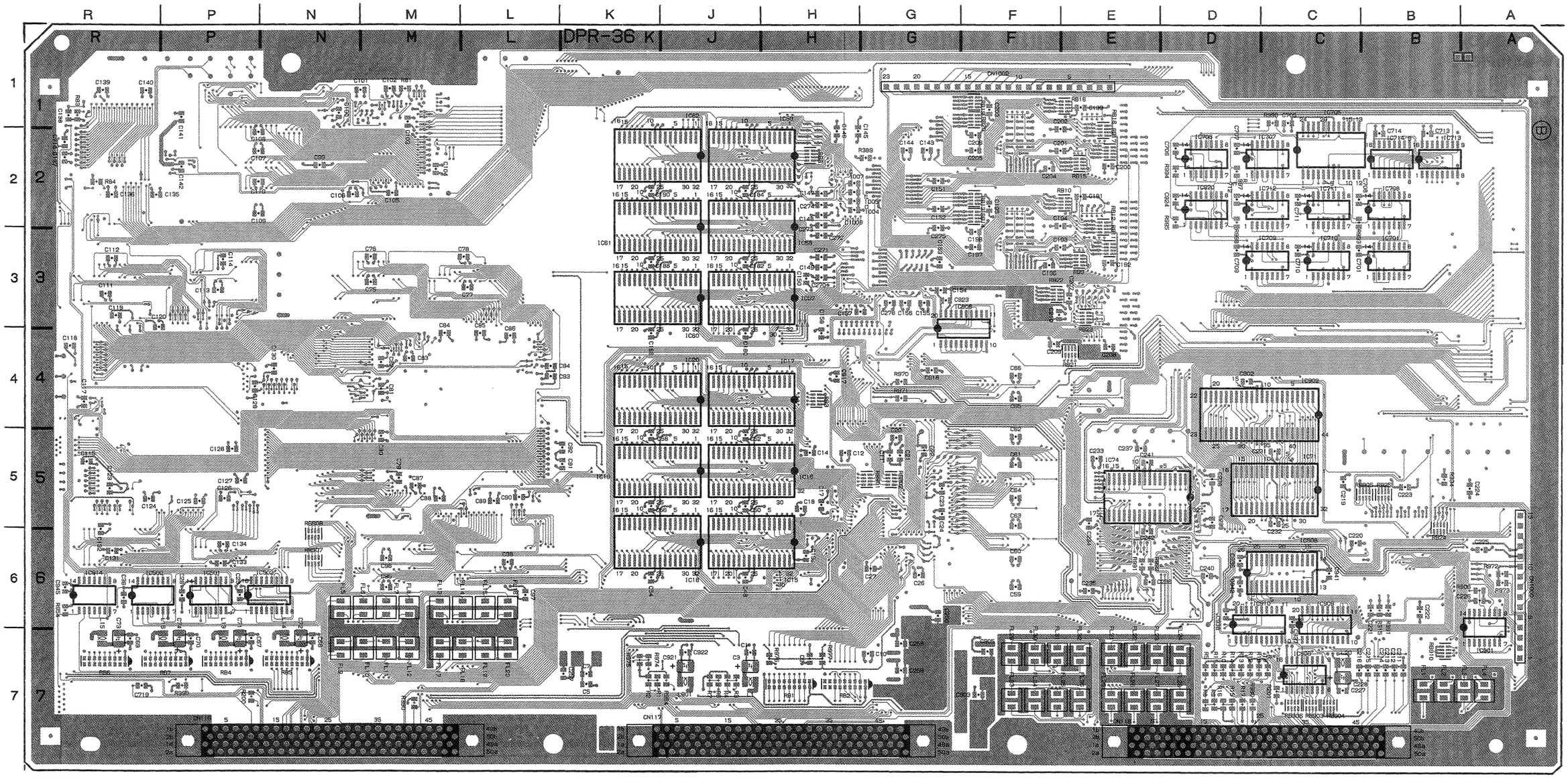
LOT NO. H-1



DPR-36 BOARD -A SIDE-

1-648-533-13 (LOT No. 409 - 811)

DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36P	MCB
DVW-A500P(UC)	; DPR-36PG	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36P	MCB
DVW-500P(UC)	; DPR-36PG	MCB



DPR-36 BOARD -B SIDE-

1-648-533-13 (LOT No. 409 - 811)

DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36P	MCB
DVW-A500P(UC)	; DPR-36PG	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36P	MCB
DVW-500P(UC)	; DPR-36PG	MCB

DPR-36 ; Digital data processor (Encode/Decode, Error correction)

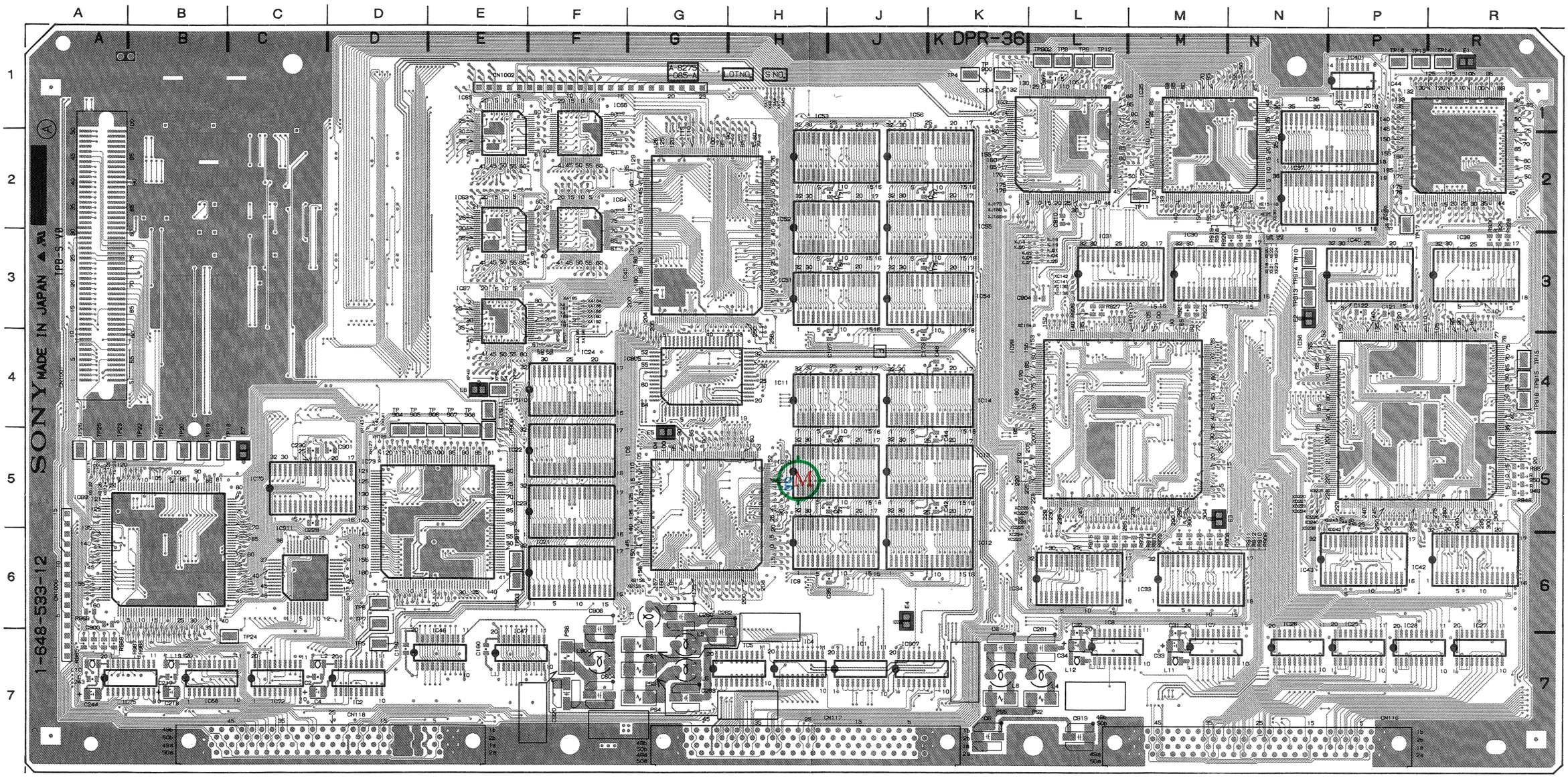
(Board's Lot No. 304 through 409)
All recorder models

DPR-36(1-648-533-12)

CN116	N-7	✱IC15	H-5	✱IC708	B-2	TP14	R-1
CN117	H-7	✱IC16	H-5	✱IC709	D-3	TP15	R-4
CN118	D-7	✱IC17	H-4	✱IC710	C-3	TP16	P-1
CN1000	A-6	✱IC18	J-5	✱IC711	C-2	TP17	P-2
CN1001	A-3	✱IC19	J-5	✱IC712	D-2	TP18	B-5
CN1002	F-1	✱IC20	J-4	✱IC713	B-2	TP19	B-5
		IC21	F-6	✱IC714	B-2	TP20	B-5
E1	R-1	IC22	F-5	✱IC716	B-2	TP21	B-5
E2	N-3	IC23	F-6	✱IC900	C-7	TP22	B-5
E3	M-5	IC24	F-4	✱IC901	A-7	TP23	A-5
E4	J-6	IC25	P-7	✱IC902	C-4	TP24	C-7
E5	G-5	IC26	N-7	✱IC903	K-3	TP25	A-5
E6	E-4	IC27	R-7	IC904	L-2	TP26	A-5
E7	C-5	IC28	P-7	IC905	G-4	TP900	K-1
		IC29	L-4	✱IC906	G-4	TP902	L-1
✱D701	B-2	IC30	M-3	IC907	J-7	TP903	E-6
		IC31	L-3	✱IC908	D-6	TP904	D-5
✱FL1	B-7	IC33	M-6	✱IC909	C-7	TP905	D-5
✱FL2	B-7	IC34	L-6	✱IC910	D-7	TP906	E-5
✱FL3	A-7	IC35	M-2	IC911	C-6	TP907	E-5
✱FL4	A-7	IC36	N-2	✱IC912	L-4	TP908	E-5
✱FL5	N-6	IC37	N-2	✱IC913	P-4	TP909	E-5
✱FL6	M-6	IC38	P-4	✱IC914	R-6	TP910	E-4
✱FL7	M-6	IC39	R-3			TP911	E-4
✱FL8	M-6	IC40	P-3	PS1	G-7	TP912	E-6
✱FL9	N-7	IC42	R-6	PS2	L-7	TP913	N-3
✱FL10	M-7	IC43	P-6	PS3	G-7	TP914	N-3
✱FL11	M-7	IC44	R-2	PS4	G-7	TP915	R-4
✱FL12	M-7	IC45	G-3	PS5	K-7	TP916	R-4
✱FL13	M-6	IC46	D-7	PS6	F-7		
✱FL14	L-6	IC47	E-7				
✱FL15	L-6	IC51	H-3	✱RB1	H-7		
✱FL16	L-6	IC52	H-3	✱RB2	H-7		
✱FL17	M-7	IC53	H-2	✱RB3	H-4		
✱FL18	L-7	IC54	J-3	✱RB4	P-7		
✱FL19	L-7	IC55	J-3	✱RB5	N-7		
✱FL20	L-7	IC56	J-2	✱RB6	R-7		
✱FL21	E-7	✱IC57	H-3	✱RB7	P-7		
✱FL22	E-7	✱IC58	H-2	✱RB8	H-2		
✱FL23	D-7	✱IC59	H-2	✱RB9	E-3		
✱FL24	D-7	✱IC60	J-3	✱RB10	E-2		
✱FL25	E-7	✱IC61	J-2	✱RB11	E-3		
✱FL26	E-7	✱IC62	J-2	✱RB12	E-2		
✱FL27	D-7	IC63	E-3	✱RB13	F-2		
✱FL28	D-7	IC64	F-3	✱RB14	F-2		
✱FL29	F-7	IC65	E-2	✱RB15	E-2		
✱FL30	F-7	IC66	F-2	✱RB16	E-1		
✱FL31	E-7	IC67	E-3	✱RB17	E-2		
✱FL32	E-7	IC68	B-7	✱RB18	E-2		
✱FL33	F-7	IC69	B-6	✱RB19	F-1		
✱FL34	F-7	IC70	C-5	✱RB20	F-1		
✱FL35	E-7	✱IC71	C-5	✱RB21	E-4		
✱FL36	E-7	IC72	C-7	✱RB22	F-3		
		IC73	E-5	✱RB23	E-3		
IC1	J-7	✱IC74	D-5	✱RB24	B-5		
IC2	D-7	IC75	A-7	✱RB25	B-5		
IC4	H-7	IC401	P-1				
IC5	G-7	✱IC500	R-6	TP4	K-1		
IC6	G-5	✱IC501	P-6	TP5	D-7		
IC7	M-7	✱IC502	P-6	TP6	D-6		
IC8	L-7	✱IC701	B-3	TP7	D-6		
IC9	H-6	✱IC702	K-5	TP8	L-1		
IC10	H-5	✱IC703	D-2	TP9	L-1		
IC11	H-4	✱IC704	D-3	TP10	N-3		
IC12	J-6	✱IC705	C-2	TP11	M-2		
IC13	J-5	✱IC706	D-2	TP12	L-1		
IC14	J-4	✱IC707	D-2	TP13	P-1		

✱ : B SIDE

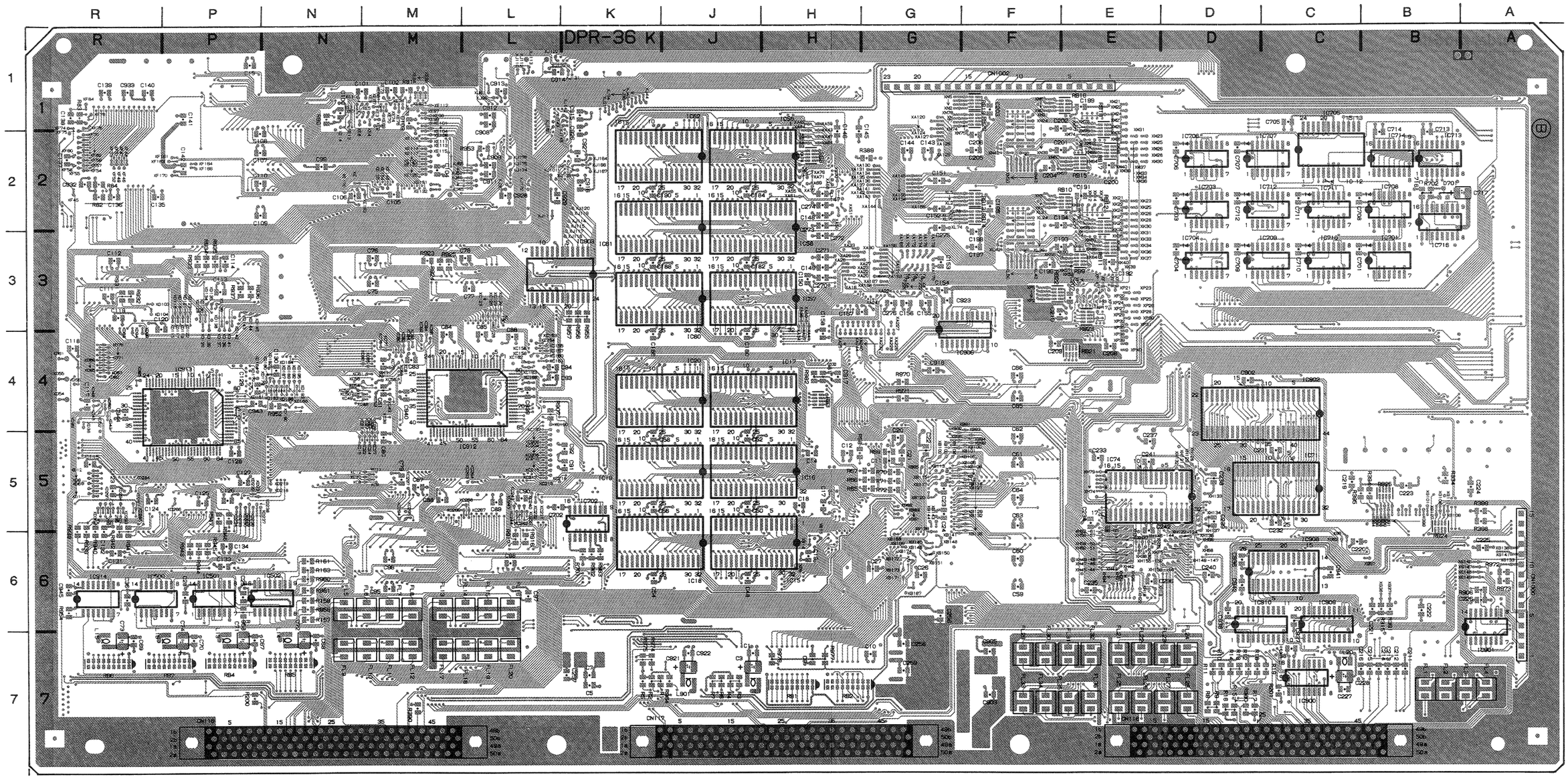
LOT NO. H-1



DPR-36 BOARD -A SIDE-

1-648-533-12 (LOT No. 304 - 409)

DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36P	MCB
DVW-A500P(UC)	; DPR-36PG	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36P	MCB
DVW-500P(UC)	; DPR-36PG	MCB



DPR-36 BOARD -B SIDE-

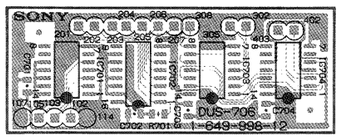
1-648-533-12 (LOT No. 304 - 409)

DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36P	MCB
DVW-A500P(UC)	; DPR-36PG	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36P	MCB
DVW-500P(UC)	; DPR-36PG	MCB

DPR-36, DUS-706/708/712

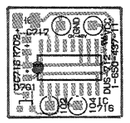
DPR-36 ; Digital data processor (Encode/Decode, Error correction)
DUS-706/708/712

(Board's Lot No. 302 through 303)
All recorder models
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)



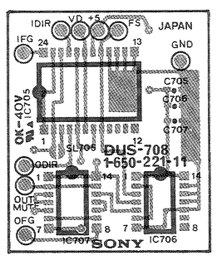
DUS-706 BOARD -A SIDE-

1-649-998-12



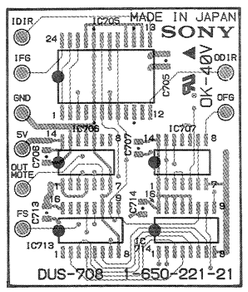
DUS-712 BOARD -A SIDE-

1-650-437-11



DUS-708 BOARD -A SIDE-

1-650-221-11
for PAL models



DUS-708 BOARD -A SIDE-

1-650-221-21
for NTSC models

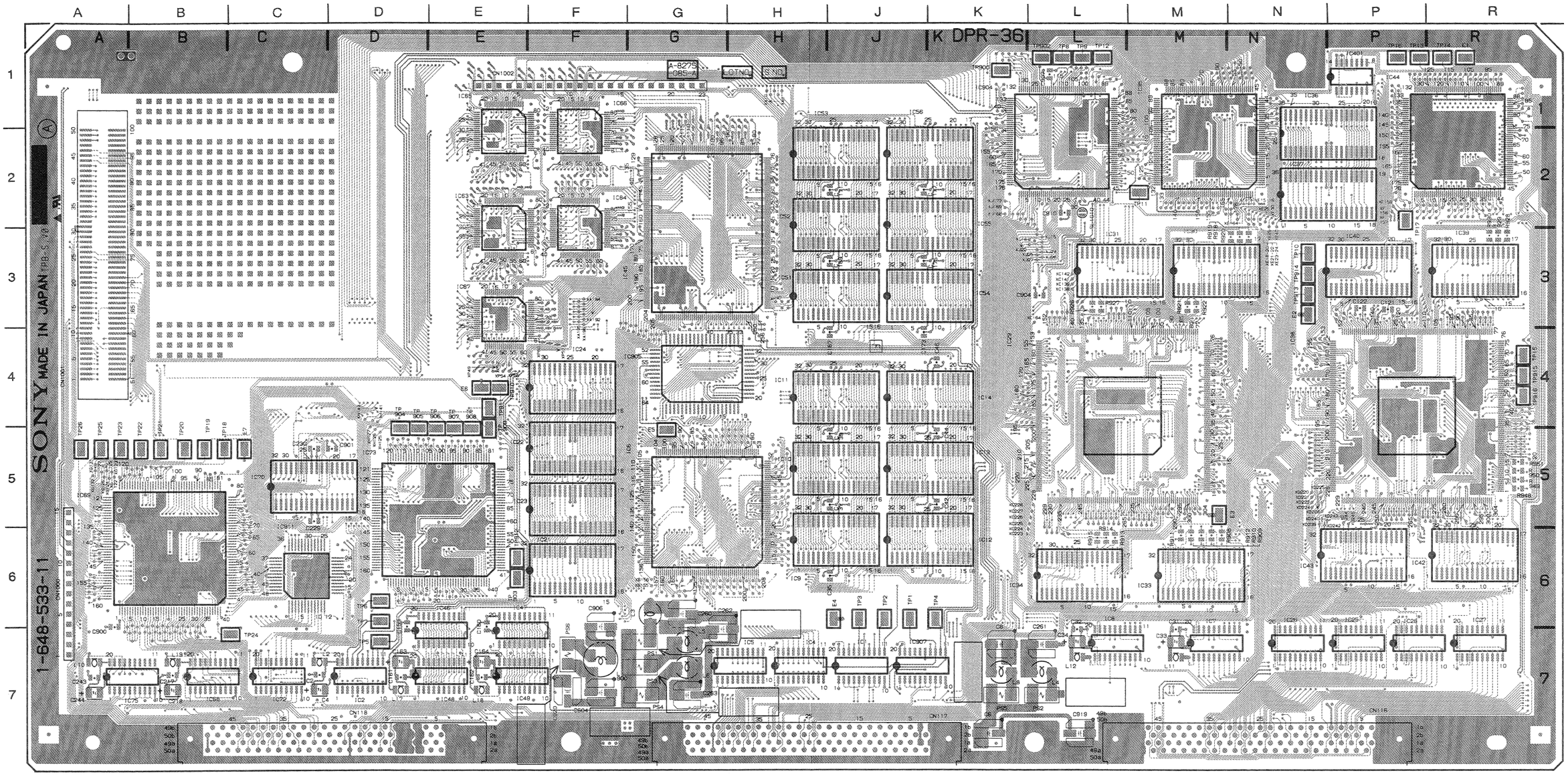
DPR-36(1-648-533-11)

CN116	N-7	IC26	N-7	✱RB4	P-7
CN117	H-7	IC27	R-7	✱RB5	N-7
CN118	D-7	IC28	P-7	✱RB6	R-7
CN1000	A-6	IC29	L-4	✱RB7	P-7
CN1001	A-3	IC30	M-3	✱RB8	H-2
CN1002	F-1	IC31	L-3	✱RB9	E-3
		IC33	M-6	✱RB10	E-2
E1	R-1	IC34	L-6	✱RB11	E-3
E2	N-3	IC35	M-2	✱RB12	E-2
E3	M-5	IC36	N-2	✱RB13	F-2
E4	J-6	IC37	N-2	✱RB14	F-2
E5	G-5	IC38	P-4	✱RB15	E-2
E6	E-4	IC39	R-3	✱RB16	E-1
E7	C-5	IC40	P-3	✱RB17	E-2
		IC42	R-6	✱RB18	E-2
✱FL1	B-7	IC43	P-6	✱RB19	F-1
✱FL2	B-7	IC44	R-2	✱RB20	F-1
✱FL3	A-7	IC45	G-3	✱RB21	E-4
✱FL4	A-7	IC46	D-7	✱RB22	F-3
✱FL5	N-6	IC47	E-7	✱RB23	E-3
✱FL6	M-6	IC48	D-7	✱RB24	B-5
✱FL7	M-6	IC49	E-7	✱RB25	B-5
✱FL8	M-6	IC51	H-3	✱RB26	B-5
✱FL9	N-7	IC52	H-3	✱RB27	B-5
✱FL10	M-7	IC53	H-2		
✱FL11	M-7	IC54	J-3	SL1010	L-2
✱FL12	M-7	IC55	J-3		
✱FL13	M-6	IC56	J-2	TP1	J-6
✱FL14	L-6	✱IC57	H-3	TP2	J-6
✱FL15	L-6	✱IC58	H-2	TP3	J-6
✱FL16	L-6	✱IC59	H-2	TP4	K-6
✱FL17	M-7	✱IC60	J-3	TP5	D-7
✱FL18	L-7	✱IC61	J-2	TP6	D-6
✱FL19	L-7	✱IC62	J-2	TP7	D-6
✱FL20	L-7	IC63	E-3	TP8	L-1
✱FL21	E-7	IC64	F-3	TP9	L-1
✱FL22	E-7	IC65	E-2	TP10	N-3
✱FL23	D-7	IC66	F-2	TP11	M-2
✱FL24	D-7	IC67	E-3	TP12	L-1
✱FL25	E-7	IC68	B-7	TP13	P-1
✱FL26	E-7	IC69	B-6	TP14	R-1
✱FL27	D-7	IC70	C-5	TP15	R-4
✱FL28	D-7	✱IC71	C-5	TP16	P-1
✱FL29	F-7	IC72	C-7	TP17	P-2
✱FL30	F-7	IC73	E-5	TP18	B-5
✱FL31	E-7	✱IC74	D-5	TP19	B-5
✱FL32	E-7	IC75	A-7	TP20	B-5
✱FL33	F-7	IC401	P-1	TP21	B-5
✱FL34	F-7	✱IC500	R-6	TP22	B-5
✱FL35	E-7	✱IC501	P-6	TP23	A-5
✱FL36	E-7	✱IC502	P-6	TP24	C-7
		✱IC900	C-7	TP25	A-5
IC1	J-7	✱IC901	A-7	TP26	A-5
IC2	D-7	✱IC902	C-4	TP900	K-1
IC4	H-7	✱IC903	K-3	TP902	L-1
IC5	G-7	IC904	L-2	TP903	E-6
IC6	G-5	IC905	G-4	TP904	D-5
IC7	M-7	✱IC906	G-4	TP905	D-5
IC8	L-7	IC907	J-7	TP906	E-5
IC9	H-6	✱IC908	D-6	TP907	E-5
IC10	H-5	✱IC909	C-7	TP908	E-5
IC11	H-4	✱IC910	D-7	TP909	E-5
IC12	J-6	IC911	C-6	TP910	E-4
IC13	J-5	✱IC912	L-4	TP911	E-4
IC14	J-4	✱IC913	P-4	TP912	E-6
✱IC15	H-5			TP913	N-3
✱IC16	H-5	PS1	G-7	TP914	N-3
✱IC17	H-4	PS2	L-7	TP915	R-4
✱IC18	J-5	PS3	G-7	TP916	R-4
✱IC19	J-5	PS4	G-7		
✱IC20	J-4	PS5	K-7		
IC21	F-6	PS6	F-7		
IC22	F-5				
IC23	F-6	✱RB1	H-7		
IC24	F-4	✱RB2	H-7		
IC25	P-7	✱RB3	H-4		

✱ : B SIDE

LOT NO. H-1

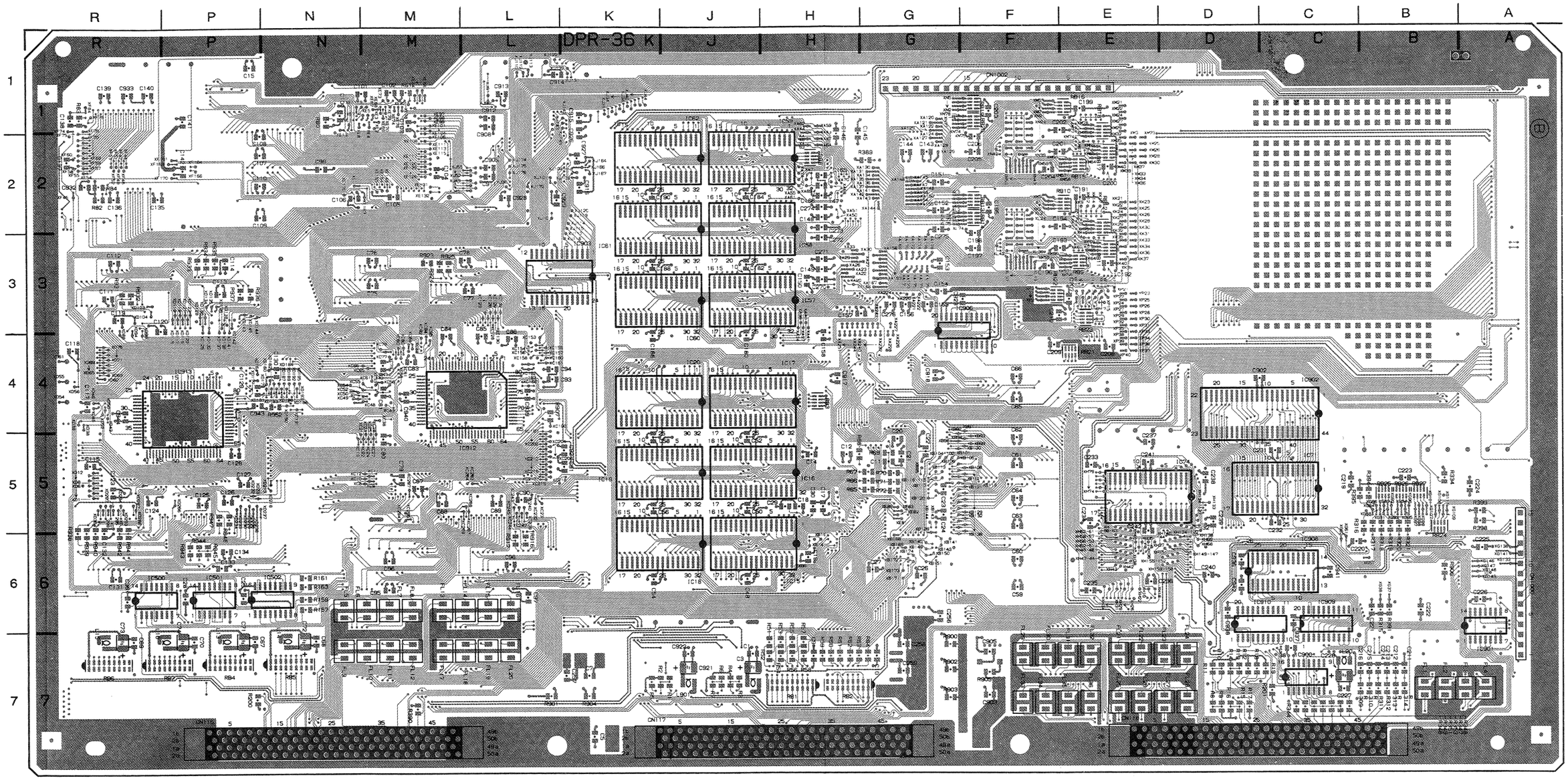
1-33 (a)



DPR-36 BOARD -A SIDE-

1-648-533-11 (LOT No. 302 - 303)

DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36P	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36P	MCB



DPR-36 BOARD -B SIDE-

1-648-533-11 (LOT No. 302 - 303)

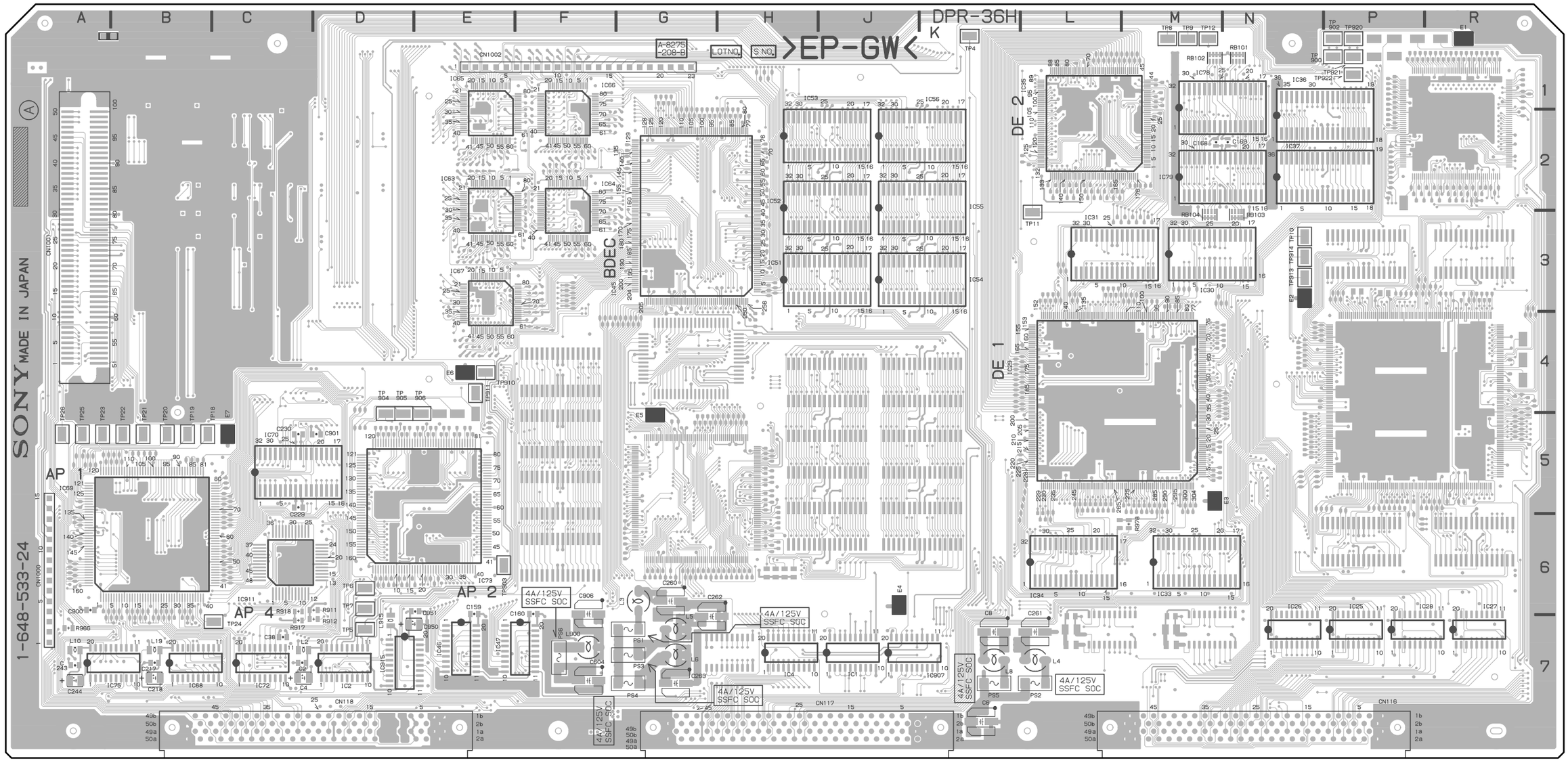
DVW-A500(J)	; DPR-36	MCB
DVW-A500(UC)	; DPR-36	MCB
DVW-A500P(EK)	; DPR-36P	MCB
DVW-500(J)	; DPR-36	MCB
DVW-500(UC)	; DPR-36	MCB
DVW-500P(EK)	; DPR-36P	MCB

DPR-36H ; Digital data processor (Decode, Error correction)

(Board's Lot No. 812 and higher)
All player models

DPR-36H (1-648-533-24)

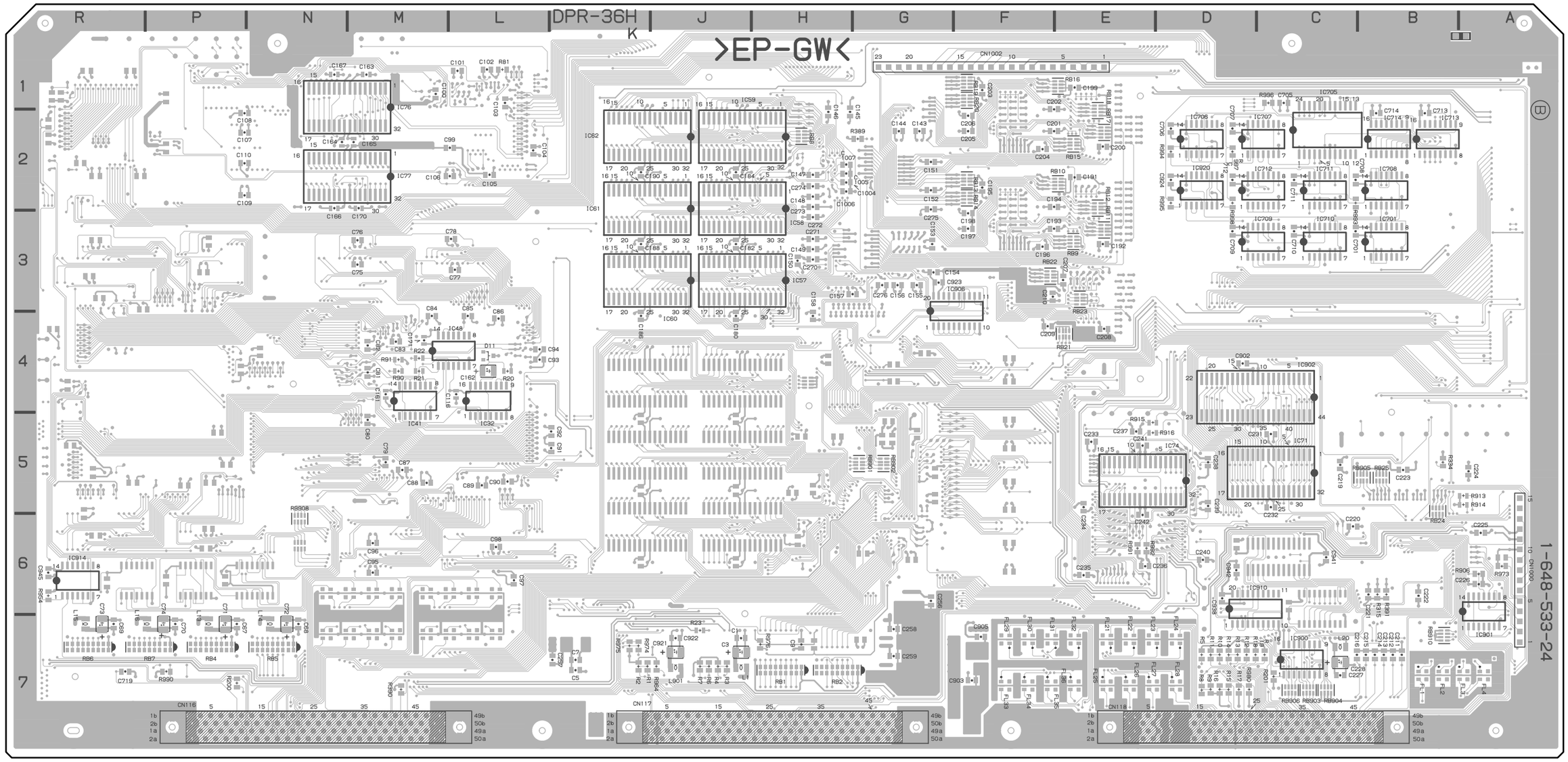
CN116	N7	IC910	*D7
CN117	H7	IC911	C6
CN118	D7	IC914	*R6
CN1001	A3	IC915	D7
		IC920	*D2
E1	R1		
E2	N3	PS1	G7
E3	M5	PS2	L7
E4	J6	PS3	G7
E5	G5	PS4	G7
E6	E4	PS5	K7
E7	C5	PS6	F7
FL1	*B7	RB1	*H7
FL3	*A7	RB2	*H7
FL4	*A7	RB4	*P7
FL21	*E7	RB5	*N7
FL22	*E7	RB6	*R7
FL23	*E7	RB7	*P7
FL24	*D7	RB8	*H2
FL25	*E7	RB9	*E3
FL26	*E7	RB10	*E2
FL27	*E7	RB11	*E3
FL28	*D7	RB12	*E2
FL29	*F7	RB13	*F2
FL30	*F7	RB14	*F2
FL31	*F7	RB15	*E2
FL32	*E7	RB16	*E1
FL33	*F7	RB17	*E2
FL34	*F7	RB18	*E2
FL35	*F7	RB19	*F1
FL36	*E7	RB20	*F1
		RB21	*E4
IC1	J7	RB22	*F3
IC2	D7	RB23	*E3
IC4	H7	RB24	*B5
IC25	P7	RB25	*B5
IC26	N7	RB101	N1
IC27	R7	RB102	M1
IC28	P7	RB103	N3
IC29	L4	RB104	M3
IC30	M3	RB901	*G5
IC31	L3	RB902	*G5
IC33	M6	RB903	*C7
IC34	L6	RB904	*C7
IC35	L2	RB905	*B5
IC45	G3	RB906	*C7
IC46	E7	RB908	*N6
IC47	E7	RB910	*B7
IC51	H3		
IC52	H3	TP4	K1
IC53	H2	TP5	D7
IC54	J3	TP6	D6
IC55	J3	TP7	D6
IC56	J2	TP8	M1
IC57	*H3	TP9	M1
IC58	*H2	TP10	N3
IC59	*H2	TP11	L3
IC60	*J3	TP12	M1
IC61	*J2	TP18	B5
IC62	*J2	TP19	B5
IC63	E3	TP20	B5
IC64	F3	TP21	B5
IC65	E2	TP22	B5
IC66	F2	TP23	A5
IC67	E3	TP24	C7
IC68	B7	TP25	A5
IC69	B6	TP26	A5
IC72	C7	TP900	P1
IC73	E5	TP902	P1
IC74	*D5	TP903	E6
IC75	A7	TP904	D5
IC76	*M1	TP905	D5
IC77	*M2	TP906	E5
IC78	M2	TP910	E4
IC79	M2	TP911	E4
IC701	*B3	TP913	N3
IC705	*C2	TP914	N3
IC706	*D2	TP920	P1
IC707	*D2	TP921	P1
IC708	*B2	TP922	P1
IC709	*D3		
IC710	*C3	*:B SIDE	
IC711	*C2		
IC712	*D2		
IC713	*B2		
IC714	*B2		
IC900	*C7		
IC901	*A7		
IC902	*C4		
IC906	*G4		
IC907	J7		



DPR-36H BOARD -A SIDE-

1-648-533-24 (LOT No. 812 -)

DVW-A510(J)	; DPR-36H	MCB
DVW-A510(UC)	; DPR-36H	MCB
DVW-A510P(EK)	; DPR-36H	MCB
DVW-510(J)	; DPR-36H	MCB
DVW-510(UC)	; DPR-36H	MCB
DVW-510P(EK)	; DPR-36H	MCB
DVW-CA510(J)	; DPR-36H	MCB
DVW-CA510(UC)	; DPR-36H	MCB
DVW-CA510P(EK)	; DPR-36H	MCB



DPR-36H BOARD -B SIDE-

1-648-533-24 (LOT No. 812 -)

DVW-A510(J)	; DPR-36H	MCB
DVW-A510(UC)	; DPR-36H	MCB
DVW-A510P(EK)	; DPR-36H	MCB
DVW-510(J)	; DPR-36H	MCB
DVW-510(UC)	; DPR-36H	MCB
DVW-510P(EK)	; DPR-36H	MCB
DVW-CA510(J)	; DPR-36H	MCB
DVW-CA510(UC)	; DPR-36H	MCB
DVW-CA510P(EK)	; DPR-36H	MCB

DPR-36H ; Digital data processor (Decode, Error correction)

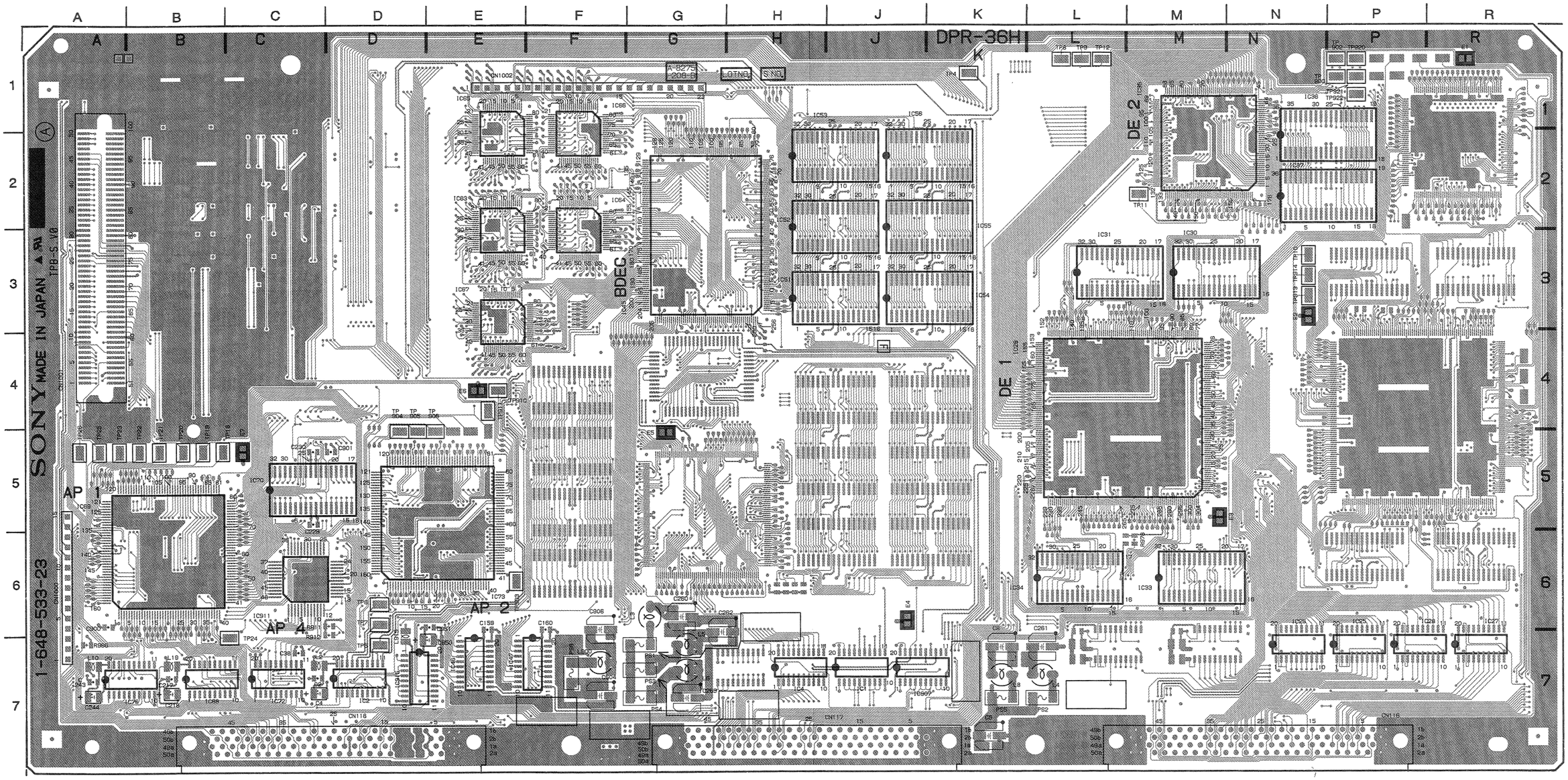
(Board's Lot No. 409 through 811)
All player models

DPR-36H(1-648-533-23)

CN116	N-7	IC73	E-6	TP21	B-5
CN117	H-7	✱IC74	D-5	TP22	B-5
CN118	D-7	IC75	A-7	TP23	A-5
CN1000	A-6	✱IC701	B-3	TP24	C-7
CN1001	A-3	✱IC705	C-2	TP25	A-5
CN1002	F-1	✱IC706	D-2	TP26	A-5
		✱IC707	D-2	TP900	P-1
E1	R-1	✱IC708	B-2	TP902	P-1
E2	N-3	✱IC709	D-3	TP903	E-6
E3	M-5	✱IC710	C-3	TP904	D-5
E4	J-6	✱IC711	C-2	TP905	D-5
E5	G-5	✱IC712	D-2	TP906	E-5
E6	E-4	✱IC713	B-2	TP910	E-4
E7	C-5	✱IC714	B-2	TP911	E-4
		✱IC900	C-7	TP913	N-3
✱FL1	B-7	✱IC901	A-7	TP914	N-3
✱FL2	B-7	✱IC902	C-4	TP920	P-1
✱FL3	A-7	✱IC906	G-3	TP921	P-1
✱FL4	A-7	IC907	J-7	TP922	P-1
✱FL21	E-7	✱IC910	D-7		
✱FL22	E-7	IC911	C-6		
✱FL23	D-7	✱IC914	R-6		
✱FL24	D-7	IC915	D-7		
✱FL25	E-7	✱IC920	D-2		
✱FL26	E-7				
✱FL27	D-7	PS1	G-7		
✱FL28	D-7	PS2	L-7		
✱FL29	F-7	PS3	G-7		
✱FL30	F-7	PS4	G-7		
✱FL31	E-7	PS5	K-7		
✱FL32	E-7	PS6	F-7		
✱FL33	F-7				
✱FL34	F-7	✱RB1	H-7		
✱FL35	E-7	✱RB2	H-7		
✱FL36	E-7	✱RB4	P-7		
		✱RB5	N-7		
IC1	J-7	✱RB6	R-7		
IC2	D-7	✱RB7	P-7		
IC4	H-7	✱RB8	H-2		
IC25	P-7	✱RB9	E-3		
IC26	N-7	✱RB10	E-2		
IC27	R-7	✱RB11	E-3		
IC28	P-7	✱RB12	E-2		
IC29	L-4	✱RB13	F-2		
IC30	M-3	✱RB14	F-2		
IC31	L-3	✱RB15	E-2		
IC33	M-6	✱RB16	E-1		
IC34	L-6	✱RB17	E-2		
IC35	M-2	✱RB18	E-2		
IC36	N-2	✱RB19	F-1		
IC37	N-2	✱RB20	F-1		
IC45	G-3	✱RB21	E-4		
IC46	E-7	✱RB22	F-3		
IC47	E-7	✱RB23	E-3		
IC51	H-3	✱RB24	B-5		
IC52	H-3	✱RB25	B-5		
IC53	H-2	✱RB901	G-5		
IC54	J-3	✱RB902	G-5		
IC55	J-3	✱RB903	C-7		
IC56	J-2	✱RB904	C-7		
✱IC57	H-3	✱RB905	B-5		
✱IC58	H-2	✱RB906	C-7		
✱IC59	H-2	✱RB908	N-5		
✱IC60	J-3				
✱IC61	J-2	TP4	K-1		
✱IC62	J-2	TP5	D-7		
IC63	E-3	TP6	D-6		
IC64	F-3	TP7	D-6		
IC65	E-2	TP8	L-1		
IC66	F-2	TP9	L-1		
IC67	E-3	TP10	N-3		
IC68	B-7	TP11	M-2		
IC69	B-6	TP12	L-1		
IC70	C-5	TP18	B-5		
✱IC71	C-5	TP19	B-5		
IC72	C-7	TP20	B-5		

✱ : B SIDE

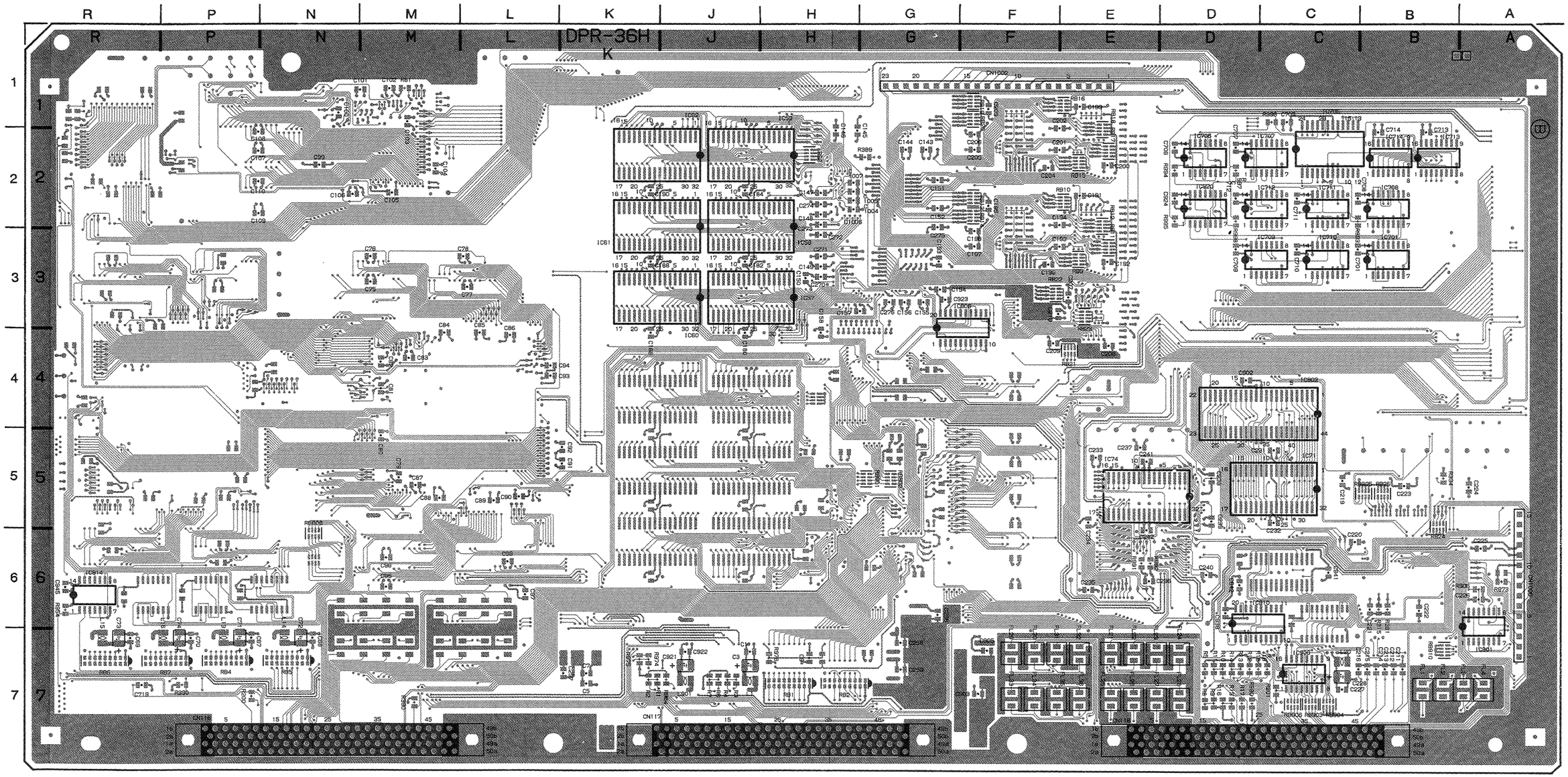
LOT NO. H-1



DPR-36H BOARD -A SIDE-

1-648-533-23 (LOT No. 409 - 811)

DVW-A510(J)	; DPR-36H	MCB
DVW-A510(UC)	; DPR-36H	MCB
DVW-A510P(EK)	; DPR-36HP	MCB
DVW-510(J)	; DPR-36H	MCB
DVW-510(UC)	; DPR-36H	MCB
DVW-510P(EK)	; DPR-36HP	MCB
DVW-CA510(J)	; DPR-36H	MCB
DVW-CA510(UC)	; DPR-36H	MCB
DVW-CA510P(EK)	; DPR-36HP	MCB


DPR-36H
R P N M L K J H G F E D C B A
1 2 3 4 5 6 7
CN118
CN117
CN1002
IC60
IC61
IC62
IC63
IC64
IC65
IC66
IC67
IC68
IC69
IC70
IC71
IC72
IC73
IC74
IC75
IC76
IC77
IC78
IC79
IC80
IC81
IC82
IC83
IC84
IC85
IC86
IC87
IC88
IC89
IC90
IC91
IC92
IC93
IC94
IC95
IC96
IC97
IC98
IC99

DPR-36H ; Digital data processor (Decode, Error correction)

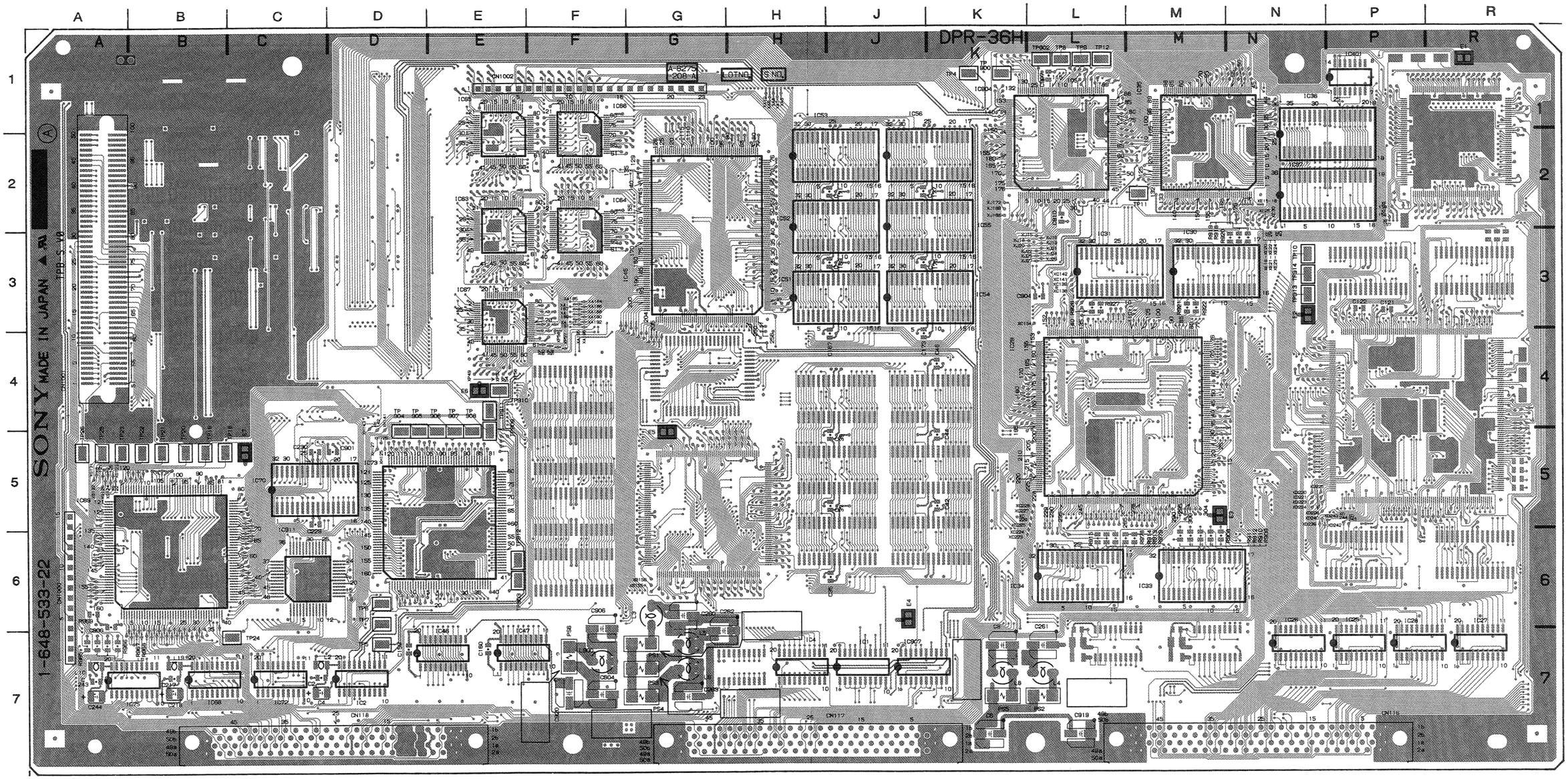
(Board's Lot No. 307 through 409)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

DPR-36H(1-648-533-22)

CN116	N-7	✱IC71	C-5	TP10	N-3
CN117	H-7	IC72	C-7	TP11	M-2
CN118	D-7	IC73	E-5	TP12	L-1
CN1000	A-6	✱IC74	D-5	TP18	B-5
CN1001	A-3	IC75	A-7	TP19	B-5
CN1002	F-1	IC401	P-1	TP20	B-5
		✱IC500	R-6	TP21	B-5
E1	R-1	✱IC501	P-6	TP22	B-5
E2	N-3	✱IC502	P-6	TP23	A-5
E3	M-5	✱IC701	B-3	TP24	C-7
E4	J-6	✱IC702	K-5	TP25	A-5
E5	G-5	✱IC703	D-2	TP26	A-5
E6	E-4	✱IC704	D-3	TP900	K-1
E7	C-5	✱IC705	C-2	TP902	L-1
		✱IC706	D-2	TP903	E-6
✱D701	B-2	✱IC707	D-2	TP904	D-5
		✱IC708	B-2	TP905	D-5
✱FL1	B-7	✱IC709	D-3	TP906	E-5
✱FL2	B-7	✱IC710	C-3	TP907	E-5
✱FL3	A-7	✱IC711	C-2	TP908	E-5
✱FL4	A-7	✱IC712	D-2	TP909	E-5
✱FL21	E-7	✱IC713	B-2	TP910	E-4
✱FL22	E-7	✱IC714	B-2	TP911	E-4
✱FL23	D-7	✱IC716	B-2	TP912	E-6
✱FL24	D-7	✱IC900	C-7	TP913	N-3
✱FL25	E-7	✱IC901	A-7	TP914	N-3
✱FL26	E-7	✱IC902	C-4		
✱FL27	D-7	✱IC903	K-3		
✱FL28	D-7	IC904	L-2		
✱FL29	F-7	✱IC906	G-4		
✱FL30	F-7	IC907	J-7		
✱FL31	E-7	✱IC908	D-6		
✱FL32	E-7	✱IC909	C-7		
✱FL33	F-7	✱IC910	D-7		
✱FL34	F-7	IC911	C-6		
✱FL35	E-7	✱IC912	L-4		
✱FL36	E-7	✱IC914	R-6		
IC1	J-7	PS1	G-7		
IC2	D-7	PS2	L-7		
IC4	H-7	PS3	G-7		
IC25	P-7	PS4	G-7		
IC26	N-7	PS5	K-7		
IC27	R-7	PS6	F-7		
IC28	P-7				
IC29	L-4	✱RB1	H-7		
IC30	M-3	✱RB2	H-7		
IC31	L-3	✱RB4	P-7		
IC33	M-6	✱RB5	N-7		
IC34	L-6	✱RB6	R-7		
IC35	M-2	✱RB7	P-7		
IC36	N-2	✱RB8	H-2		
IC37	N-2	✱RB9	E-3		
IC45	G-3	✱RB10	E-2		
IC46	D-7	✱RB11	E-3		
IC47	E-7	✱RB12	E-2		
IC51	H-3	✱RB13	F-2		
IC52	H-3	✱RB14	F-2		
IC53	H-2	✱RB15	E-2		
IC54	J-3	✱RB16	E-1		
IC55	J-3	✱RB17	E-2		
IC56	J-2	✱RB18	E-2		
✱IC57	H-3	✱RB19	F-1		
✱IC58	H-2	✱RB20	F-1		
✱IC59	H-2	✱RB21	E-4		
✱IC60	J-3	✱RB22	F-3		
✱IC61	J-2	✱RB23	E-3		
✱IC62	J-2	✱RB24	B-5		
IC63	E-3	✱RB25	B-5		
IC64	F-3				
IC65	E-2	TP4	K-1		
IC66	F-2	TP5	D-7		
IC67	E-3	TP6	D-6		
IC68	B-7	TP7	D-6		
IC69	B-6	TP8	L-1		
IC70	C-5	TP9	L-1		

✱ : B SIDE

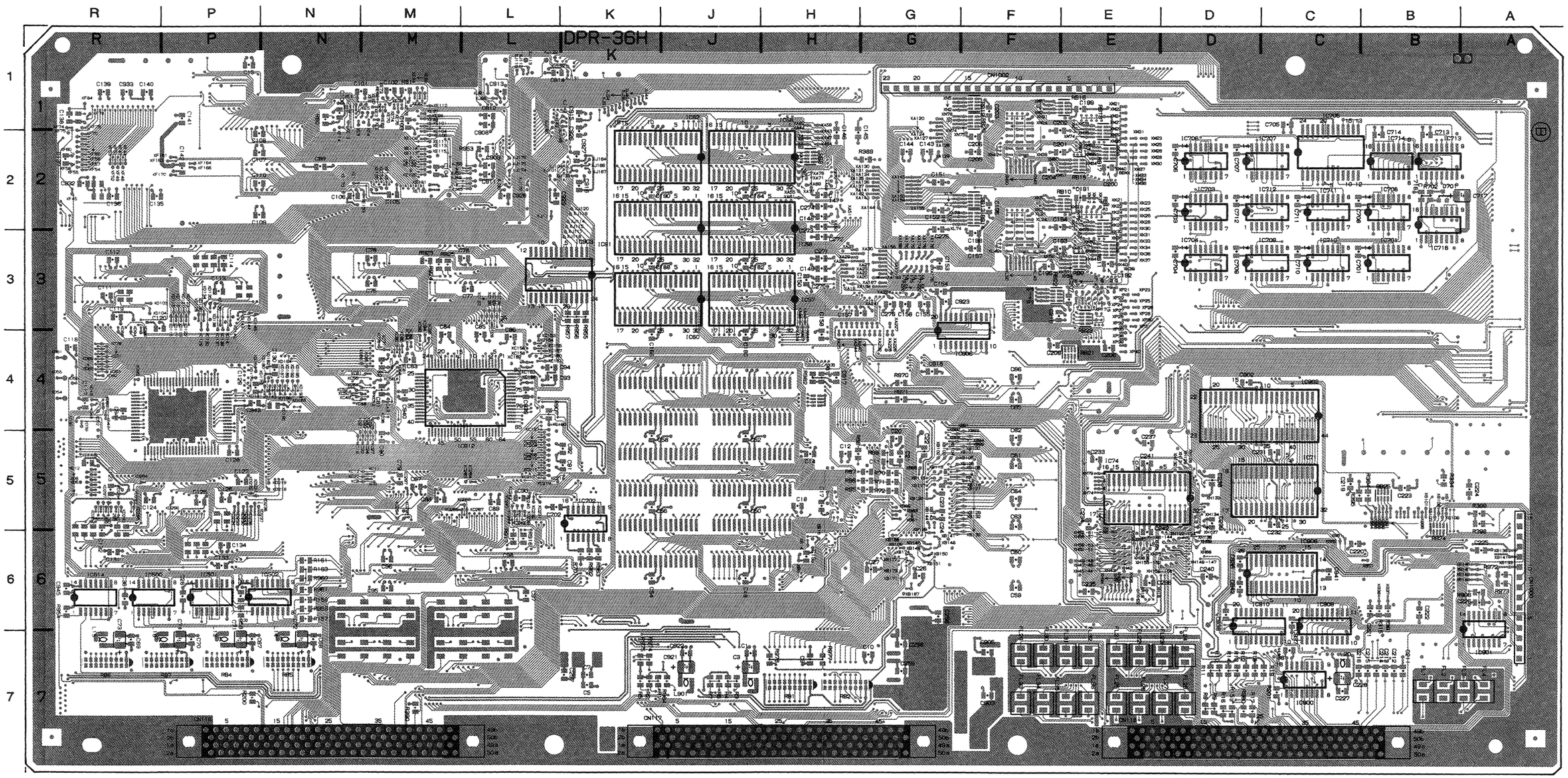
LOT NO. H-1



DPR-36H BOARD -A SIDE-

1-648-533-22 (LOT No. 307 - 409)

DVW-A510(J)	; DPR-36H MCB
DVW-A510(UC)	; DPR-36H MCB
DVW-A510P(EK)	; DPR-36HP MCB
DVW-510(J)	; DPR-36H MCB
DVW-510(UC)	; DPR-36H MCB
DVW-510P(EK)	; DPR-36HP MCB
DVW-CA510(UC)	; DPR-36H MCB
DVW-CA510P(EK)	; DPR-36HP MCB



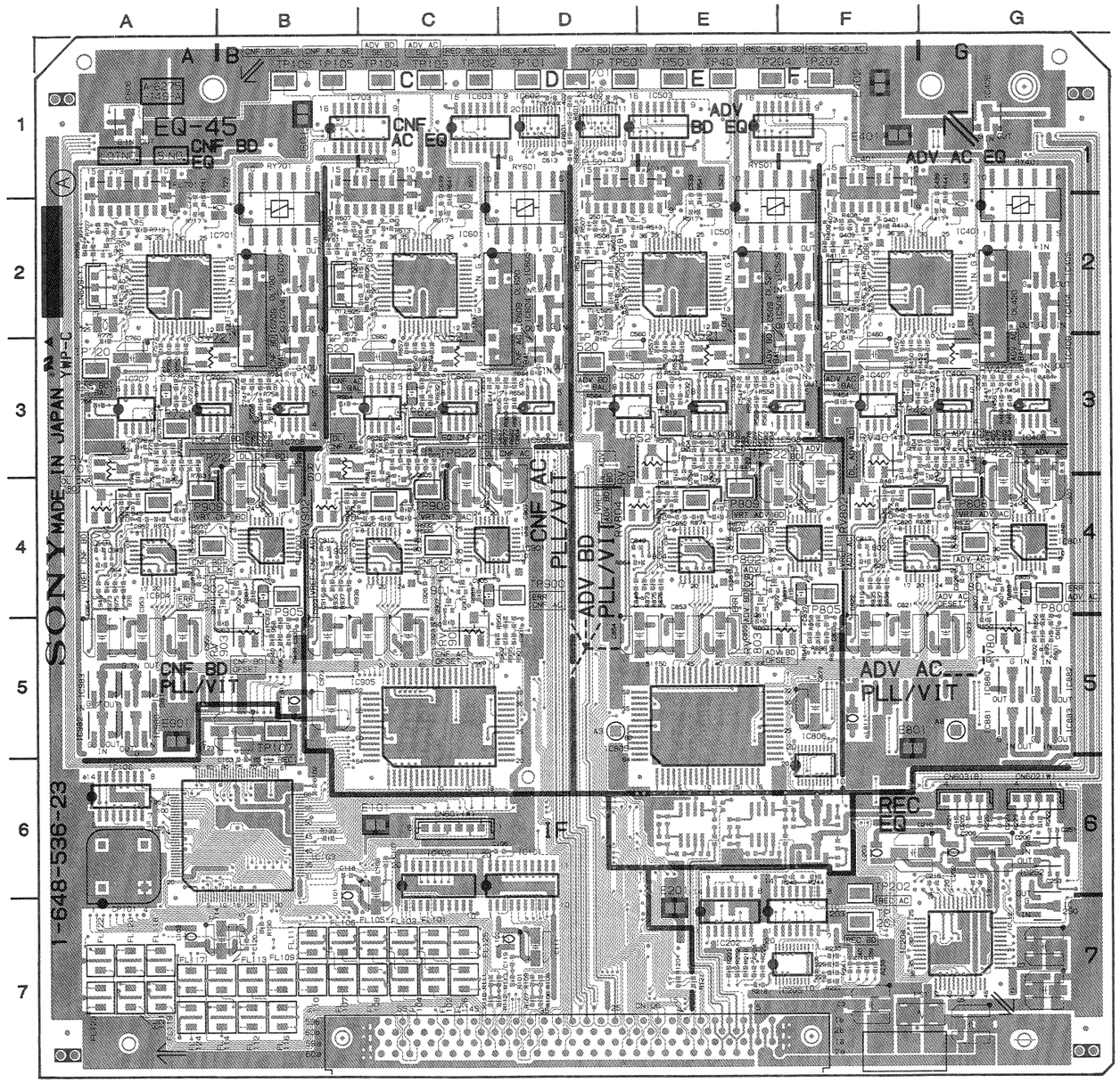
DPR-36H BOARD -B SIDE-

1-648-533-22 (LOT No. 307 - 409)

DVW-A510(J)	; DPR-36H MCB
DVW-A510(UC)	; DPR-36H MCB
DVW-A510P(EK)	; DPR-36HP MCB
DVW-510(J)	; DPR-36H MCB
DVW-510(UC)	; DPR-36H MCB
DVW-510P(EK)	; DPR-36HP MCB
DVW-CA510(UC)	; DPR-36H MCB
DVW-CA510P(EK)	; DPR-36HP MCB

EQ-45 ; RF equalizer (REC current control, PB EQ)

(Board's Lot No. 306 and higher)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-500P(UC)



EQ-45 BOARD -A SIDE-

1-648-536-23 (LOT No. 306 -)

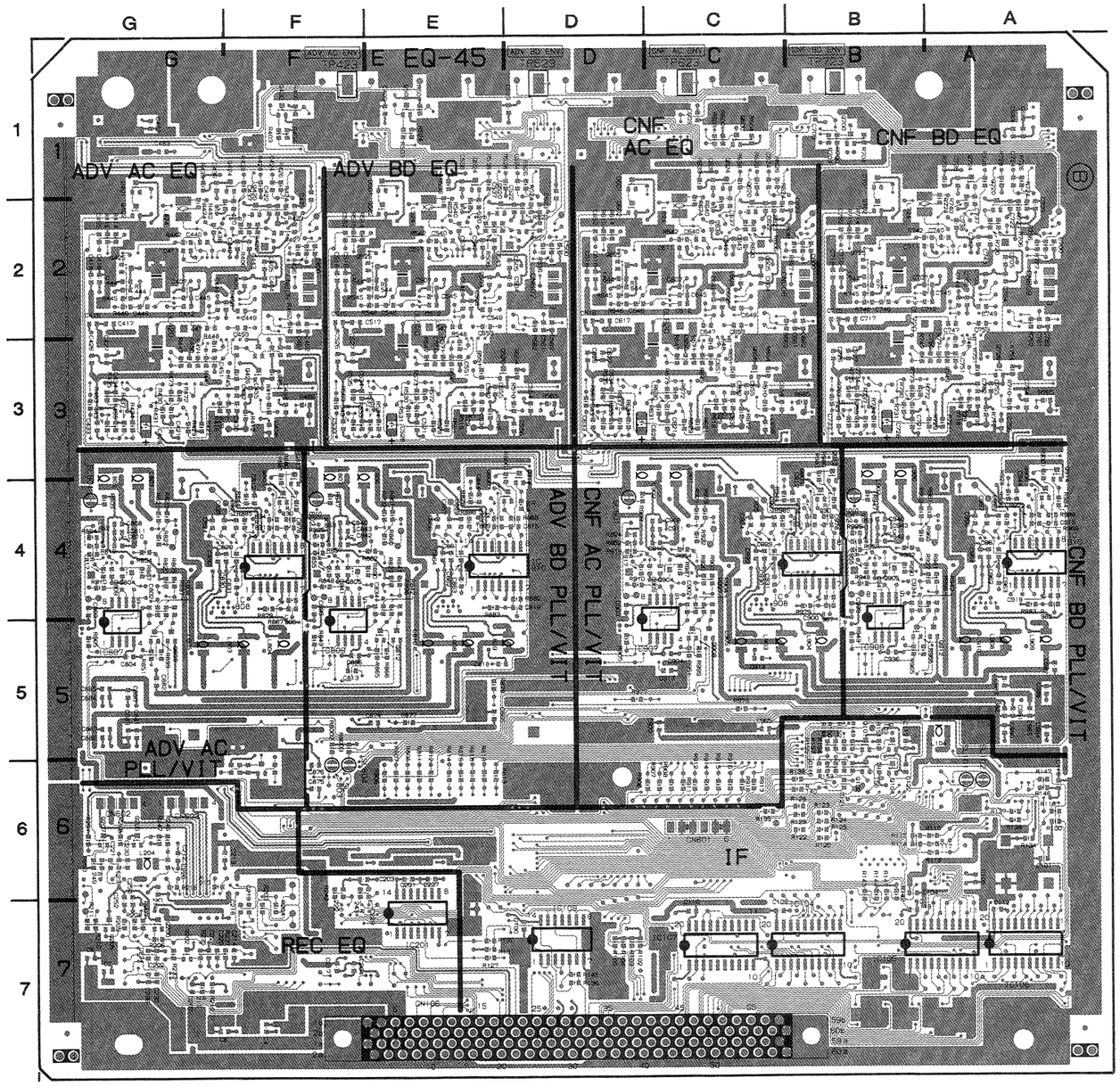
DVW-500(J)	; EQ-45	MCB
DVW-500(UC)	; EQ-45	MCB
DVW-500P(EK)	; EQ-45P	MCB
DVW-500P(UC)	; EQ-45P	MCB

EQ-45(1-648-536-23)

CN106	D-7	IC400	G-3	Q401	F-2	RV901	C-5
CN601	C-6	IC401	G-2	✱Q402	G-2	RV902	B-4
CN602	G-6	IC402	D-1	Q403	F-2	RV903	B-5
CN603	G-6	IC403	E-1	Q404	F-3	RV904	A-4
CN606	F-2	IC404	G-2	Q405	G-4		
CN607	D-2	IC405	G-2	✱Q420	F-2	RY401	G-2
CN608	B-2	IC406	G-1	✱Q424	F-1	RY501	E-2
CN609	A-2	IC407	F-3	✱Q425	G-2	RY601	D-2
		IC408	G-3	✱Q426	F-3	RY701	B-2
CP101	A-6	IC409	G-3	✱Q500	E-1		
		IC500	E-3	Q501	D-2	✱SL101	A-6
DL420	G-2	IC501	E-2	✱Q502	E-2	✱SL102	A-6
DL520	E-2	IC503	D-1	Q503	D-2	✱SL801	G-4
DL620	C-2	IC504	F-2	Q504	E-3	✱SL802	F-4
DL720	B-2	IC505	F-2	Q505	E-4	✱SL803	E-6
		IC507	D-3	✱Q520	E-2	✱SL804	E-6
✱D401	G-1	IC508	E-3	✱Q524	E-1	✱SL901	D-4
✱D501	E-1	IC509	F-3	✱Q525	E-2	✱SL902	B-4
✱D601	D-1	IC600	C-3	✱Q526	E-3		
✱D701	B-1	IC601	C-2	✱Q600	C-1	TP101	D-1
		IC602	D-1	Q601	C-2	TP102	C-1
E101	C-6	IC603	C-1	✱Q602	D-2	TP103	C-1
E201	E-7	IC604	D-2	Q603	B-2	TP104	C-1
E401	F-1	IC605	D-2	Q604	C-3	TP105	B-1
E402	F-1	IC606	A-1	Q605	C-4	TP106	B-1
E601	B-1	IC607	C-3	✱Q620	C-2	TP107	B-5
E801	G-5	IC608	D-3	✱Q624	C-1	TP201	F-7
E901	A-5	IC609	D-3	✱Q625	D-2	TP202	F-6
		IC700	A-3	✱Q626	C-3	TP203	F-1
FL101	C-7	IC701	A-2	✱Q700	B-1	TP204	E-1
FL102	C-7	IC703	B-1	Q701	A-2	TP401	E-1
FL103	C-7	IC704	B-2	✱Q702	B-2	TP420	F-3
FL104	C-7	IC705	B-2	Q703	A-2	TP421	F-3
FL105	C-7	IC707	A-3	Q704	A-3	TP422	G-4
FL106	B-7	IC708	B-3	Q705	A-4	✱TP423	F-1
FL107	B-7	IC709	B-3	✱Q720	A-2	TP501	E-1
FL108	C-7	IC801	G-4	✱Q724	A-1	TP520	D-3
FL109	B-7	IC802	G-4	✱Q725	B-2	TP521	E-3
FL110	B-7	IC803	F-4	✱Q726	A-3	TP522	E-4
FL111	B-7	IC804	E-4	Q801	G-4	✱TP523	D-1
FL112	B-7	IC805	E-5	Q802	E-4	TP601	D-1
FL113	B-7	IC806	F-6	✱Q803	F-4	TP620	B-3
FL114	A-7	✱IC807	G-5	✱Q804	G-4	TP621	C-3
FL115	A-7	✱IC808	F-4	✱Q805	F-4	TP622	C-4
FL116	B-7	✱IC809	F-5	✱Q806	D-4	✱TP623	C-1
FL117	A-7	✱IC810	E-4	Q807	G-4	TP701	D-1
FL118	A-7	IC880	G-5	✱Q808	G-5	TP720	A-3
FL119	A-7	IC881	G-5	Q811	E-4	TP721	A-3
FL120	A-7	IC882	G-5	✱Q812	E-5	TP722	A-4
FL121	A-7	IC883	G-5	✱Q813	F-3	✱TP723	B-1
FL122	A-7	IC901	C-4	✱Q814	D-3	TP800	G-4
FL123	A-7	IC902	C-4	Q901	C-4	TP801	G-4
FL124	A-7	IC903	B-4	Q902	B-4	TP802	E-4
FL125	C-7	IC904	A-4	✱Q903	B-4	TP805	F-4
FL126	C-7	IC905	C-5	✱Q904	C-4	TP808	G-4
FL401	F-1	✱IC907	C-5	✱Q905	B-4	TP809	E-4
FL501	D-1	✱IC908	B-4	✱Q906	A-4	TP900	D-4
FL601	C-1	✱IC909	B-5	Q907	C-4	TP901	C-4
FL701	A-1	✱IC910	A-4	✱Q908	C-5	TP902	A-4
		IC980	A-5	Q911	A-5	TP905	B-4
IC101	C-7	IC981	A-5	✱Q912	B-5	TP908	C-4
IC102	C-7	IC982	A-5	✱Q913	B-3	TP909	A-4
IC103	B-6	IC983	A-5	✱Q914	A-3		
✱IC104	C-7						
✱IC105	B-7	PS1	F-7	RV401	F-3		
✱IC106	A-7			RV421	G-3		
✱IC107	C-7	✱Q101	B-5	RV501	E-3		
IC108	A-6	✱Q102	B-6	RV521	E-3		
✱IC109	D-7	✱Q103	B-5	RV601	B-3		
✱IC201	E-7	✱Q104	B-6	RV621	C-3		
IC202	E-7	✱Q200	G-7	RV701	A-3		
IC203	E-7	✱Q202	G-7	RV721	A-3		
IC204	G-7	✱Q205	G-7	RV801	G-5		
IC205	E-7	✱Q206	G-6	RV802	F-4		
IC250	G-7	✱Q207	G-6	RV803	F-5		
IC252	G-6	✱Q400	F-1	RV804	D-4		

✱: B SIDE

LOT NO. A-1



EQ-45 BOARD -B SIDE-

1-648-536-23 (LOT No. 306 -)

DVW-500(J) ; EQ-45 MCB
DVW-500(UC) ; EQ-45 MCB
DVW-500P(EK) ; EQ-45P MCB
DVW-500P(UC) ; EQ-45P MCB

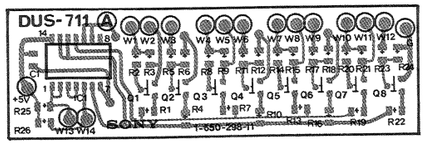
EQ-45, DUS-709/711

EQ-45 ; RF equalizer (REC current control, PB EQ)
DUS-709/711

(Board's Lot No. 303 through 306)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

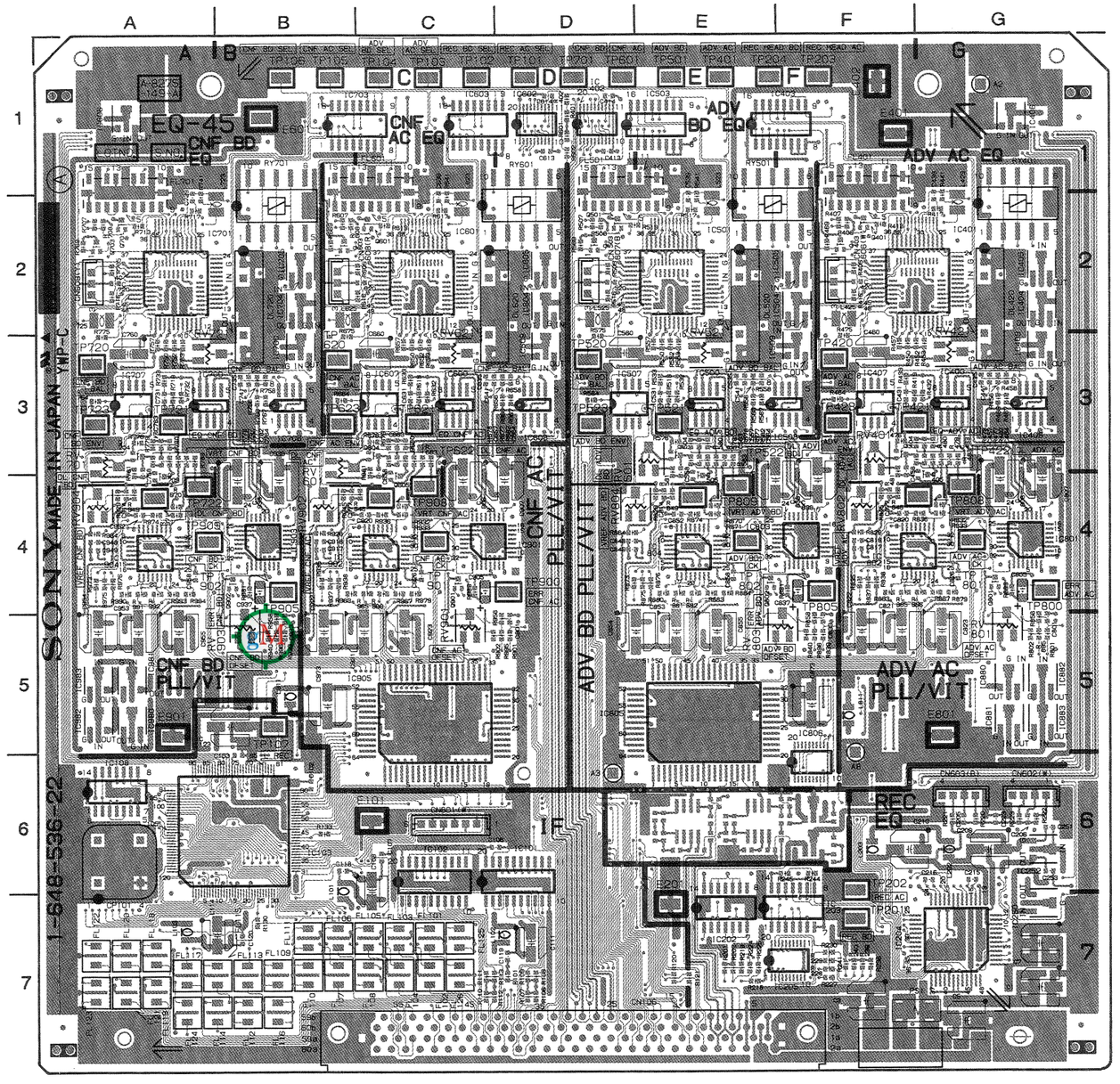
DUS-709 BOARD -A SIDE-

1-649-293-11



DUS-711 BOARD -A SIDE-

1-649-298-11



EQ-45 BOARD -A SIDE-

1-648-536-22 (LOT No. 303 - 306)

DVW-500(J)	; EQ-45	MCB
DVW-500(UC)	; EQ-45	MCB
DVW-500P(EK)	; EQ-45P	MCB

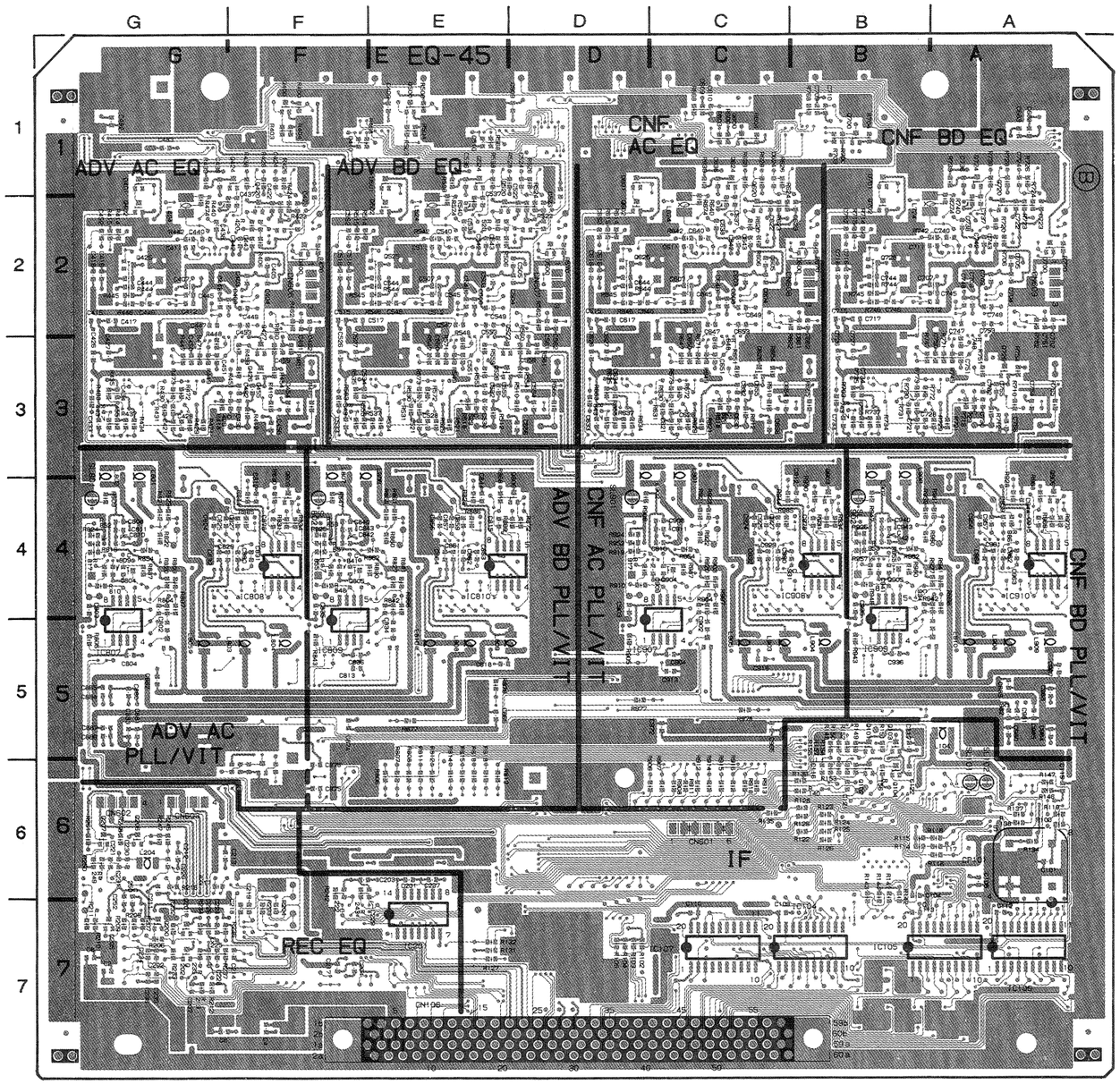
1-40 (a)

EQ-45(1-648-536-22)

CN106	D-7	IC205	E-7	✱Q205	G-7	RY501	E-2
CN601	C-6	IC250	G-7	✱Q206	G-6	RY601	D-2
CN602	G-6	IC252	G-6	✱Q207	G-6	RY701	B-2
CN603	G-6	IC400	G-3	✱Q400	F-1		
CN606	F-2	IC401	G-2	Q401	F-2	✱SL101	A-6
CN607	D-2	IC402	D-1	✱Q402	G-2	✱SL102	A-6
CN608	B-2	IC403	E-1	Q403	F-2	✱SL801	G-4
CN609	A-2	IC404	G-2	Q404	F-3	✱SL802	F-4
		IC405	G-2	Q405	G-4	✱SL901	D-4
CP101	A-6	IC406	G-1	✱Q420	F-2	✱SL902	B-4
		IC407	F-3	✱Q424	F-1		
DL420	G-2	IC408	G-3	✱Q425	G-2	TP101	D-1
DL520	E-2	IC409	G-3	✱Q426	F-3	TP102	C-1
DL620	C-2	IC500	E-3	✱Q427	F-3	TP103	C-1
DL720	B-2	IC501	E-2	✱Q500	E-1	TP104	C-1
		IC503	D-1	Q501	D-2	TP105	B-1
✱D400	F-2	IC504	F-2	✱Q502	E-2	TP106	B-1
✱D401	G-1	IC505	F-2	Q503	D-2	TP107	B-5
✱D500	D-2	IC507	D-3	Q504	E-3	TP201	F-7
✱D501	E-1	IC508	E-3	Q505	E-4	TP202	F-6
✱D600	B-2	IC509	F-3	✱Q520	E-2	TP203	F-1
✱D601	D-1	IC600	C-3	✱Q524	E-1	TP204	E-1
✱D700	A-2	IC601	C-2	✱Q525	E-2	TP401	E-1
✱D701	B-1	IC602	D-1	✱Q526	E-3	TP420	F-3
		IC603	C-1	✱Q527	E-3	TP421	F-3
E101	C-6	IC604	D-2	✱Q600	C-1	TP422	G-4
E201	E-7	IC605	D-2	Q601	C-2	TP423	F-3
E401	F-1	IC606	A-1	✱Q602	D-2	TP501	E-1
E402	F-1	IC607	C-3	Q603	B-2	TP520	D-3
E601	B-1	IC608	D-3	Q604	C-3	TP521	E-3
E801	G-5	IC609	D-3	Q605	C-4	TP522	E-4
E901	A-5	IC700	A-3	✱Q620	C-2	TP523	D-3
		IC701	A-2	✱Q624	C-1	TP601	D-1
FL101	C-7	IC703	B-1	✱Q625	D-2	TP620	B-3
FL102	C-7	IC704	B-2	✱Q626	C-3	TP621	C-3
FL103	C-7	IC705	B-2	✱Q700	B-1	TP622	C-4
FL104	C-7	IC707	A-3	Q701	A-2	TP623	B-3
FL105	C-7	IC708	B-3	✱Q702	B-2	TP701	D-1
FL106	B-7	IC709	B-3	Q703	A-2	TP720	A-3
FL107	B-7	IC801	G-4	Q704	A-3	TP721	A-3
FL108	C-7	IC802	G-4	Q705	A-4	TP722	A-4
FL109	B-7	IC803	F-4	✱Q720	A-2	TP723	A-3
FL110	B-7	IC804	E-4	✱Q724	A-1	TP800	G-4
FL111	B-7	IC805	E-5	✱Q725	B-2	TP801	G-4
FL112	B-7	IC806	F-6	✱Q726	A-3	TP802	E-4
FL113	B-7	✱IC807	G-5	Q801	G-4	TP805	F-4
FL114	A-7	✱IC808	F-4	Q802	E-4	TP808	G-4
FL115	A-7	✱IC809	F-5	✱Q803	F-4	TP809	E-4
FL116	B-7	✱IC810	E-4	✱Q804	G-4	TP900	D-4
FL117	A-7	IC880	G-5	✱Q805	F-4	TP901	C-4
FL118	A-7	IC881	G-5	✱Q806	D-4	TP902	A-4
FL119	A-7	IC882	G-5	Q901	C-4	TP905	B-4
FL120	A-7	IC883	G-5	Q902	B-4	TP908	C-4
FL121	A-7	IC901	C-4	✱Q903	B-4	TP909	A-4
FL122	A-7	IC902	C-4	✱Q904	C-4		
FL123	A-7	IC903	B-4	✱Q905	B-4		
FL124	A-7	IC904	A-4	✱Q906	A-4		
FL125	C-7	IC905	C-5				
FL126	C-7	✱IC907	C-5	RV401	F-3		
FL401	F-1	✱IC908	B-4	RV421	G-3		
FL501	D-1	✱IC909	B-5	RV501	E-3		
FL601	C-1	✱IC910	A-4	RV521	E-3		
FL701	A-1	IC980	A-5	RV601	B-3		
		IC981	A-5	RV621	C-3		
IC101	C-7	IC982	A-5	RV701	A-3		
IC102	C-7	IC983	A-5	RV721	A-3		
IC103	B-6			RV801	G-5		
✱IC104	C-7	PS1	F-7	RV802	F-4		
✱IC105	B-7			RV803	F-5		
✱IC106	A-7	✱Q101	B-5	RV804	D-4		
✱IC107	C-7	✱Q102	B-6	RV901	C-5		
IC108	A-6	✱Q103	B-5	RV902	B-4		
✱IC201	E-7	✱Q104	B-6	RV903	B-5		
IC202	E-7	✱Q200	G-7	RV904	A-4		
IC203	E-7	✱Q201	G-7				
IC204	G-7	✱Q202	G-7	RY401	G-2		

✱ : B SIDE

LOT NO. A-1

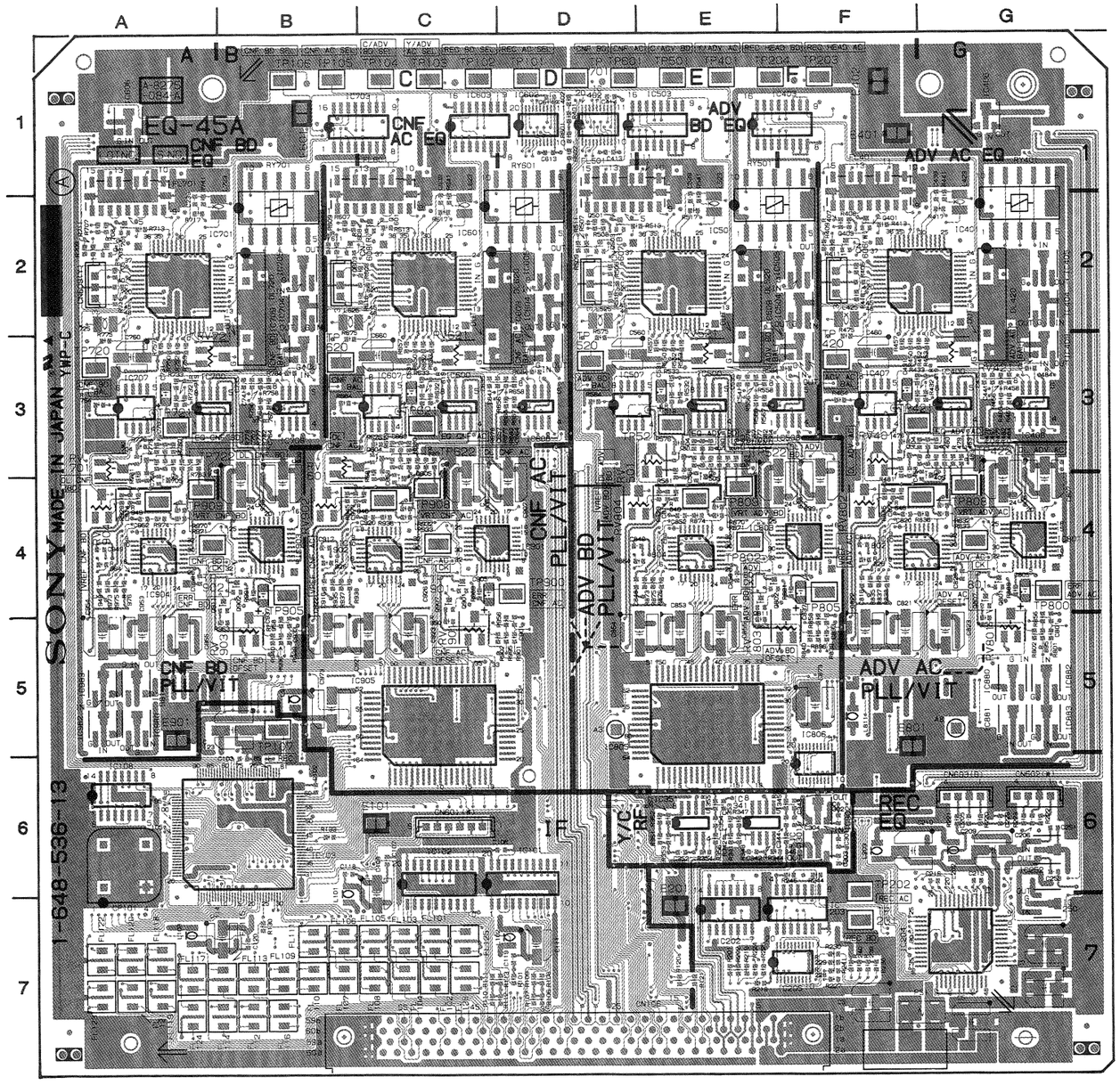


EQ-45 BOARD -B SIDE-

1-648-536-22 (LOT No. 303 - 306)
DVW-500(J) ; EQ-45 MCB
DVW-500(UC) ; EQ-45 MCB
DVW-500P(EK) ; EQ-45P MCB

EQ-45A ; RF equalizer (REC current control, PB EQ), Betacam PB buffer

(Board's Lot No. 306 and higher)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)



EQ-45A BOARD -A SIDE-

1-648-536-13 (LOT No. 306 -)

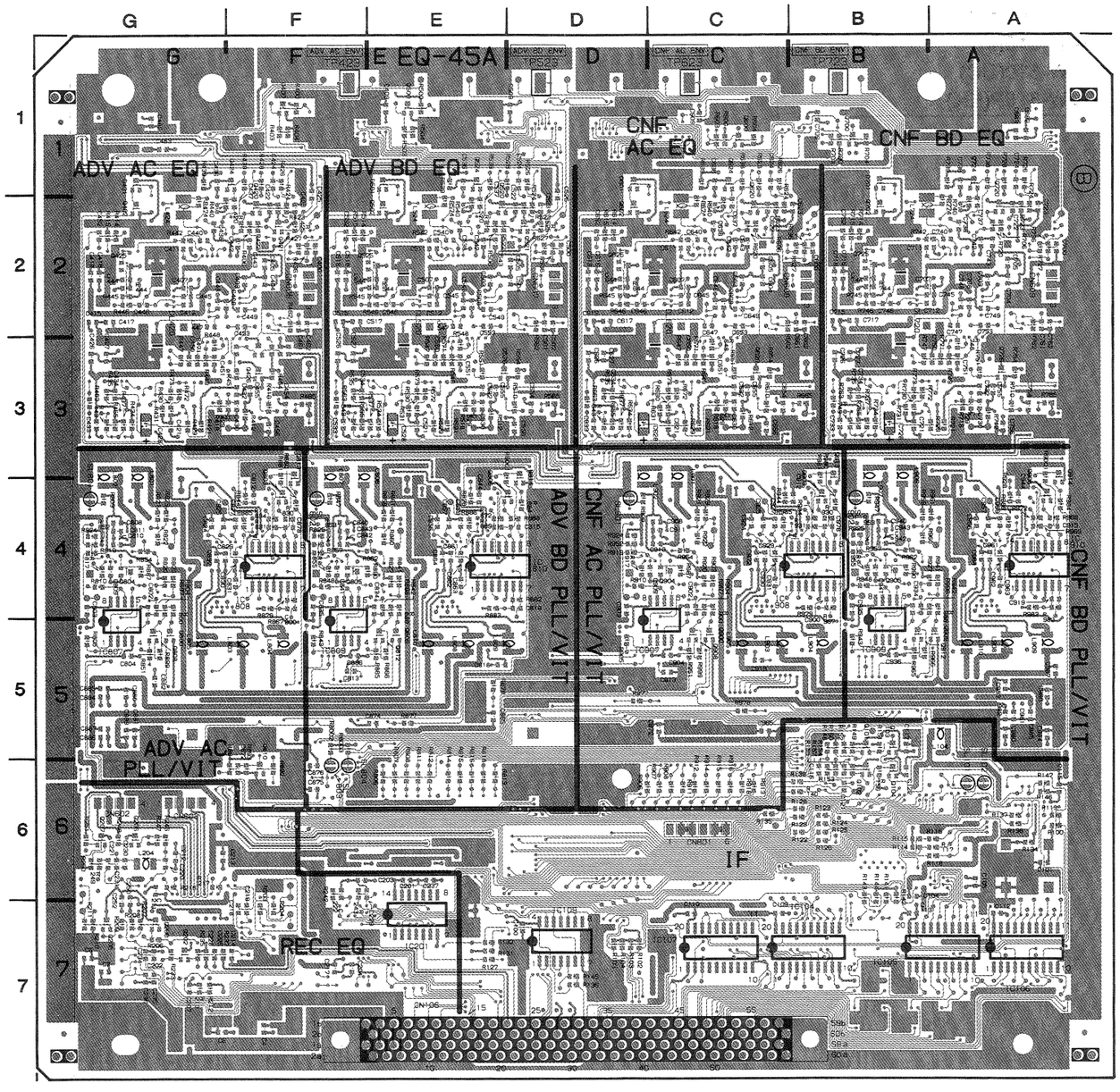
DVW-A500(J)	; EQ-45A	MCB
DVW-A500(UC)	; EQ-45A	MCB
DVW-A500P(EK)	; EQ-45AP	MCB
DVW-A500P(UC)	; EQ-45APG	MCB

EQ-45A(1-648-536-13)

CN106	D-7	IC301	F-6	✱Q205	G-7	RV421	G-3
CN601	C-6	IC302	F-6	✱Q206	G-6	RV501	E-3
CN602	G-6	IC341	E-6	✱Q207	G-6	RV521	E-3
CN603	G-6	IC351	E-6	✱Q400	F-1	RV601	B-3
CN606	F-2	IC400	G-3	Q401	F-2	RV621	C-3
CN607	D-2	IC401	G-2	✱Q402	G-2	RV701	A-3
CN608	B-2	IC402	D-1	Q403	F-2	RV721	A-3
CN609	A-2	IC403	E-1	Q404	F-3	RV801	G-5
		IC404	G-2	Q405	G-4	RV802	F-4
CP101	A-6	IC405	G-2	✱Q420	F-2	RV803	F-5
		IC406	G-1	✱Q421	F-2	RV804	D-4
DL420	G-2	IC407	F-3	✱Q424	F-1	RV901	C-5
DL520	E-2	IC408	G-3	✱Q425	G-2	RV902	B-4
DL620	C-2	IC409	G-3	✱Q426	F-3	RV903	B-5
DL720	B-2	IC500	E-3	✱Q500	E-1	RV904	A-4
		IC501	E-2	Q501	D-2		
✱D401	G-1	IC503	D-1	✱Q502	E-2	RY401	G-2
✱D501	E-1	IC504	F-2	Q503	D-2	RY501	E-2
✱D601	D-1	IC505	F-2	Q504	E-3	RY601	D-2
✱D701	B-1	IC507	D-3	Q505	E-4	RY701	B-2
		IC508	E-3	✱Q520	E-2		
E101	C-6	IC509	F-3	✱Q521	D-2	✱SL101	A-6
E201	E-7	IC600	C-3	✱Q524	E-1	✱SL102	A-6
E401	F-1	IC601	C-2	✱Q525	E-2	✱SL801	G-4
E402	F-1	IC602	D-1	✱Q526	E-3	✱SL802	F-4
E601	B-1	IC603	C-1	✱Q600	C-1	✱SL803	E-6
E801	G-5	IC604	D-2	Q601	C-2	✱SL804	E-6
E901	A-5	IC605	D-2	✱Q602	D-2	✱SL901	D-4
		IC606	A-1	Q603	B-2	✱SL902	B-4
FL101	C-7	IC607	C-3	Q604	C-3		
FL102	C-7	IC608	D-3	Q605	C-4	TP101	D-1
FL103	C-7	IC609	D-3	✱Q620	C-2	TP102	C-1
FL104	C-7	IC700	A-3	✱Q624	C-1	TP103	C-1
FL105	C-7	IC701	A-2	✱Q625	D-2	TP104	C-1
FL106	B-7	IC703	B-1	✱Q626	C-3	TP105	B-1
FL107	B-7	IC704	B-2	✱Q700	B-1	TP106	B-1
FL108	C-7	IC705	B-2	Q701	A-2	TP107	B-5
FL109	B-7	IC707	A-3	✱Q702	B-2	TP201	F-7
FL110	B-7	IC708	B-3	Q703	A-2	TP202	F-6
FL111	B-7	IC709	B-3	Q704	A-3	TP203	F-1
FL112	B-7	IC801	G-4	Q705	A-4	TP204	E-1
FL113	B-7	IC802	G-4	✱Q720	A-2	TP401	E-1
FL114	A-7	IC803	F-4	✱Q724	A-1	TP420	F-3
FL115	A-7	IC804	E-4	✱Q725	B-2	TP421	F-3
FL116	B-7	IC805	E-5	✱Q726	A-3	TP422	G-4
FL117	A-7	IC806	F-6	✱Q800	G-5	✱TP423	F-1
FL118	A-7	✱IC807	G-5	Q801	G-4	TP501	E-1
FL119	A-7	✱IC808	F-4	Q802	E-4	TP520	D-3
FL120	A-7	✱IC809	F-5	✱Q803	F-3	TP521	E-3
FL121	A-7	✱IC810	E-4	✱Q804	G-4	TP522	E-4
FL122	A-7	IC880	G-5	✱Q805	F-4	✱TP523	D-1
FL123	A-7	IC881	G-5	✱Q806	D-3	TP601	D-1
FL124	A-7	IC882	G-5	Q807	G-4	TP620	B-3
FL125	C-7	IC883	G-5	✱Q808	G-5	TP621	C-3
FL126	C-7	IC901	C-4	✱Q809	E-5	TP622	C-4
FL401	F-1	IC902	C-4	✱Q810	F-6	✱TP623	C-1
FL501	D-1	IC903	B-4	Q811	E-4	TP701	D-1
FL601	C-1	IC904	A-4	✱Q812	E-5	TP720	A-3
FL701	A-1	IC905	C-5	✱Q813	F-3	TP721	A-3
		✱IC907	C-5	✱Q814	D-3	TP722	A-4
IC101	C-7	✱IC908	B-4	✱Q900	C-5	✱TP723	B-1
IC102	C-7	✱IC909	B-5	Q901	C-4	TP800	G-4
IC103	B-6	✱IC910	A-4	Q902	B-4	TP801	G-4
✱IC104	C-7	IC980	A-5	✱Q903	B-3	TP802	E-4
✱IC105	B-7	IC981	A-5	✱Q904	C-4	TP805	F-4
✱IC106	A-7	IC982	A-5	✱Q905	B-4	TP808	G-4
✱IC107	C-7	IC983	A-5	✱Q906	A-3	TP809	E-4
IC108	A-6			Q907	C-4	TP900	D-4
✱IC109	D-7	PS1	F-7	✱Q908	C-5	TP901	C-4
✱IC201	E-7			✱Q909	A-5	TP902	A-4
IC202	E-7	✱Q101	B-5	Q911	A-5	TP905	B-4
IC203	E-7	✱Q102	B-6	✱Q912	B-5	TP908	C-4
IC204	G-7	✱Q103	B-5	✱Q913	B-3	TP909	A-4
IC205	E-7	✱Q104	B-6	✱Q914	A-3		
IC250	G-7	✱Q200	G-7				
IC252	G-6	✱Q202	G-7	RV401	F-3		

✱ : B SIDE

LOT NO. A-1



EQ-45A BOARD -B SIDE-

1-648-536-13 (LOT No. 306 -)

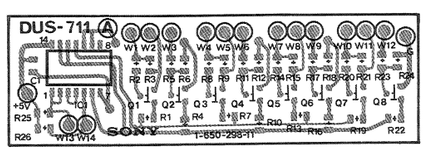
DVW-A500(J) ; EQ-45A MCB
DVW-A500(UC) ; EQ-45A MCB
DVW-A500P(EK) ; EQ-45AP MCB
DVW-A500P(UC) ; EQ-45APG MCB

EQ-45A, DUS-709/711

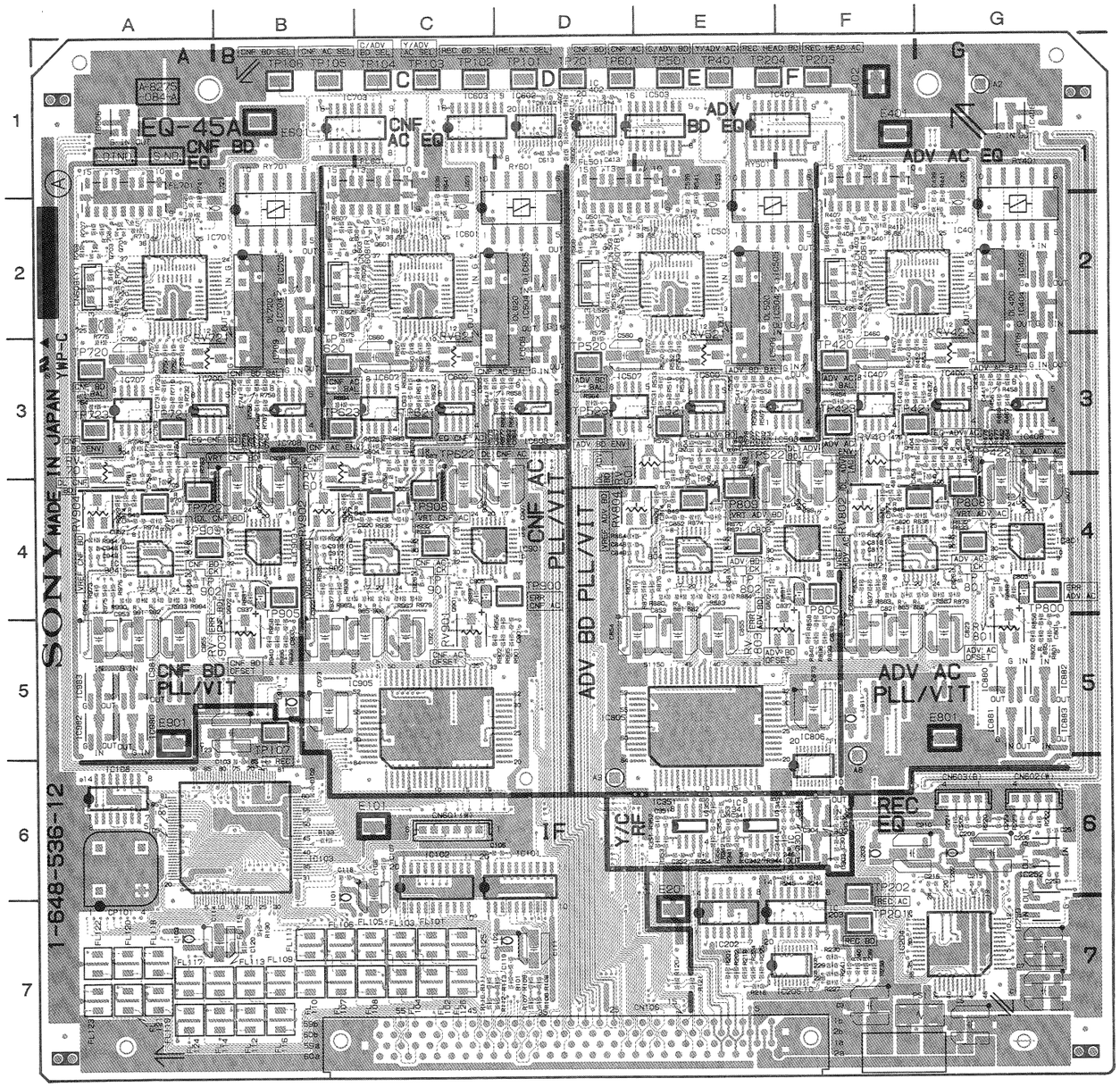
EQ-45A ; RF equalizer (REC current control, PB EQ), Betacam PB buffer
DUS-709/711

(Board's Lot No. 303 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)

DUS-709 BOARD -A SIDE-
1-649-293-11



DUS-711 BOARD -A SIDE-
1-649-298-11



EQ-45A BOARD -A SIDE-
1-648-536-12 (LOT No. 303 - 306)
DVW-A500(J) ; EQ-45A MCB
DVW-A500(UC) ; EQ-45A MCB
DVW-A500P(EK) ; EQ-45AP MCB
DVW-A500P(UC) ; EQ-45APG MCB

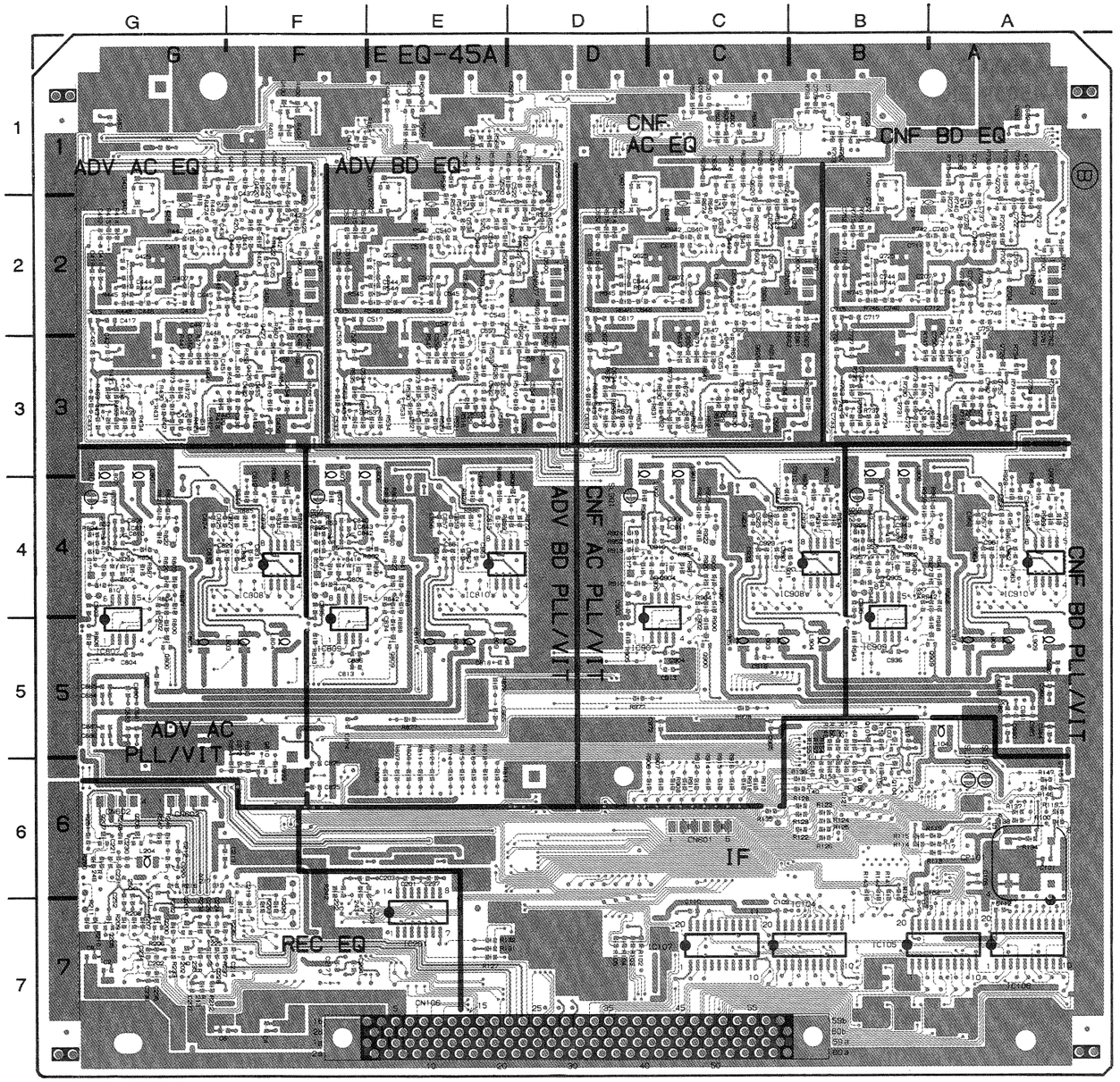
1-42 (b)

EQ-45A(1-648-536-12)

CN106	D-7	IC205	E-7	✱Q104	B-6	RV721	A-3
CN601	C-6	IC250	G-7	✱Q200	G-7	RV801	G-5
CN602	G-6	IC252	G-6	✱Q201	G-7	RV802	F-4
CN603	G-6	IC301	F-6	✱Q202	G-7	RV803	F-5
CN606	F-2	IC302	F-6	✱Q205	G-7	RV804	D-4
CN607	D-2	IC341	E-6	✱Q206	G-6	RV901	C-5
CN608	B-2	IC351	E-6	✱Q207	G-6	RV902	B-4
CN609	A-2	IC400	G-3	✱Q400	F-1	RV903	B-5
		IC401	G-2	Q401	F-2	RV904	A-4
CP101	A-6	IC402	D-1	✱Q402	G-2		
		IC403	E-1	Q403	F-2	RY401	G-2
DL420	G-2	IC404	G-2	Q404	F-3	RY501	E-2
DL520	E-2	IC405	G-2	Q405	G-4	RY601	D-2
DL620	C-2	IC406	G-1	✱Q420	F-2	RY701	B-2
DL720	B-2	IC407	F-3	✱Q421	F-2		
		IC408	G-3	✱Q424	F-1	✱SL101	A-6
✱D400	F-2	IC409	G-3	✱Q425	G-2	✱SL102	A-6
✱D401	G-1	IC500	E-3	✱Q426	F-3	✱SL801	G-4
✱D500	D-2	IC501	E-2	✱Q427	F-3	✱SL802	F-4
✱D501	E-1	IC503	D-1	✱Q500	E-1	✱SL901	D-4
✱D600	B-2	IC504	F-2	Q501	D-2	✱SL902	B-4
✱D601	D-1	IC505	F-2	✱Q502	E-2		
✱D700	A-2	IC507	D-3	Q503	D-2	TP101	D-1
✱D701	B-1	IC508	E-3	Q504	E-3	TP102	C-1
		IC509	F-3	Q505	E-4	TP103	C-1
E101	C-6	IC600	C-3	✱Q520	E-2	TP104	C-1
E201	E-7	IC601	C-2	✱Q521	D-2	TP105	B-1
E401	F-1	IC602	D-1	✱Q524	E-1	TP106	B-1
E402	F-1	IC603	C-1	✱Q525	E-2	TP107	B-5
E601	B-1	IC604	D-2	✱Q526	E-3	TP201	F-7
E801	G-5	IC605	D-2	✱Q527	E-3	TP202	F-6
E901	A-5	IC606	A-1	✱Q600	C-1	TP203	F-1
		IC607	C-3	Q601	C-2	TP204	E-1
FL101	C-7	IC608	D-3	✱Q602	D-2	TP401	E-1
FL102	C-7	IC609	D-3	Q603	B-2	TP420	F-3
FL103	C-7	IC700	A-3	Q604	C-3	TP421	F-3
FL104	C-7	IC701	A-2	Q605	C-4	TP422	G-4
FL105	C-7	IC703	B-1	✱Q620	C-2	TP423	F-3
FL106	B-7	IC704	B-2	✱Q624	C-1	TP501	E-1
FL107	B-7	IC705	B-2	✱Q625	D-2	TP520	D-3
FL108	C-7	IC707	A-3	✱Q626	C-3	TP521	E-3
FL109	B-7	IC708	B-3	✱Q700	B-1	TP522	E-4
FL110	B-7	IC709	B-3	Q701	A-2	TP523	D-3
FL111	B-7	IC801	G-4	✱Q702	B-2	TP601	D-1
FL112	B-7	IC802	G-4	Q703	A-2	TP620	B-3
FL113	B-7	IC803	F-4	Q704	A-3	TP621	C-3
FL114	A-7	IC804	E-4	Q705	A-4	TP622	C-4
FL115	A-7	IC805	E-5	✱Q720	A-2	TP623	B-3
FL116	B-7	IC806	F-6	✱Q724	A-1	TP701	D-1
FL117	A-7	✱IC807	G-5	✱Q725	B-2	TP720	A-3
FL118	A-7	✱IC808	F-4	✱Q726	A-3	TP721	A-3
FL119	A-7	✱IC809	F-5	✱Q800	G-5	TP722	A-4
FL120	A-7	✱IC810	E-4	Q801	G-4	TP723	A-3
FL121	A-7	IC880	G-5	Q802	E-4	TP800	G-4
FL122	A-7	IC881	G-5	✱Q803	F-3	TP801	G-4
FL123	A-7	IC882	G-5	✱Q804	G-4	TP802	E-4
FL124	A-7	IC883	G-5	✱Q805	F-4	TP805	F-4
FL125	C-7	IC901	C-4	✱Q806	D-3	TP808	G-4
FL126	C-7	IC902	C-4	✱Q809	E-5	TP809	E-4
FL401	F-1	IC903	B-4	✱Q810	F-6	TP900	D-4
FL501	D-1	IC904	A-4	✱Q900	C-5	TP901	C-4
FL601	C-1	IC905	C-5	Q901	C-4	TP902	A-4
FL701	A-1	✱IC907	C-5	Q902	B-4	TP905	B-4
		✱IC908	B-4	✱Q903	B-3	TP908	C-4
IC101	C-7	✱IC909	B-5	✱Q904	C-4	TP909	A-4
IC102	C-7	✱IC910	A-4	✱Q905	B-4		
IC103	B-6	IC980	A-5	✱Q906	A-3		
✱IC104	C-7	IC981	A-5	✱Q909	A-5		
✱IC105	B-7	IC982	A-5				
✱IC106	A-7	IC983	A-5	RV401	F-3		
✱IC107	C-7			RV421	G-3		
IC108	A-6	PS1	F-7	RV501	E-3		
✱IC201	E-7			RV521	E-3		
IC202	E-7	✱Q101	B-5	RV601	B-3		
IC203	E-7	✱Q102	B-6	RV621	C-3		
IC204	G-7	✱Q103	B-5	RV701	A-3		

✱: B SIDE

LOT NO. A-1



EQ-45A BOARD -B SIDE-

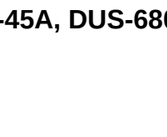
1-648-536-12 (LOT No. 303 - 306)
DVW-A500(J) ; EQ-45A MCB
DVW-A500(UC) ; EQ-45A MCB
DVW-A500P(EK) ; EQ-45AP MCB
DVW-A500P(UC) ; EQ-45APG MCB

EQ-45A, DUS-680/682/709/711

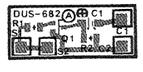
EQ-45A ; RF equalizer (REC current control, PB EQ), Betacam PB buffer
DUS-680/682/709/711

(Board's Lot No. 302)
DVW-A500P(EK)

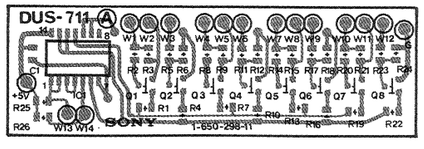
DUS-680 BOARD -A SIDE-
1-649-270-11



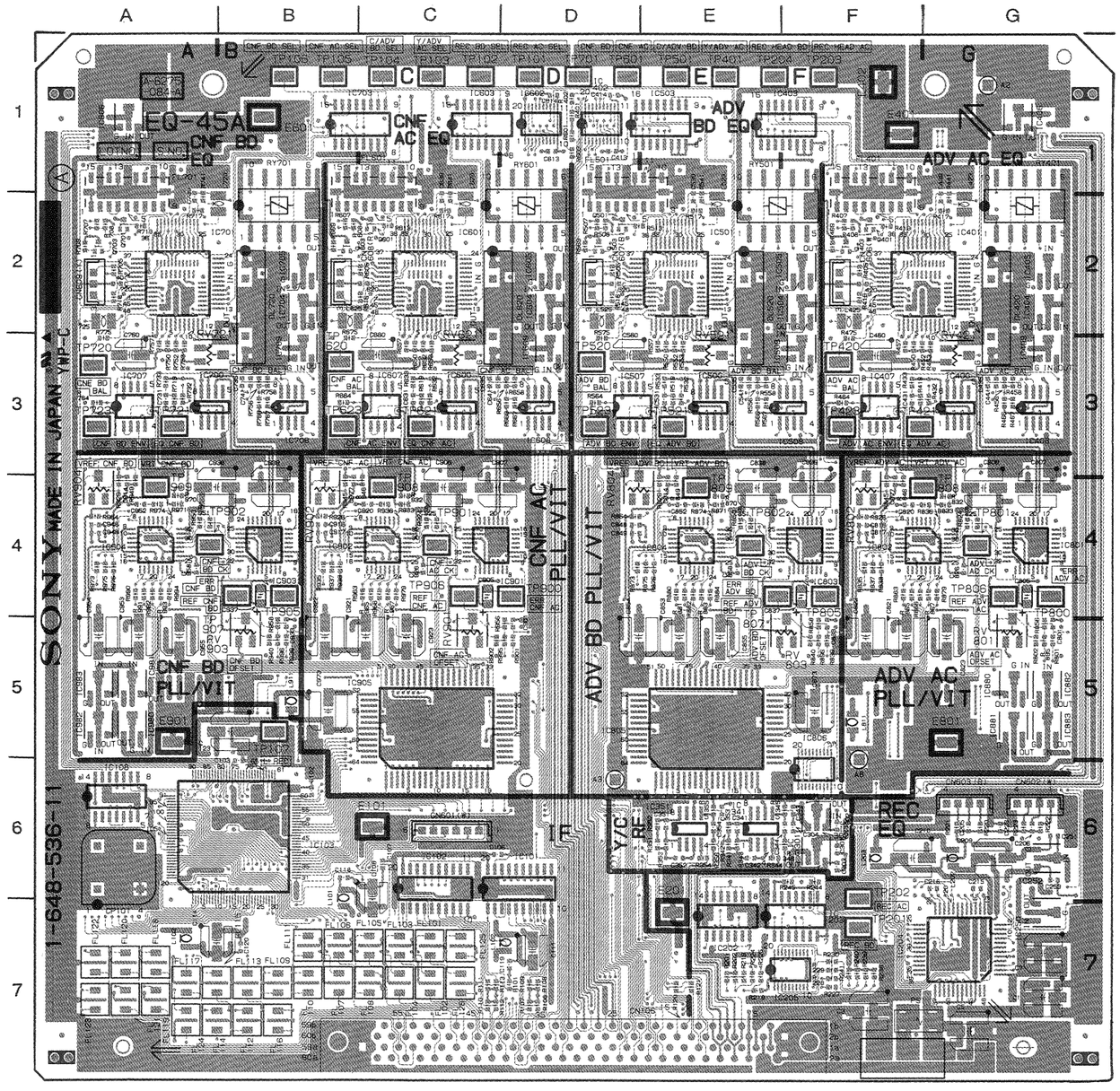
DUS-709 BOARD -A SIDE-
1-649-293-11



DUS-682 BOARD -A SIDE-
1-649-272-11



DUS-711 BOARD -A SIDE-
1-649-298-11



EQ-45A BOARD -A SIDE-
1-648-536-11 (LOT No. 302)
DVW-A500P(EK) ; EQ-45AP MCB

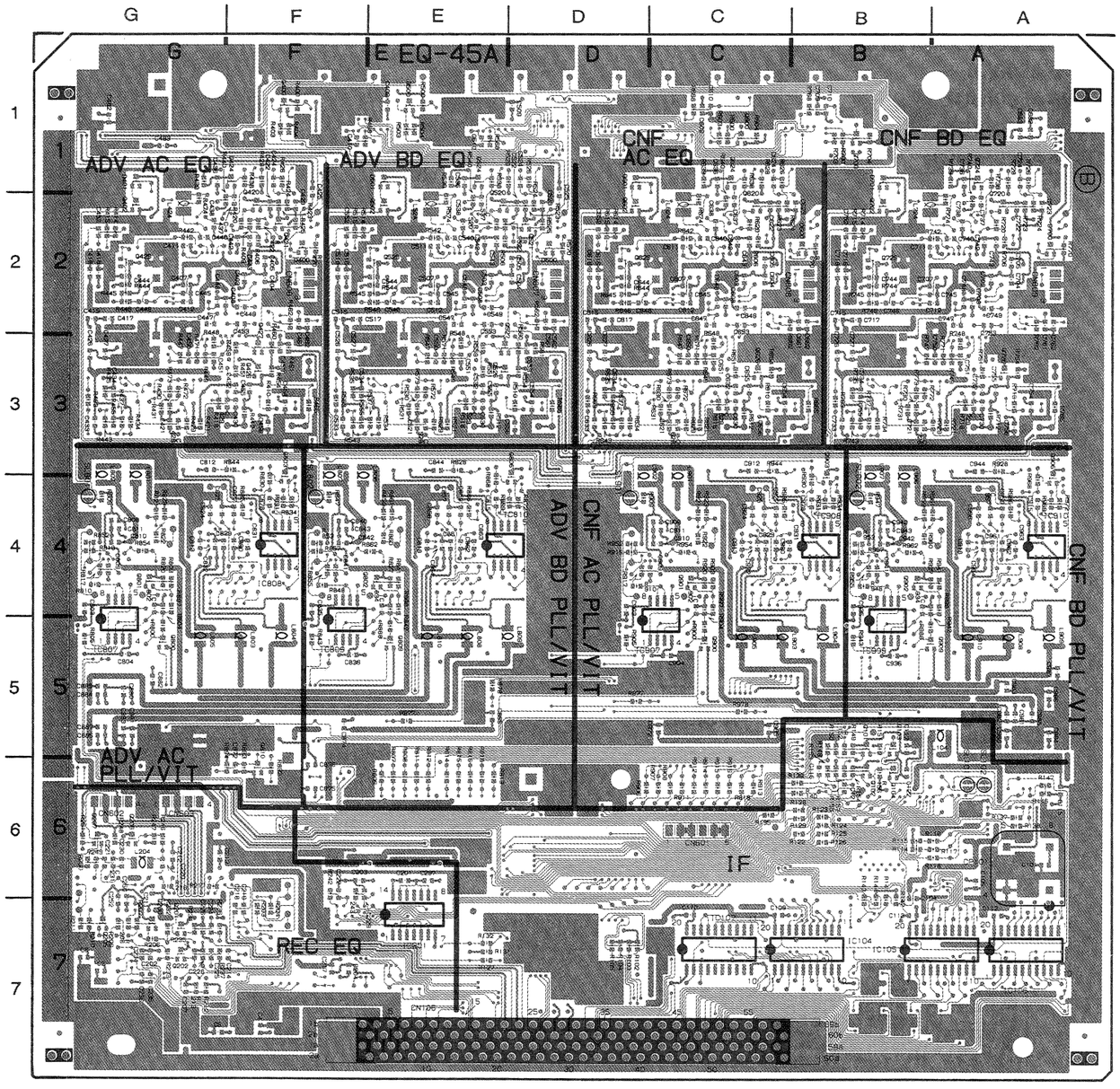
1-42 (a)

EQ-45A(1-648-536-11)

CN106	D-7	IC205	E-7	✱Q104	B-6	✱SL102	A-6
CN601	C-6	IC250	G-7	✱Q200	G-7	✱SL801	G-4
CN602	G-6	IC252	G-6	✱Q201	G-7	✱SL802	F-4
CN603	G-6	IC301	F-6	✱Q202	G-7	✱SL901	D-4
CN606	F-2	IC302	F-6	✱Q205	G-7	✱SL902	B-4
CN607	D-2	IC341	E-6	✱Q206	G-6		
CN608	B-2	IC351	E-6	✱Q207	G-6	TP101	D-1
CN609	A-2	IC400	G-3	✱Q400	F-1	TP102	C-1
		IC401	G-2	Q401	F-2	TP103	C-1
CP101	A-6	IC402	D-1	✱Q402	G-2	TP104	C-1
		IC403	E-1	Q403	F-2	TP105	B-1
DL420	G-2	IC404	G-2	✱Q420	F-2	TP106	B-1
DL520	E-2	IC405	G-2	✱Q421	F-2	TP107	B-5
DL620	C-2	IC406	G-1	✱Q424	F-1	TP201	F-7
DL720	B-2	IC407	F-3	✱Q425	G-2	TP202	F-6
		IC408	G-3	✱Q426	F-3	TP203	F-1
✱D400	F-2	IC409	G-3	✱Q427	F-3	TP204	E-1
✱D401	G-1	IC500	E-3	✱Q500	E-1	TP401	E-1
✱D500	D-2	IC501	E-2	Q501	D-2	TP420	F-3
✱D501	E-1	IC503	D-1	✱Q502	E-2	TP421	F-3
✱D600	B-2	IC504	F-2	Q503	D-2	TP423	F-3
✱D601	D-1	IC505	F-2	✱Q520	E-2	TP501	E-1
✱D700	A-2	IC507	D-3	✱Q521	D-2	TP520	D-3
✱D701	B-1	IC508	E-3	✱Q524	E-1	TP521	E-3
		IC509	F-3	✱Q525	E-2	TP523	D-3
E101	C-6	IC600	C-3	✱Q526	E-3	TP601	D-1
E201	E-7	IC601	C-2	✱Q527	E-3	TP620	B-3
E401	F-1	IC602	D-1	✱Q600	C-1	TP621	C-3
E402	F-1	IC603	C-1	Q601	C-2	TP623	B-3
E601	B-1	IC604	D-2	✱Q602	D-2	TP701	D-1
E801	G-5	IC605	D-2	Q603	B-2	TP720	A-3
E901	A-5	IC606	A-1	✱Q620	C-2	TP721	A-3
		IC607	C-3	✱Q624	C-1	TP723	A-3
FL101	C-7	IC608	D-3	✱Q625	D-2	TP800	G-4
FL102	C-7	IC609	D-3	✱Q626	C-3	TP801	G-4
FL103	C-7	IC700	A-3	✱Q700	B-1	TP802	E-4
FL104	C-7	IC701	A-2	Q701	A-2	TP805	F-4
FL105	C-7	IC703	B-1	✱Q702	B-2	TP806	G-4
FL106	B-7	IC704	B-2	Q703	A-2	TP807	E-4
FL107	B-7	IC705	B-2	✱Q720	A-2	TP808	G-4
FL108	C-7	IC707	A-3	✱Q724	A-1	TP809	E-4
FL109	B-7	IC708	B-3	✱Q725	B-2	TP900	D-4
FL110	B-7	IC709	B-3	✱Q726	A-3	TP901	C-4
FL111	B-7	IC801	G-4	✱Q800	G-5	TP902	A-4
FL112	B-7	IC802	G-4	✱Q801	G-4	TP905	B-4
FL113	B-7	IC803	F-4	✱Q802	E-4	TP906	C-4
FL114	A-7	IC804	E-4	✱Q803	F-3	TP907	B-4
FL115	A-7	IC805	E-5	✱Q806	D-3	TP908	C-4
FL116	B-7	IC806	F-6	✱Q809	E-5	TP909	A-4
FL117	A-7	✱IC807	G-5	✱Q810	F-6		
FL118	A-7	✱IC808	F-4	✱Q900	C-5		
FL119	A-7	✱IC809	F-5	✱Q901	C-4		
FL120	A-7	✱IC810	E-4	✱Q902	B-4		
FL121	A-7	IC880	G-5	✱Q903	B-3		
FL122	A-7	IC881	G-5	✱Q906	A-3		
FL123	A-7	IC882	G-5	✱Q909	A-5		
FL124	A-7	IC883	G-5				
FL125	C-7	IC901	C-4	RV421	G-3		
FL126	C-7	IC902	C-4	RV521	E-3		
FL401	F-1	IC903	B-4	RV621	C-3		
FL501	D-1	IC904	A-4	RV721	A-3		
FL601	C-1	IC905	C-5	RV801	G-5		
FL701	A-1	✱IC907	C-5	RV802	F-4		
		✱IC908	B-4	RV803	F-5		
IC101	C-7	✱IC909	B-5	RV804	D-4		
IC102	C-7	✱IC910	A-4	RV901	C-5		
IC103	B-6	IC980	A-5	RV902	B-4		
✱IC104	C-7	IC981	A-5	RV903	B-5		
✱IC105	B-7	IC982	A-5	RV904	A-4		
✱IC106	A-7	IC983	A-5				
✱IC107	C-7			RY401	G-2		
IC108	A-6	PS1	F-7	RY501	E-2		
✱IC201	E-7			RY601	D-2		
IC202	E-7	✱Q101	B-5	RY701	B-2		
IC203	E-7	✱Q102	B-6				
IC204	G-7	✱Q103	B-5	✱SL101	A-6		

✱: B SIDE

LOT NO. A-1

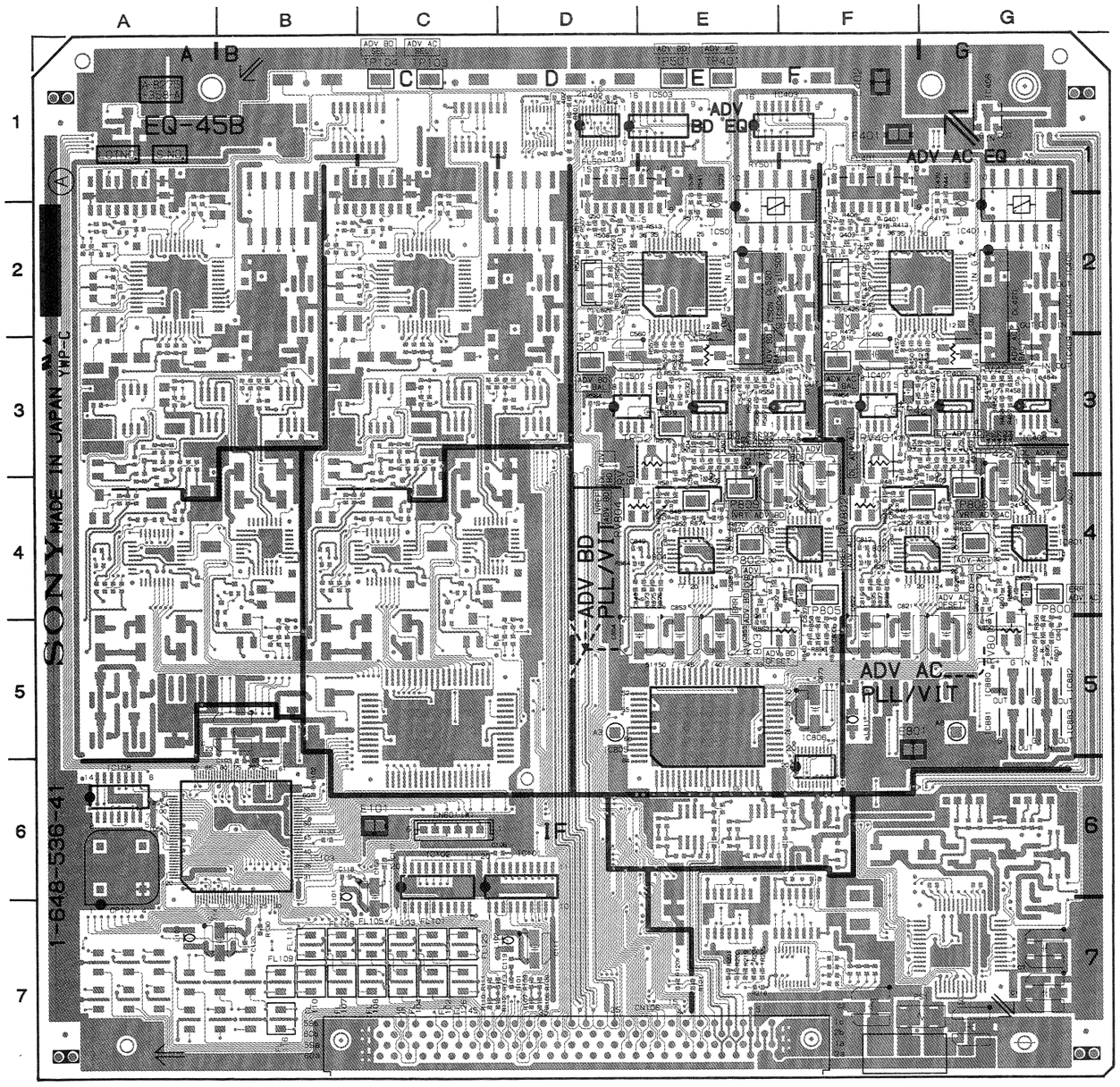


EQ-45A BOARD -B SIDE-

1-648-536-11 (LOT No. 302)
DVW-A500P(EK) ; EQ-45AP MCB

EQ-45B ; PB RF equalizer

(Board's Lot No. 308 and higher)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)



EQ-45B BOARD -A SIDE-

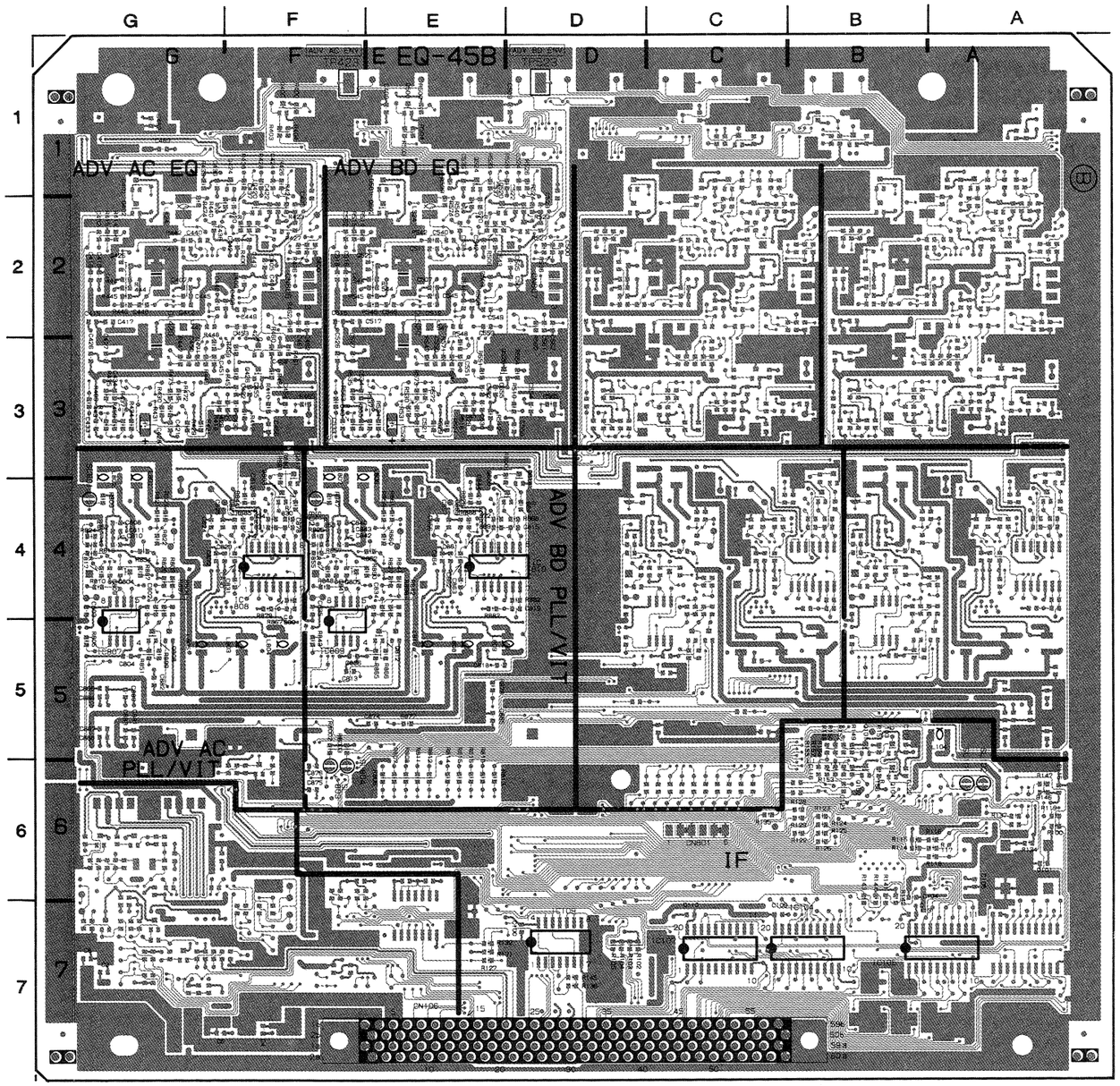
1-648-536-41 (LOT No. 308 -)
DVW-510(J) ; EQ-45B MCB
DVW-510(UC) ; EQ-45B MCB
DVW-510P(EK) ; EQ-45BP MCB

EQ-45B(1-648-536-41)

CN106	D-7	✱IC808	F-4	TP420	F-3
CN601	C-6	✱IC809	F-5	TP421	F-3
CN606	F-2	✱IC810	E-4	TP422	G-4
CN607	D-2	IC880	G-5	✱TP423	F-1
		IC881	G-5	TP501	E-1
CP101	A-6	IC882	G-5	TP520	D-3
		IC883	G-5	TP521	E-3
DL420	G-2			TP522	E-4
DL520	E-2	PS1	F-7	✱TP523	D-1
				TP800	G-4
✱D401	G-1	✱Q101	B-5	TP801	G-4
✱D501	E-1	✱Q102	B-6	TP802	E-4
✱D601	D-1	✱Q103	B-5	TP805	F-4
✱D701	B-1	✱Q104	B-6	TP808	G-4
		✱Q400	F-1	TP809	E-4
E101	C-6	Q401	F-2		
E401	F-1	✱Q402	G-2		
E402	F-1	Q403	F-2		
E801	G-5	Q404	F-3		
		Q405	G-4		
FL101	C-7	✱Q420	F-2		
FL102	C-7	✱Q424	F-1		
FL103	C-7	✱Q425	G-2		
FL104	C-7	✱Q426	F-3		
FL105	C-7	✱Q427	F-3		
FL106	B-7	✱Q500	E-1		
FL107	B-7	Q501	D-2		
FL108	C-7	✱Q502	E-2		
FL109	B-7	Q503	D-2		
FL110	B-7	Q504	E-3		
FL111	B-7	Q505	E-4		
FL116	B-7	✱Q520	E-2		
FL125	C-7	✱Q524	E-1		
FL126	C-7	✱Q525	E-2		
FL401	F-1	✱Q526	E-3		
FL501	D-1	Q801	G-4		
		Q802	E-4		
IC101	C-7	✱Q803	F-4		
IC102	C-7	✱Q804	G-4		
IC103	B-6	✱Q805	F-4		
✱IC104	C-7	✱Q806	D-4		
✱IC105	B-7	Q807	G-4		
✱IC107	C-7	✱Q808	G-5		
IC108	A-6	Q811	E-4		
✱IC109	D-7	✱Q812	E-5		
IC400	G-3	✱Q813	F-3		
IC401	G-2	✱Q814	D-3		
IC402	D-1				
IC403	E-1	RV401	F-3		
IC404	G-2	RV421	G-3		
IC405	G-2	RV501	E-3		
IC406	G-1	RV521	E-3		
IC407	F-3	RV801	G-5		
IC408	G-3	RV802	F-4		
IC409	G-3	RV803	F-5		
IC500	E-3	RV804	D-4		
IC501	E-2				
IC503	D-1	RY401	G-2		
IC504	F-2	RY501	E-2		
IC505	F-2				
IC507	D-3	✱SL101	A-6		
IC508	E-3	✱SL102	A-6		
IC509	F-3	✱SL801	G-4		
IC801	G-4	✱SL802	F-4		
IC802	G-4	✱SL803	E-6		
IC803	F-4	✱SL804	E-6		
IC804	E-4				
IC805	E-5	TP103	C-1		
IC806	F-6	TP104	C-1		
✱IC807	G-5	TP401	E-1		

✱: B SIDE

LOT NO. A-1



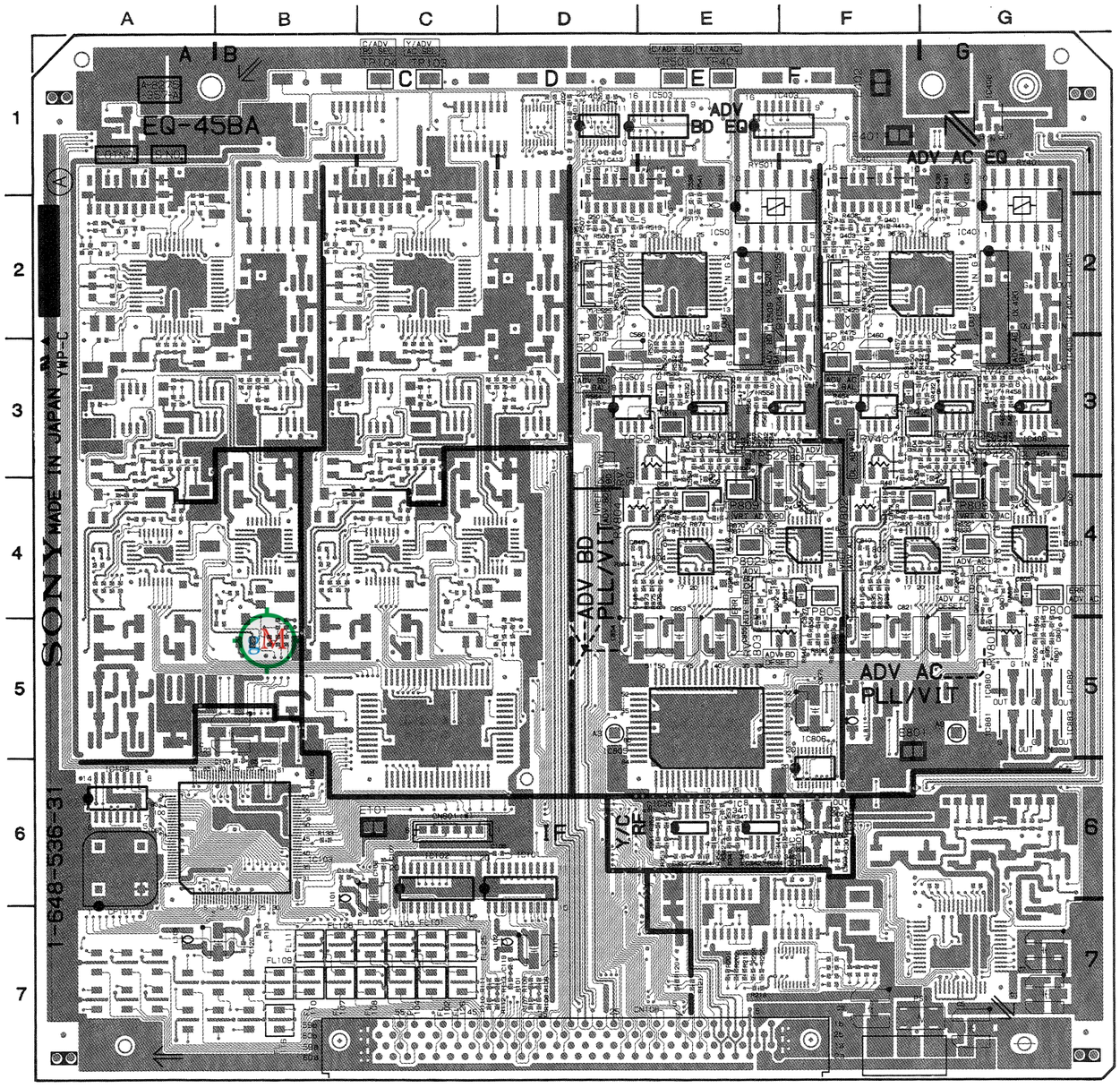
EQ-45B BOARD -B SIDE-

1-648-536-41 (LOT No. 308 -)

DVW-510(J) ; EQ-45B MCB
DVW-510(UC) ; EQ-45B MCB
DVW-510P(EK) ; EQ-45BP MCB

EQ-45BA ; PB RF equalizer, Betacam PB buffer

(Board's Lot No. 307 and higher)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



EQ-45BA BOARD -A SIDE-

1-648-536-31 (LOT No. 307 -)

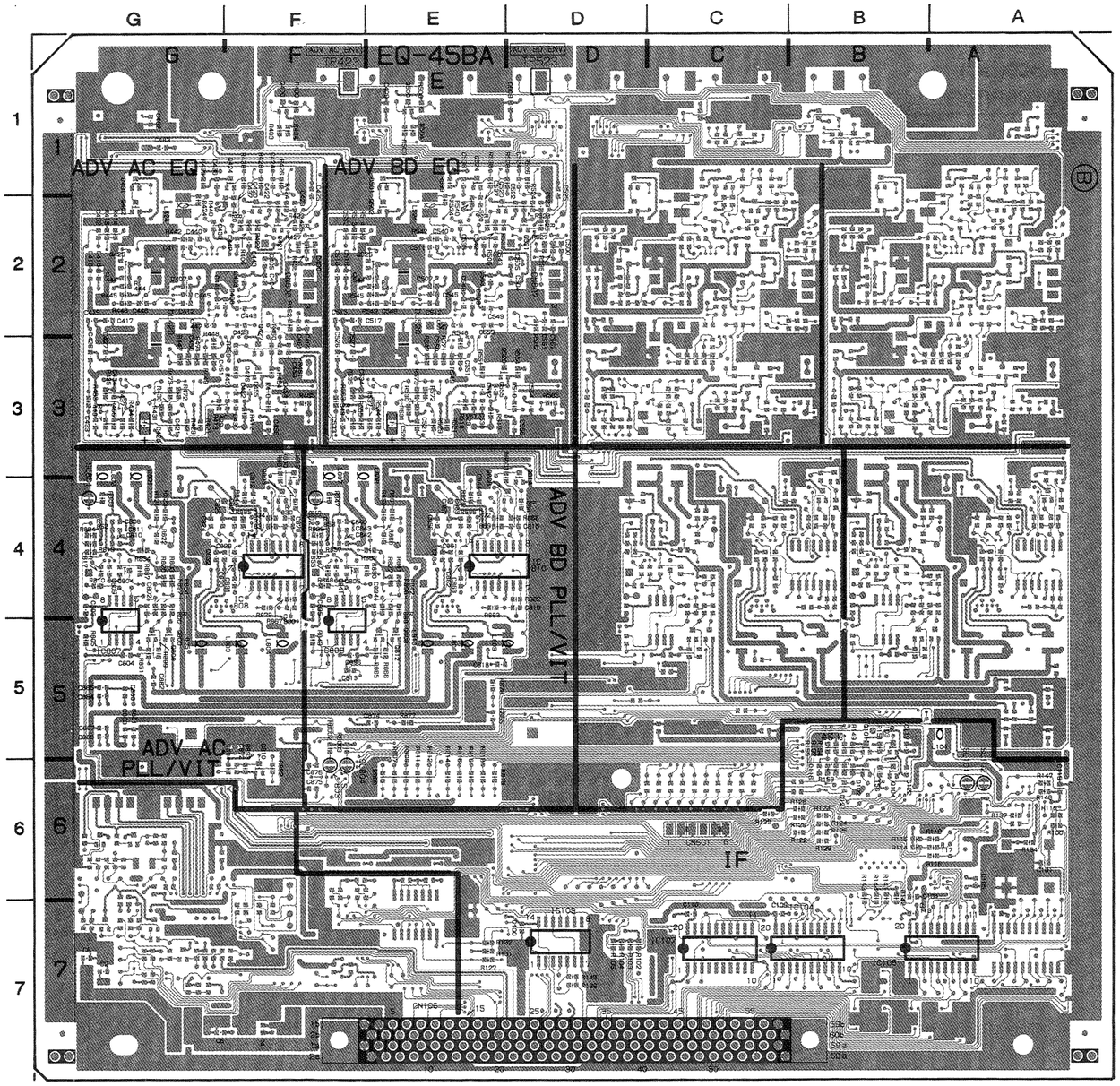
DVW-A510(J)	; EQ-45BA MCB
DVW-A510(UC)	; EQ-45BA MCB
DVW-A510P(EK)	; EQ-45BAP MCB
DVW-CA510(J)	; EQ-45BA MCB
DVW-CA510(UC)	; EQ-45BA MCB
DVW-CA510P(EK)	; EQ-45BAP MCB

EQ-45BA(1-648-536-31)

CN106	D-7	IC804	E-4	✱SL102	A-6
CN601	C-6	IC805	E-5	✱SL801	G-4
CN606	F-2	IC806	F-6	✱SL802	F-4
CN607	D-2	✱IC807	G-5	✱SL803	E-6
		✱IC808	F-4	✱SL804	E-6
CP101	A-6	✱IC809	F-5		
		✱IC810	E-4	TP103	C-1
DL420	G-2	IC880	G-5	TP104	C-1
DL520	E-2	IC881	G-5	TP401	E-1
		IC882	G-5	TP420	F-3
✱D401	G-1	IC883	G-5	TP421	F-3
✱D501	E-1			TP422	G-4
✱D601	D-1	PS1	F-7	✱TP423	F-1
✱D701	B-1			TP501	E-1
		✱Q101	B-5	TP520	D-3
E101	C-6	✱Q102	B-6	TP521	E-3
E401	F-1	✱Q103	B-5	TP522	E-4
E402	F-1	✱Q104	B-6	✱TP523	D-1
E801	G-5	✱Q400	F-1	TP800	G-4
		Q401	F-2	TP801	G-4
FL101	C-7	✱Q402	G-2	TP802	E-4
FL102	C-7	Q403	F-2	TP805	F-4
FL103	C-7	Q404	F-3	TP808	G-4
FL104	C-7	Q405	G-4	TP809	E-4
FL105	C-7	✱Q420	F-2		
FL106	B-7	✱Q421	F-2		
FL107	B-7	✱Q424	F-1		
FL108	C-7	✱Q425	G-2		
FL109	B-7	✱Q426	F-3		
FL110	B-7	✱Q427	F-3		
FL111	B-7	✱Q500	E-1		
FL116	B-7	Q501	D-2		
FL125	C-7	✱Q502	E-2		
FL126	C-7	Q503	D-2		
FL401	F-1	Q504	E-3		
FL501	D-1	Q505	E-4		
		✱Q520	E-2		
IC101	C-7	✱Q521	D-2		
IC102	C-7	✱Q524	E-1		
IC103	B-6	✱Q525	E-2		
✱IC104	C-7	✱Q526	E-3		
✱IC105	B-7	✱Q800	G-5		
✱IC107	C-7	Q801	G-4		
IC108	A-6	Q802	E-4		
✱IC109	D-7	✱Q803	F-3		
IC301	F-6	✱Q804	G-4		
IC302	F-6	✱Q805	F-4		
IC341	E-6	✱Q806	D-3		
IC351	E-6	Q807	G-4		
IC400	G-3	✱Q808	G-5		
IC401	G-2	✱Q809	E-5		
IC402	D-1	✱Q810	F-6		
IC403	E-1	Q811	E-4		
IC404	G-2	✱Q812	E-5		
IC405	G-2	✱Q813	F-3		
IC406	G-1	✱Q814	D-3		
IC407	F-3				
IC408	G-3	RV401	F-3		
IC409	G-3	RV421	G-3		
IC500	E-3	RV501	E-3		
IC501	E-2	RV521	E-3		
IC503	D-1	RV801	G-5		
IC504	F-2	RV802	F-4		
IC505	F-2	RV803	F-5		
IC507	D-3	RV804	D-4		
IC508	E-3				
IC509	F-3	RY401	G-2		
IC801	G-4	RY501	E-2		
IC802	G-4				
IC803	F-4	✱SL101	A-6		

✱: B SIDE

LOT NO. A-1



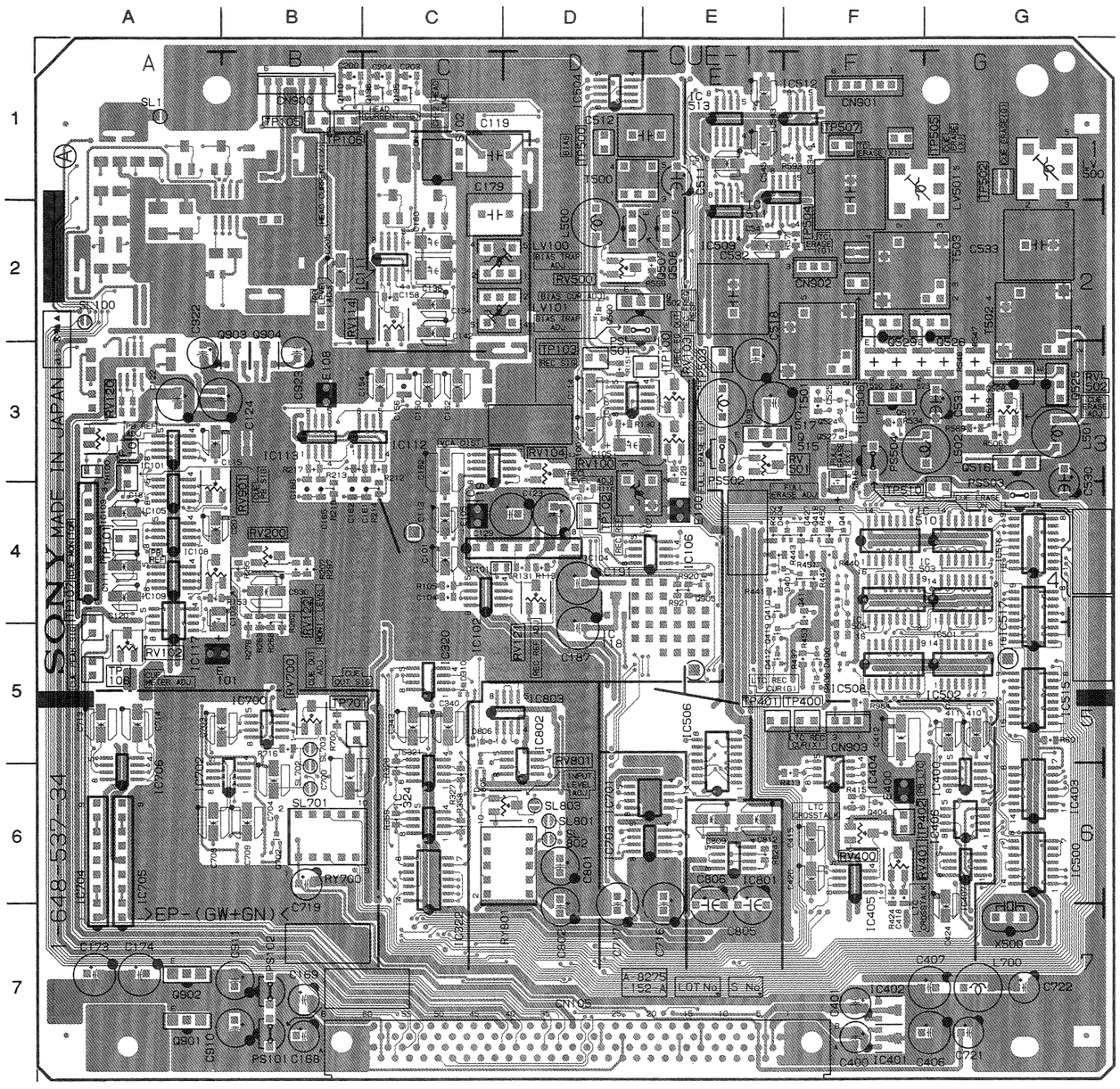
EQ-45BA BOARD -B SIDE-

1-648-536-31 (LOT No. 307 -)

DVW-A510(J)	; EQ-45BA	MCB
DVW-A510(UC)	; EQ-45BA	MCB
DVW-A510P(EK)	; EQ-45BAP	MCB
DVW-CA510(J)	; EQ-45BA	MCB
DVW-CA510(UC)	; EQ-45BA	MCB
DVW-CA510P(EK)	; EQ-45BAP	MCB

CUE-1 ; CUE REC/PB and LTC REC/PB circuits, CUE/LTC/FULL erase OSC

(Board's Lot No. 511 and higher)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-500P(UC)



CUE-1 BOARD -A SIDE-

1-648-537-34 (LOT No. 511 -)

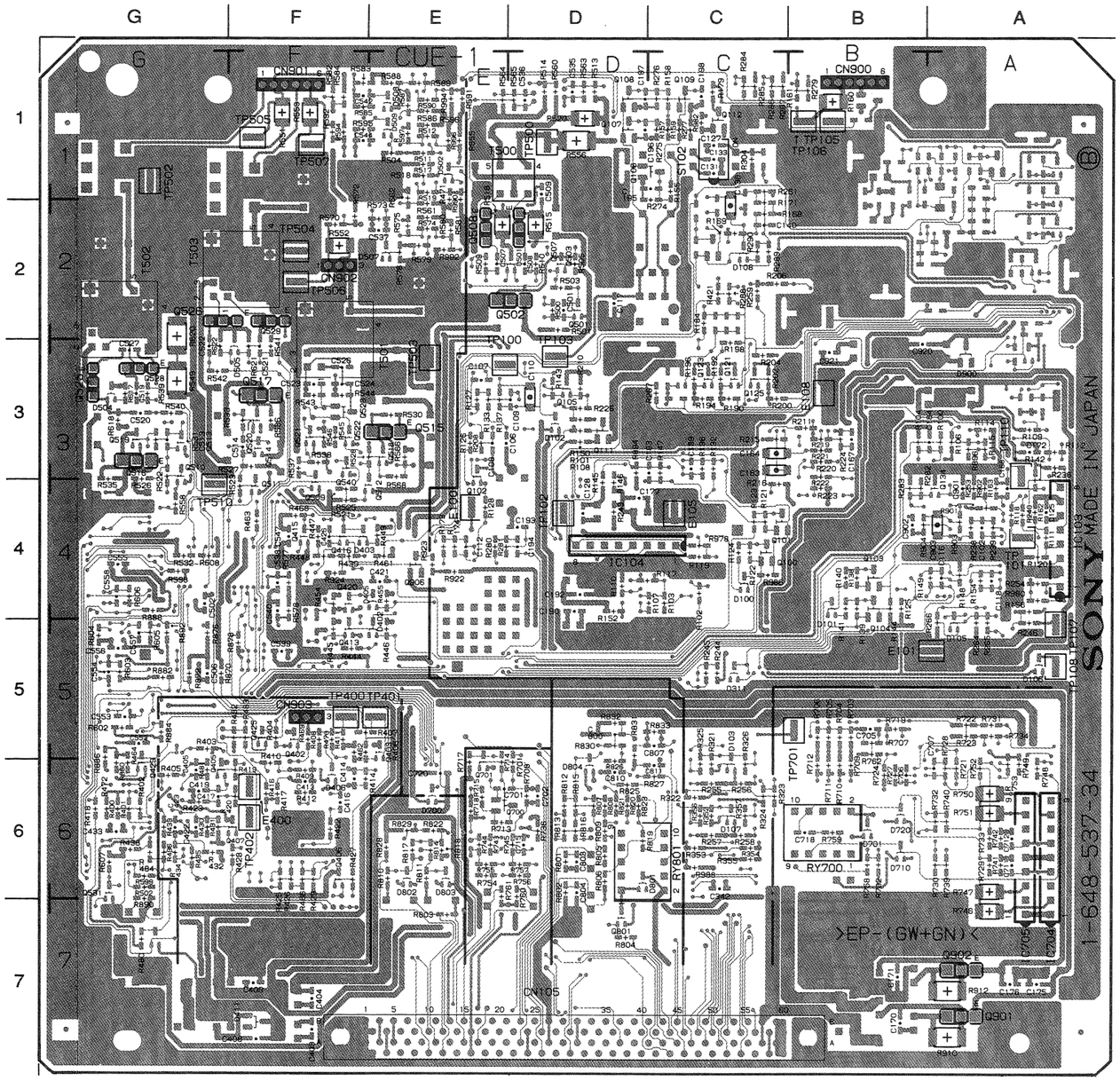
DVW-500(J)	; CUE-1	MCB
DVW-500(UC)	; CUE-1	MCB
DVW-500P(EK)	; CUE-1P	MCB
DVW-500P(UC)	; CUE-1PG	MCB

CUE-1(1-648-537-34)

CN105	D-7	IC500	G-6	✱Q425	F-5	T502	G-2
CN900	B-1	IC501	G-4	✱Q429	G-6	T503	F-2
CN901	F-1	IC502	G-5	Q500	D-2		
CN902	F-2	IC503	G-4	✱Q501	D-2	TH100	A-3
CN903	F-5	IC504	D-1	Q502	D-2	TH101	C-4
		IC505	F-4	✱Q503	D-2		
✱D100	C-4	IC506	E-6	Q507	D-2	TP100	E-3
✱D101	B-4	IC508	F-5	Q508	E-2	TP101	A-3
✱D102	D-3	IC509	E-2	✱Q509	F-4	TP102	D-4
✱D103	C-6	IC510	F-4	✱Q510	G-3	TP103	D-3
✱D105	A-5	IC511	F-2	✱Q511	F-3	TP105	B-1
✱D106	A-5	IC512	F-1	✱Q512	F-4	TP106	B-1
✱D107	C-6	IC513	E-1	✱Q513	G-3	TP107	A-4
✱D108	C-2	IC515	G-5	✱Q514	F-3	TP108	A-5
D310	C-5	IC516	G-4	Q515	E-3	TP110	A-3
✱D311	C-5	IC517	G-5	Q516	G-3	TP400	F-5
D400	F-5	IC700	B-5	Q517	F-3	TP401	E-5
D401	E-4	IC701	E-6	✱Q518	E-3	TP402	F-6
✱D402	E-5	IC702	B-6	✱Q519	G-3	TP500	D-1
✱D403	F-4	IC703	E-6	✱Q520	F-3	TP502	G-1
D404	F-4	IC704	A-7	✱Q521	F-3	TP503	E-3
✱D405	E-4	IC705	A-7	✱Q522	F-3	TP504	F-2
✱D406	F-6	IC706	A-6	✱Q523	F-3	TP505	F-1
✱D411	F-7	IC801	E-6	Q524	F-3	TP506	F-2
✱D501	D-2	IC802	D-6	Q525	G-3	TP507	F-1
✱D502	E-1	IC803	D-5	Q526	G-2	TP510	G-4
✱D504	G-3			Q527	F-3	TP701	B-5
✱D505	F-3	LV100	D-2	Q528	G-3		
✱D507	E-2	LV101	D-2	Q529	F-2	X500	G-7
✱D508	E-1	LV102	D-4	✱Q531	G-6		
✱D509	E-1	LV500	G-1	✱Q540	F-3		
✱D700	E-6	LV501	F-1	✱Q700	E-6		
✱D701	B-6			✱Q701	E-6		
✱D710	B-6	PS101	B-7	Q702	B-6		
✱D720	B-6	PS102	B-7	✱Q801	D-7		
✱D801	D-6	PS501	D-2	Q901	A-7		
✱D802	E-6	PS502	E-3	Q902	A-7		
✱D803	E-6	PS503	G-3	Q903	B-3		
✱D804	D-6	PS504	F-3	Q904	B-3		
D805	C-6			Q905	E-4		
D806	C-5	✱Q100	C-4	✱Q906	E-4		
✱D900	A-3	✱Q101	C-4				
		✱Q102	E-3	RV100	E-3		
E100	E-4	✱Q103	B-4	RV102	A-5		
E101	B-5	✱Q104	B-4	RV103	E-3		
E105	C-4	✱Q105	D-3	RV104	D-3		
E108	B-3	✱Q106	C-1	RV114	C-2		
E400	F-6	✱Q107	D-1	RV120	A-3		
		✱Q108	D-1	RV121	D-4		
IC101	A-3	✱Q109	C-1	RV122	A-4		
IC102	C-4	Q110	B-1	RV200	B-4		
IC103	A-4	✱Q111	D-3	RV400	F-6		
IC104	C-4	✱Q112	C-1	RV401	F-6		
IC105	A-4	✱Q121	C-3	RV500	D-2		
IC106	E-4	✱Q123	C-3	RV501	E-3		
IC107	E-3	✱Q125	C-3	RV502	G-3		
IC108	A-4	Q134	A-4	RV700	B-5		
IC109	A-4	Q135	C-1	RV801	D-6		
IC111	C-2	Q136	C-1	RV901	A-4		
IC112	C-3	✱Q402	F-5				
IC113	B-3	✱Q403	E-5	RY700	B-6		
IC117	A-5	Q404	F-6	RY801	D-6		
IC118	D-4	✱Q405	F-6				
IC119	C-4	✱Q406	F-6	S102	C-1		
IC320	C-5	✱Q407	F-6				
IC321	C-6	Q408	F-5	SL1	A-1		
IC322	C-6	Q410	E-4	SL100	A-2		
IC324	C-6	Q411	F-4	SL701	B-6		
IC400	G-6	Q412	E-5	SL702	B-6		
IC401	F-7	✱Q413	F-5	SL703	B-5		
IC402	F-7	✱Q415	F-4	SL801	D-6		
IC403	G-6	✱Q416	F-4	SL802	D-6		
IC404	F-6	Q417	F-4	SL803	D-6		
IC405	F-6	Q418	F-4				
IC406	G-6	Q419	E-5	T500	D-1		
IC407	G-6	✱Q420	F-4	T501	F-3		

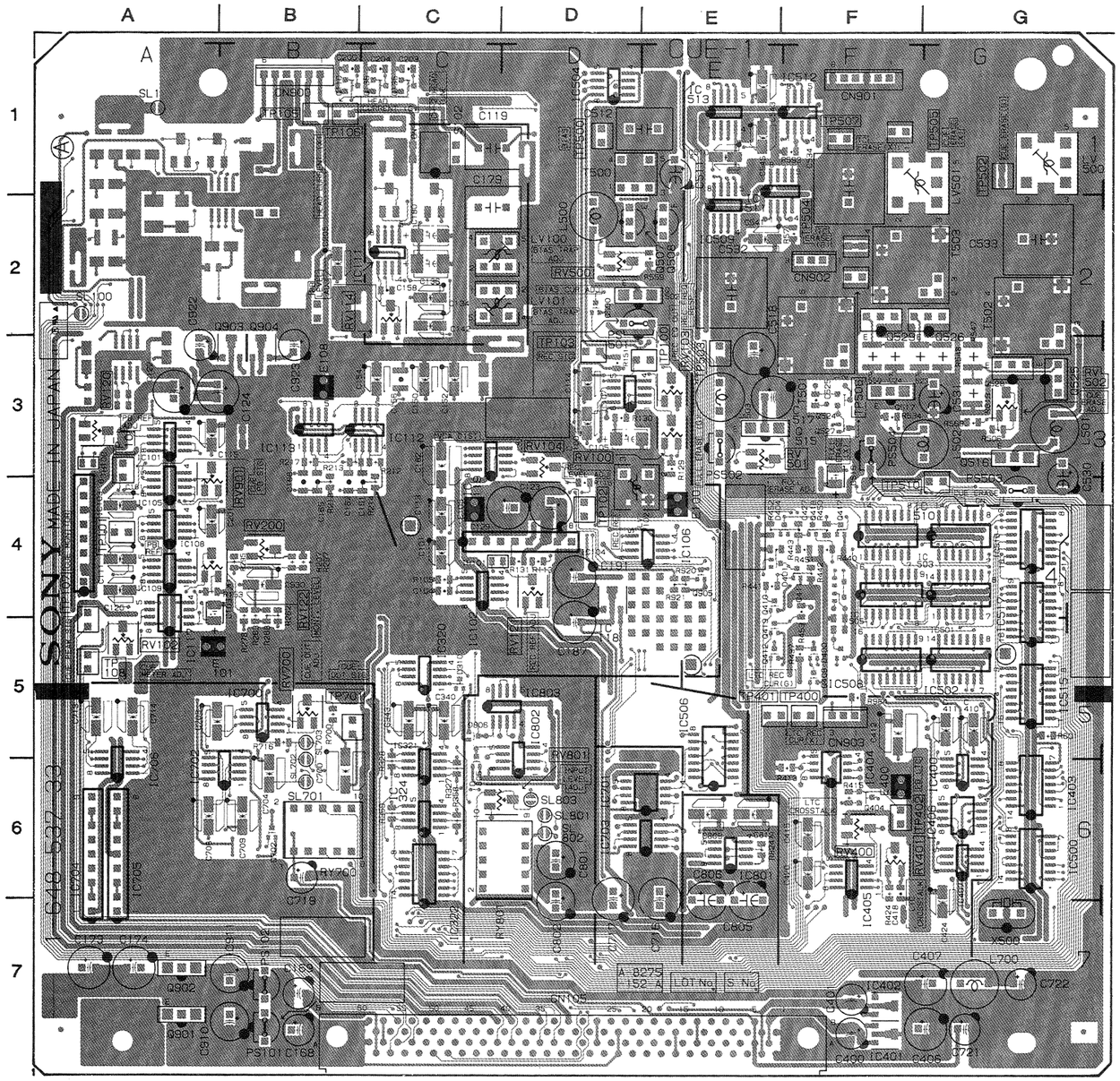
✱ : B SIDE

LOT NO. E-7



CUE-1 ; CUE REC/PB and LTC REC/PB circuits, CUE/LTC/FULL erase OSC

(Board's Lot No. 403 through 509)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)
DVW-500P(UC)



CUE-1 BOARD -A SIDE-
1-648-537-33 (LOT No. 403 - 509)

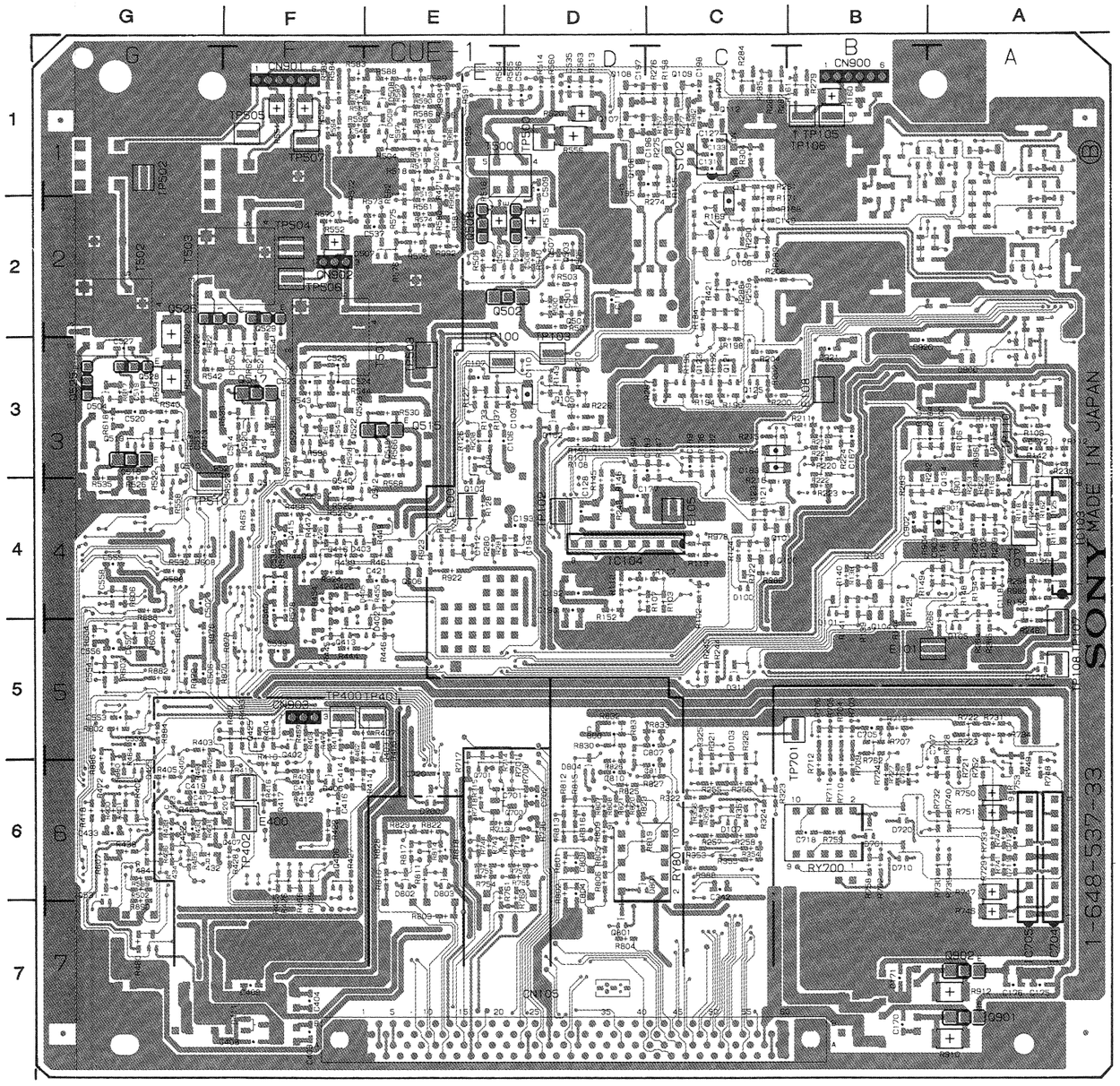
DVW-500(J)	; CUE-1	MCB
DVW-500(UC)	; CUE-1	MCB
DVW-500P(EK)	; CUE-1P	MCB
DVW-500P(UC)	; CUE-1PG	MCB

CUE-1(1-648-537-33)

CN105	D-7	IC500	G-6	✱Q425	F-5	T502	G-2
CN900	B-1	IC501	G-4	✱Q429	G-6	T503	F-2
CN901	F-1	IC502	G-5	Q500	D-2		
CN902	F-2	IC503	G-4	✱Q501	D-2	TH100	A-3
CN903	F-5	IC504	D-1	Q502	D-2	TH101	C-4
		IC505	F-4	✱Q503	D-2		
✱D100	C-4	IC506	E-6	Q507	D-2	TP100	E-3
✱D101	B-4	IC508	F-5	Q508	E-2	TP101	A-3
✱D102	D-3	IC509	E-2	✱Q509	F-4	TP102	D-4
✱D103	C-6	IC510	F-4	✱Q510	G-3	TP103	D-3
✱D105	A-5	IC511	F-2	✱Q511	F-3	TP105	B-1
✱D106	A-5	IC512	F-1	✱Q512	F-4	TP106	B-1
✱D107	C-6	IC513	E-1	✱Q513	G-3	TP107	A-4
✱D108	C-2	IC515	G-5	✱Q514	F-3	TP108	A-5
D310	C-5	IC516	G-4	Q515	E-3	TP110	A-3
✱D311	C-5	IC517	G-5	Q516	G-3	TP400	F-5
D400	F-5	IC700	B-5	Q517	F-3	TP401	E-5
D401	E-4	IC701	E-6	✱Q518	E-3	TP402	F-6
✱D402	E-5	IC702	B-6	✱Q519	G-3	TP500	D-1
✱D403	F-4	IC703	E-6	✱Q520	F-3	TP502	G-1
D404	F-4	IC704	A-7	✱Q521	F-3	TP503	E-3
✱D405	E-4	IC705	A-7	✱Q522	F-3	TP504	F-2
✱D406	F-6	IC706	A-6	✱Q523	F-3	TP505	F-1
✱D411	F-7	IC801	E-6	Q524	F-3	TP506	F-2
✱D501	D-2	IC802	D-6	Q525	G-3	TP507	F-1
✱D502	E-1	IC803	D-5	Q526	G-2	TP510	G-4
✱D504	G-3			Q527	F-3	TP701	B-5
✱D505	F-3	LV100	D-2	Q528	G-3		
✱D507	E-2	LV101	D-2	Q529	F-2	X500	G-7
✱D508	E-1	LV102	D-4	✱Q531	G-6		
✱D509	E-1	LV500	G-1	✱Q540	F-3		
✱D700	E-6	LV501	F-1	✱Q700	E-6		
✱D701	B-6			✱Q701	E-6		
✱D710	B-6	PS101	B-7	Q702	B-6		
✱D720	B-6	PS102	B-7	✱Q801	D-7		
✱D801	D-6	PS501	D-2	Q901	A-7		
✱D802	E-6	PS502	E-3	Q902	A-7		
✱D803	E-6	PS503	G-3	Q903	B-3		
✱D804	D-6	PS504	F-3	Q904	B-3		
D805	C-6			Q905	E-4		
D806	C-5	✱Q100	C-4	✱Q906	E-4		
✱D900	A-3	✱Q101	C-4				
		✱Q102	E-3	RV100	E-3		
E100	E-4	✱Q103	B-4	RV102	A-5		
E101	B-5	✱Q104	B-4	RV103	E-3		
E105	C-4	✱Q105	D-3	RV104	D-3		
E108	B-3	✱Q106	C-1	RV114	C-2		
E400	F-6	✱Q107	D-1	RV120	A-3		
		✱Q108	D-1	RV121	D-4		
IC101	A-3	✱Q109	C-1	RV122	A-4		
IC102	C-4	Q110	B-1	RV200	B-4		
IC103	A-4	✱Q111	D-3	RV400	F-6		
IC104	C-4	✱Q112	C-1	RV401	F-6		
IC105	A-4	✱Q121	C-3	RV500	D-2		
IC106	E-4	✱Q123	C-3	RV501	E-3		
IC107	E-3	✱Q125	C-3	RV502	G-3		
IC108	A-4	Q134	A-4	RV700	B-5		
IC109	A-4	Q135	C-1	RV801	D-6		
IC111	C-2	Q136	C-1	RV901	A-4		
IC112	C-3	✱Q402	F-5				
IC113	B-3	✱Q403	E-5	RY700	B-6		
IC117	A-5	Q404	F-6	RY801	D-6		
IC118	D-4	✱Q405	F-6				
IC119	C-4	✱Q406	F-6	S102	C-1		
IC320	C-5	✱Q407	F-6				
IC321	C-6	Q408	F-5	SL1	A-1		
IC322	C-6	Q410	E-4	SL100	A-2		
IC324	C-6	Q411	F-4	SL701	B-6		
IC400	G-6	Q412	E-5	SL702	B-6		
IC401	F-7	✱Q413	F-5	SL703	B-5		
IC402	F-7	✱Q415	F-4	SL801	D-6		
IC403	G-6	✱Q416	F-4	SL802	D-6		
IC404	F-6	Q417	F-4	SL803	D-6		
IC405	F-6	Q418	F-4				
IC406	G-6	Q419	E-5	T500	D-1		
IC407	G-6	✱Q420	F-4	T501	F-3		

✱ : B SIDE

LOT NO. E-7



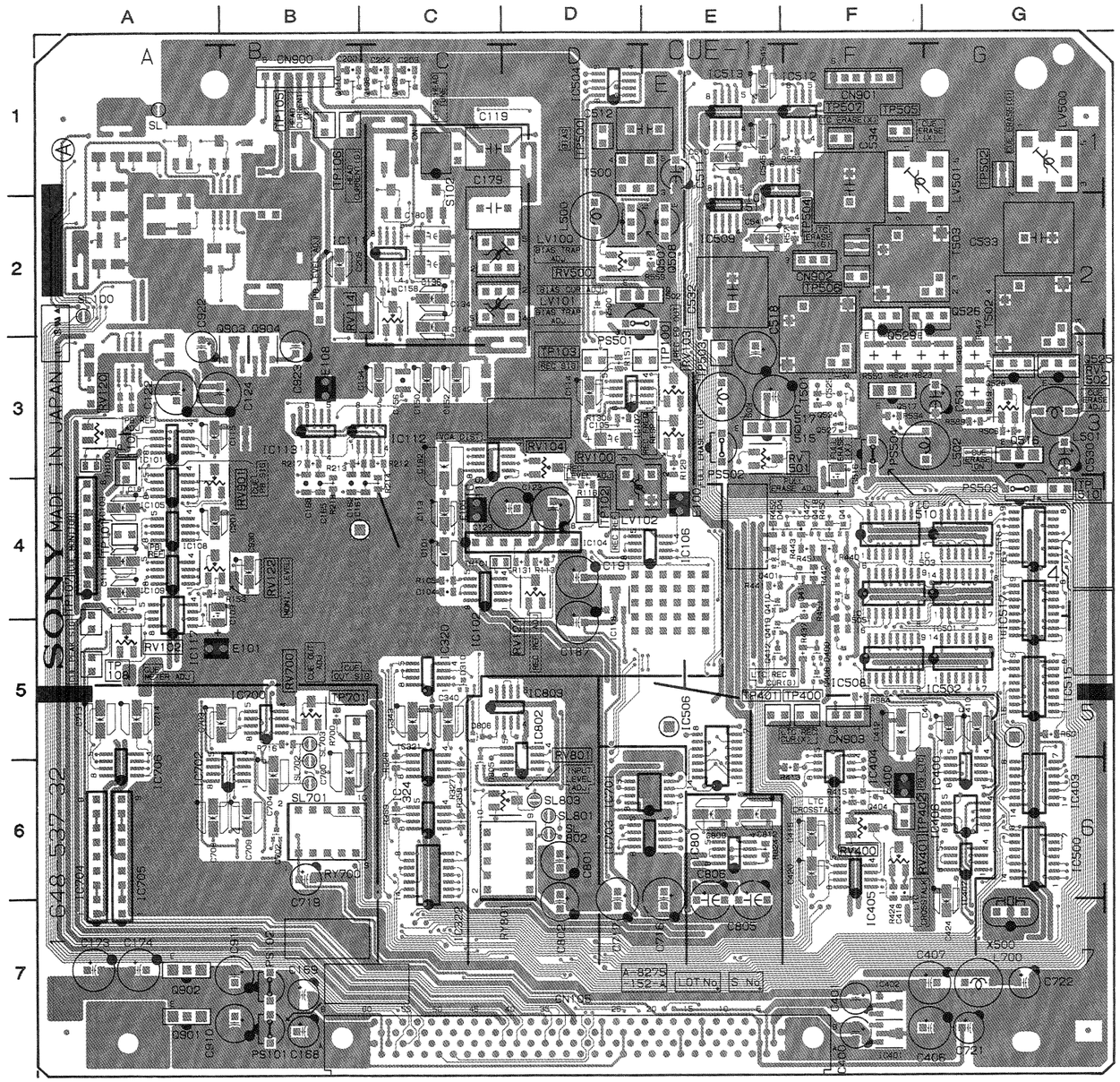
CUE-1 BOARD -B SIDE-

1-648-537-33 (LOT No. 403 - 509)

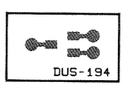
DVW-500(J)	; CUE-1	MCB
DVW-500(UC)	; CUE-1	MCB
DVW-500P(EK)	; CUE-1P	MCB
DVW-500P(UC)	; CUE-1PG	MCB

CUE-1 ; CUE REC/PB and LTC REC/PB circuits, CUE/LTC/FULL erase OSC
DUS-194

(Board's Lot No. 307 through 402)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)



CUE-1 BOARD -A SIDE-
1-648-537-32 (LOT No. 307 - 402)
DVW-500(J) ; CUE-1 MCB
DVW-500(UC) ; CUE-1 MCB
DVW-500P(EK) ; CUE-1P MCB



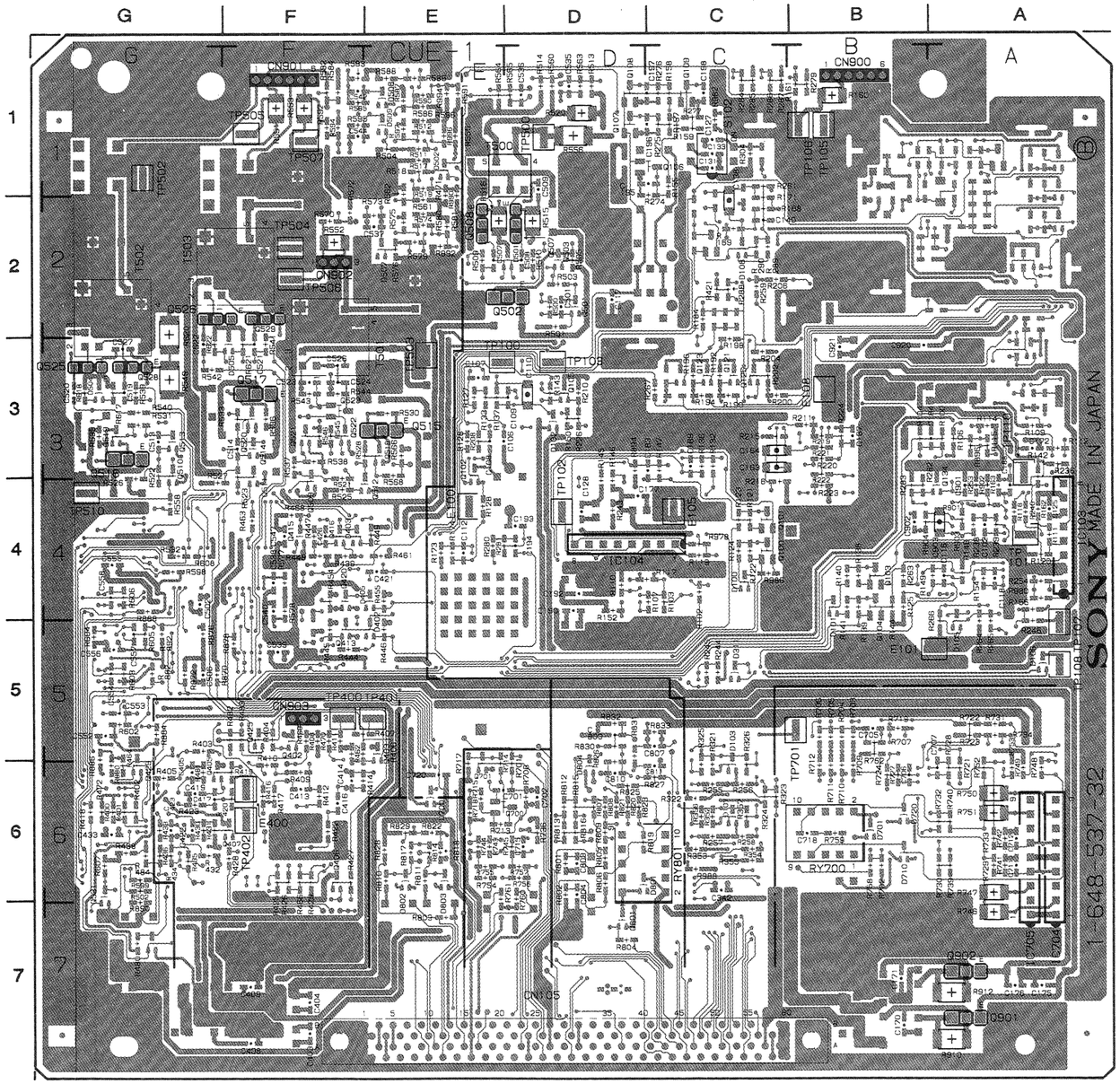
DUS-194 BOARD -SOLDERING SIDE-
1-623-599-12

CUE-1(1-648-537-32)

CN105	D-7	IC503	G-4	✱Q503	D-2	TP103	D-3
CN900	B-1	IC504	D-1	Q507	D-2	TP105	B-1
CN901	F-1	IC505	F-4	Q508	E-2	TP106	B-1
CN902	F-2	IC506	E-6	✱Q509	F-4	TP107	A-4
CN903	F-5	IC508	F-5	✱Q510	G-3	TP108	A-5
		IC509	E-2	✱Q511	F-3	TP110	A-3
✱D100	C-4	IC510	F-4	✱Q512	F-4	TP400	F-5
✱D101	B-4	IC511	F-2	✱Q513	G-3	TP401	E-5
✱D102	D-3	IC512	F-1	✱Q514	F-3	TP402	F-6
✱D103	C-6	IC513	E-1	Q515	E-3	TP500	D-1
✱D105	A-5	IC515	G-5	Q516	G-3	TP502	G-1
✱D106	A-5	IC516	G-4	Q517	F-3	TP503	E-3
✱D107	C-6	IC517	G-5	✱Q518	E-3	TP504	F-2
✱D108	C-2	IC700	B-5	✱Q519	G-3	TP505	F-1
D310	C-5	IC701	E-6	✱Q520	F-3	TP506	F-2
✱D311	C-5	IC702	B-6	✱Q521	F-3	TP507	F-1
D400	F-5	IC703	E-6	✱Q522	F-3	TP510	G-4
D401	E-4	IC704	A-7	✱Q523	F-3	TP701	B-5
✱D402	E-5	IC705	A-7	Q524	F-3		
✱D403	F-4	IC706	A-6	Q525	G-3	X500	G-7
D404	F-4	IC801	E-6	Q526	G-2		
✱D405	E-4	IC802	D-6	Q527	F-3		
✱D501	D-2	IC803	D-5	Q528	G-3		
✱D502	E-1			Q529	F-2		
✱D504	G-3	LV100	D-2	✱Q531	G-6		
✱D505	F-3	LV101	D-2	✱Q700	E-6		
✱D507	E-2	LV102	D-4	✱Q701	E-6		
✱D508	E-1	LV500	G-1	Q702	B-6		
✱D509	E-1	LV501	F-1	✱Q801	D-7		
✱D700	E-6			Q901	A-7		
✱D701	B-6	PS101	B-7	Q902	A-7		
✱D710	B-6	PS102	B-7	Q903	B-3		
✱D720	B-6	PS501	D-2	Q904	B-3		
✱D801	D-6	PS502	E-3				
✱D802	E-6	PS503	G-3	RV100	E-3		
✱D803	E-6	PS504	F-3	RV102	A-5		
✱D804	D-6			RV103	E-3		
D805	C-6	✱Q100	C-4	RV104	D-3		
D806	C-5	✱Q101	C-4	RV114	C-2		
		✱Q102	E-3	RV120	A-3		
E100	E-4	✱Q103	B-4	RV121	D-4		
E101	B-5	✱Q104	B-4	RV122	A-4		
E105	C-4	✱Q105	D-3	RV400	F-6		
E108	B-3	✱Q106	C-1	RV401	F-6		
E400	F-6	✱Q107	D-1	RV500	D-2		
		✱Q108	D-1	RV501	E-3		
IC101	A-3	✱Q109	C-1	RV502	G-3		
IC102	C-4	Q110	B-1	RV700	B-5		
IC103	A-4	✱Q121	C-3	RV801	D-6		
IC104	C-4	✱Q123	C-3	RV901	A-4		
IC105	A-4	✱Q125	C-3				
IC106	E-4	Q134	A-4	RY700	B-6		
IC107	E-3	Q135	C-1	RY801	D-6		
IC108	A-4	Q136	C-1				
IC109	A-4	✱Q402	F-5	S102	C-1		
IC111	C-2	✱Q403	E-5				
IC112	C-3	Q404	F-6	SL1	A-1		
IC113	B-3	✱Q405	F-6	SL100	A-2		
IC117	A-5	✱Q406	F-6	SL701	B-6		
IC118	D-4	✱Q407	F-6	SL702	B-6		
IC119	C-4	Q408	F-5	SL703	B-5		
IC320	C-5	Q410	E-4	SL801	D-6		
IC321	C-6	Q411	F-4	SL802	D-6		
IC322	C-6	Q412	E-5	SL803	D-6		
IC324	C-6	✱Q413	F-5				
IC400	G-6	✱Q415	F-4	T500	D-1		
IC401	F-7	✱Q416	F-4	T501	F-3		
IC402	F-7	Q417	F-4	T502	G-2		
IC403	G-6	Q418	F-4	T503	F-2		
IC404	F-6	Q419	E-5				
IC405	F-6	✱Q420	F-4	TH100	A-3		
IC406	G-6	✱Q425	F-5	TH101	C-4		
IC407	G-6	✱Q429	G-6				
IC500	G-6	Q500	D-2	TP100	E-3		
IC501	G-4	✱Q501	D-2	TP101	A-3		
IC502	G-5	Q502	D-2	TP102	D-4		

✱ : B SIDE

LOT NO. E-7

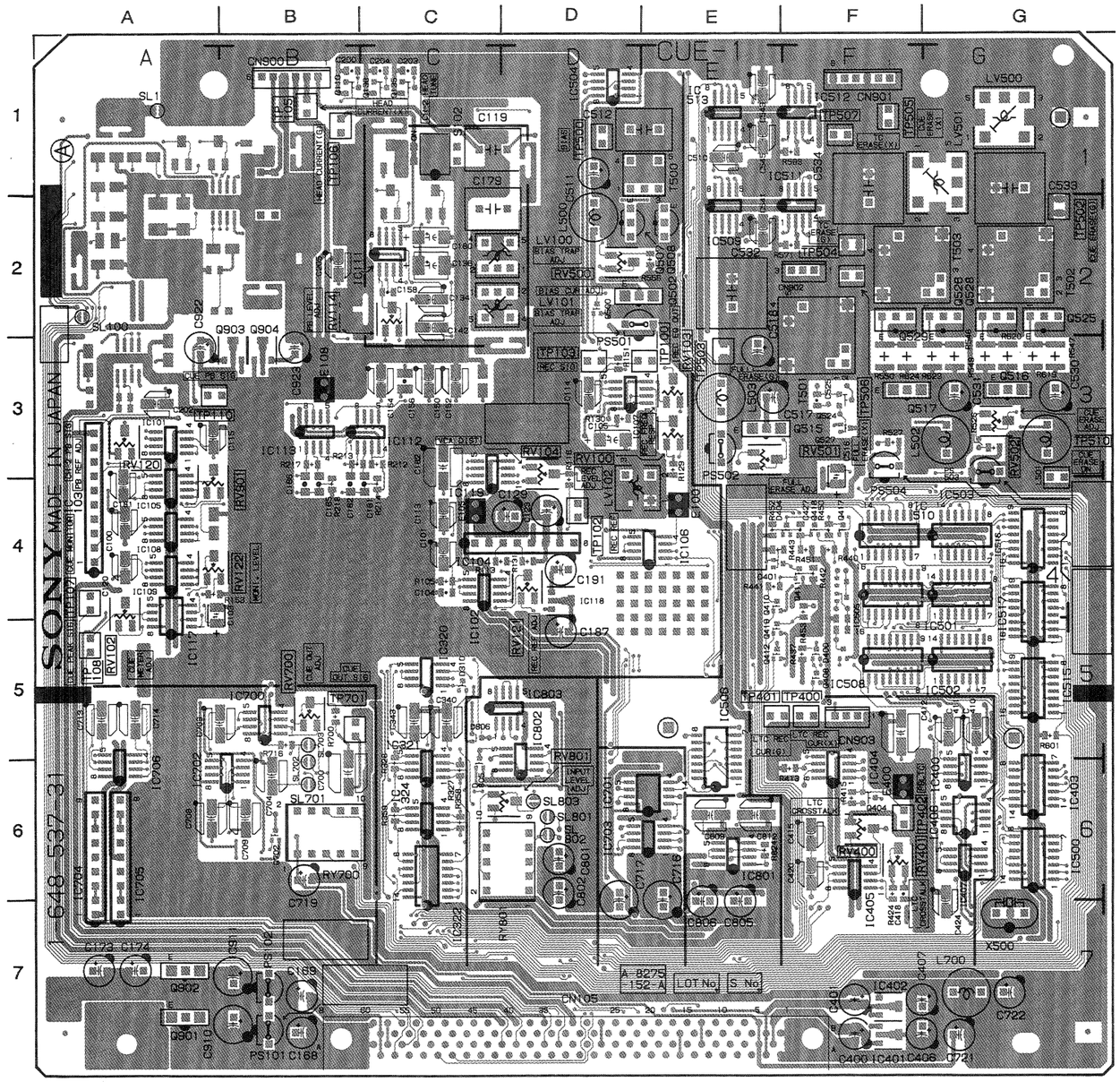


CUE-1 BOARD -B SIDE-

1-648-537-32 (LOT No. 307 - 402)
DVW-500(J) ; CUE-1 MCB
DVW-500(UC) ; CUE-1 MCB
DVW-500P(EK) ; CUE-1P MCB

CUE-1 ; CUE REC/PB and LTC REC/PB circuits, CUE/LTC/FULL erase OSC

(Board's Lot No. 303 through 306)
DVW-500(J)
DVW-500P(EK)

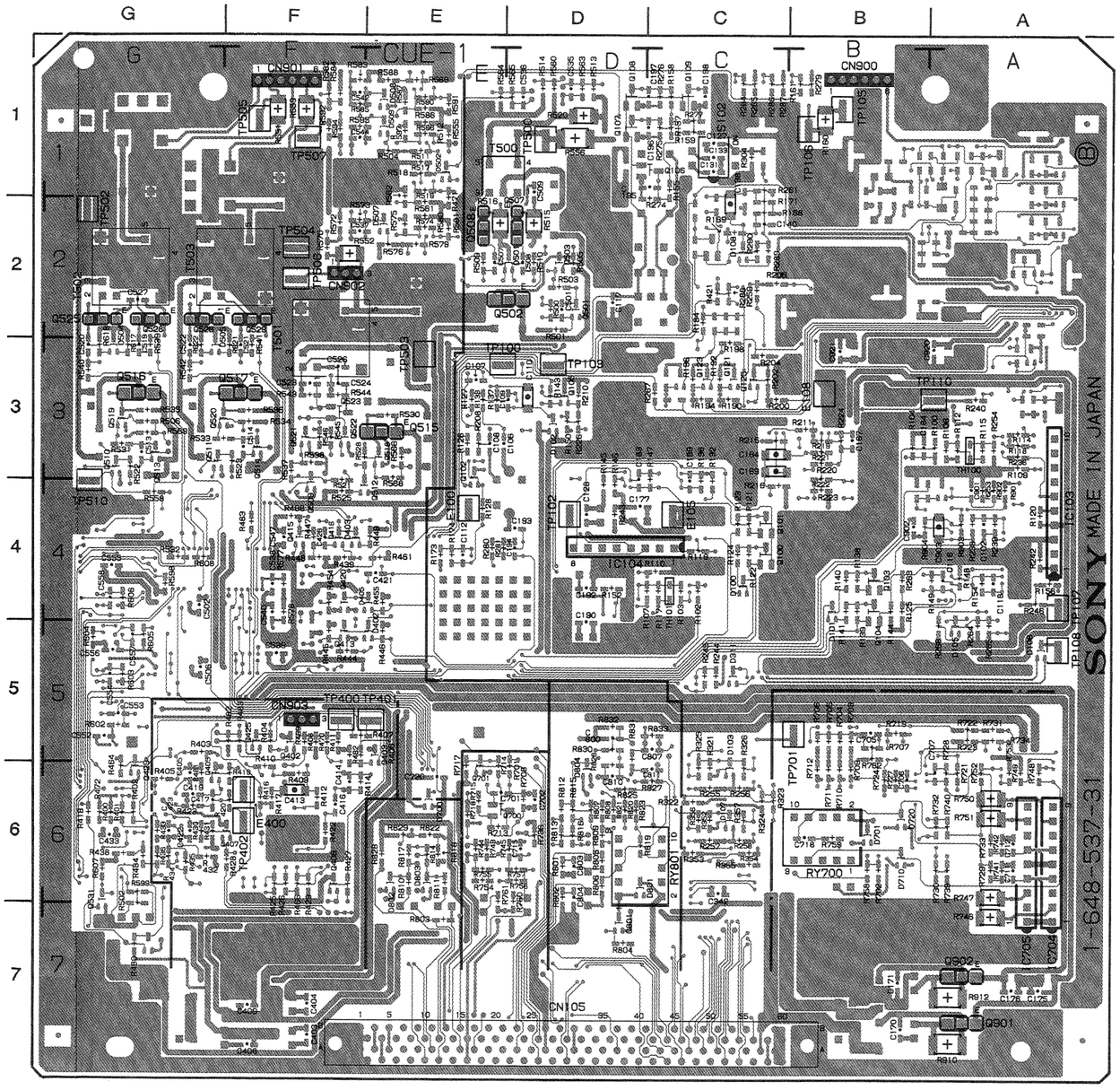


CUE-1(1-648-537-31)

CN105	D-7	IC504	D-1	Q508	E-2	TP107	A-4
CN900	B-1	IC505	F-4	✱Q509	F-4	TP108	A-5
CN901	F-1	IC506	E-6	✱Q510	G-3	TP110	A-3
CN902	F-2	IC508	F-5	✱Q511	F-3	TP400	F-5
CN903	F-5	IC509	E-2	✱Q512	F-4	TP401	E-5
		IC510	F-4	✱Q513	G-3	TP402	F-6
✱D100	C-4	IC511	F-2	✱Q514	F-3	TP500	D-1
✱D101	B-4	IC512	F-1	Q515	E-3	TP502	G-2
✱D102	D-3	IC513	E-1	Q516	G-3	TP503	E-3
✱D103	C-6	IC515	G-5	Q517	F-3	TP504	F-2
✱D105	A-5	IC516	G-4	✱Q518	E-3	TP505	F-1
✱D106	A-5	IC517	G-5	✱Q519	G-3	TP506	F-2
✱D107	C-6	IC700	B-5	✱Q520	F-3	TP507	F-1
✱D108	C-2	IC701	E-6	✱Q521	F-3	TP510	G-4
D310	C-5	IC702	B-6	✱Q522	F-3	TP701	B-5
✱D311	C-5	IC703	E-6	✱Q523	F-3		
D400	F-5	IC704	A-7	Q524	F-3	X500	G-7
D401	E-4	IC705	A-7	Q525	G-2		
✱D402	E-5	IC706	A-6	Q526	G-2		
✱D403	F-4	IC801	E-6	Q527	F-3		
D404	F-4	IC802	D-6	Q528	G-2		
✱D405	E-4	IC803	D-5	Q529	F-2		
✱D501	D-2			✱Q531	G-6		
✱D502	E-1	LV100	D-2	✱Q700	E-6		
✱D504	G-3	LV101	D-2	✱Q701	E-6		
✱D505	F-3	LV102	D-4	Q702	B-6		
✱D507	E-2	LV500	G-1	✱Q801	D-7		
✱D508	E-1	LV501	F-1	Q901	A-7		
✱D509	E-1			Q902	A-7		
✱D700	E-6	PS101	B-7	Q903	B-3		
✱D701	B-6	PS102	B-7	Q904	B-3		
✱D710	B-6	PS501	D-2				
✱D720	B-6	PS502	E-3	RV100	E-3		
✱D801	D-6	PS503	G-3	RV102	A-5		
✱D802	E-6	PS504	F-3	RV103	E-3		
✱D803	E-6			RV104	D-3		
✱D804	D-6	✱Q100	C-4	RV114	C-2		
D805	C-6	✱Q101	C-4	RV120	A-3		
D806	C-5	✱Q102	E-3	RV121	D-4		
		✱Q103	B-4	RV122	A-4		
E100	E-4	✱Q104	B-4	RV400	F-6		
E105	C-4	✱Q105	D-3	RV401	F-6		
E108	B-3	✱Q106	C-1	RV500	D-2		
E400	F-6	✱Q107	D-1	RV501	F-3		
		✱Q108	D-1	RV502	G-3		
IC101	A-3	✱Q109	C-1	RV700	B-5		
IC102	C-4	Q110	B-1	RV801	D-6		
IC103	A-4	✱Q121	C-3	RV901	A-4		
IC104	C-4	✱Q123	C-3				
IC105	A-4	✱Q125	C-3	RY700	B-6		
IC106	E-4	Q135	C-1	RY801	D-6		
IC107	E-3	Q136	C-1				
IC108	A-4	✱Q402	F-5	S102	C-1		
IC109	A-4	✱Q403	E-5				
IC111	C-2	Q404	F-6	SL1	A-1		
IC112	C-3	✱Q405	F-6	SL100	A-2		
IC113	B-3	✱Q406	F-6	SL701	B-6		
IC117	A-5	✱Q407	F-6	SL702	B-6		
IC118	D-4	Q408	F-5	SL703	B-5		
IC119	C-4	Q410	E-4	SL801	D-6		
IC320	C-5	Q411	F-4	SL802	D-6		
IC321	C-6	Q412	E-5	SL803	D-6		
IC322	C-6	✱Q413	F-5				
IC324	C-6	✱Q415	F-4	T500	E-1		
IC400	G-6	✱Q416	F-4	T501	F-2		
IC401	F-7	Q417	F-4	T502	G-2		
IC402	F-7	Q418	F-4	T503	F-2		
IC403	G-6	Q419	E-5				
IC404	F-6	✱Q420	F-4	✱TH100	A-3		
IC405	F-6	✱Q425	F-5	✱TH101	C-4		
IC406	G-6	✱Q429	G-6				
IC407	G-6	Q500	D-2	TP100	E-3		
IC500	G-6	✱Q501	D-2	TP102	D-4		
IC501	G-4	Q502	D-2	TP103	D-3		
IC502	G-5	✱Q503	D-2	TP105	B-1		
IC503	G-4	Q507	D-2	TP106	B-1		

✱: B SIDE

LOT NO. E-7



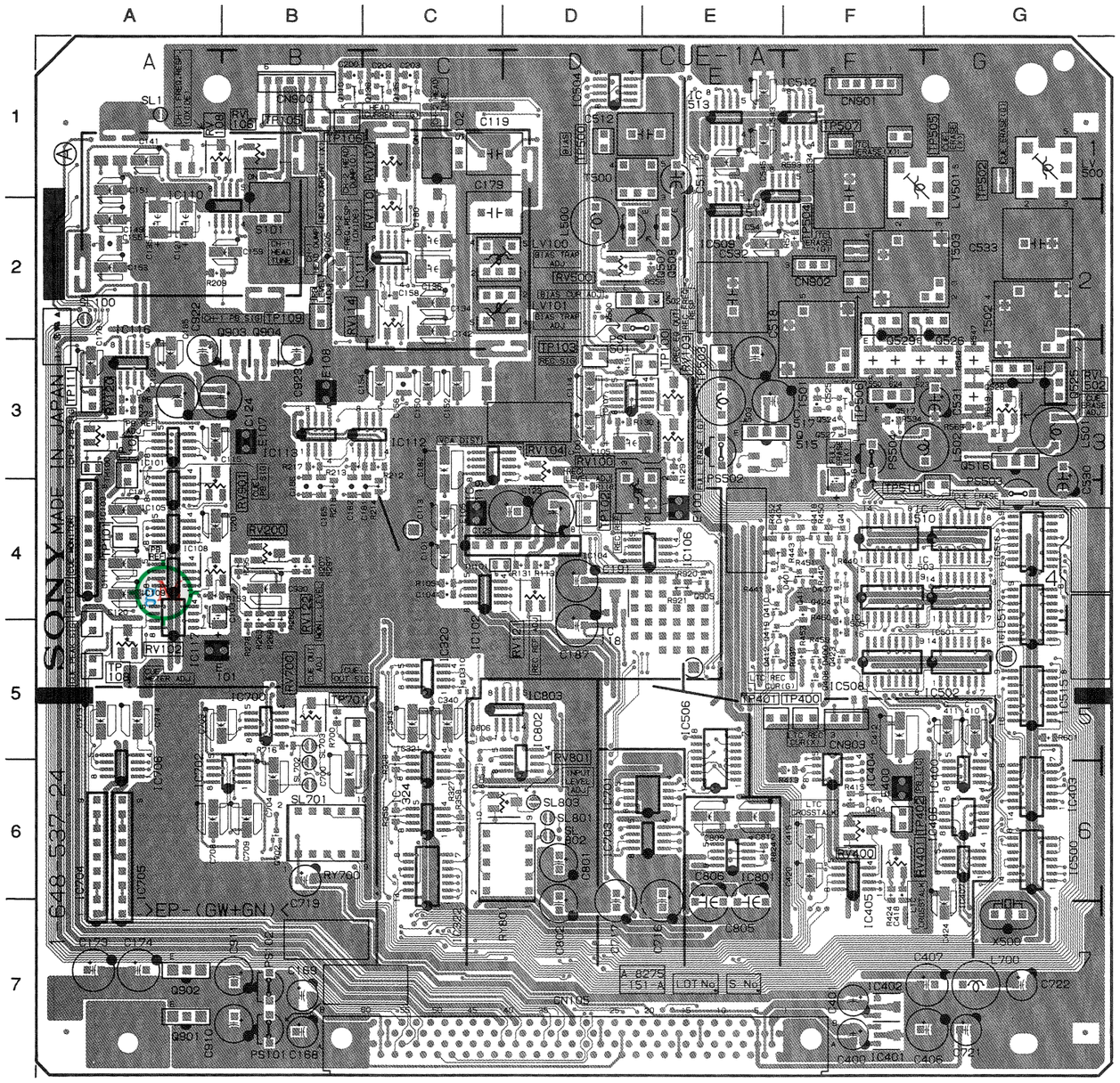
CUE-1 BOARD -B SIDE-

1-648-537-31 (LOT No. 303 - 306)

DVW-500(J) ; CUE-1 MCB
DVW-500(UC) ; CUE-1 MCB
DVW-500P(EK) ; CUE-1P MCB

CUE-1A ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for NTSC

(Board's Lot No. 511 and higher)
DVW-A500(J)
DVW-A500(UC)

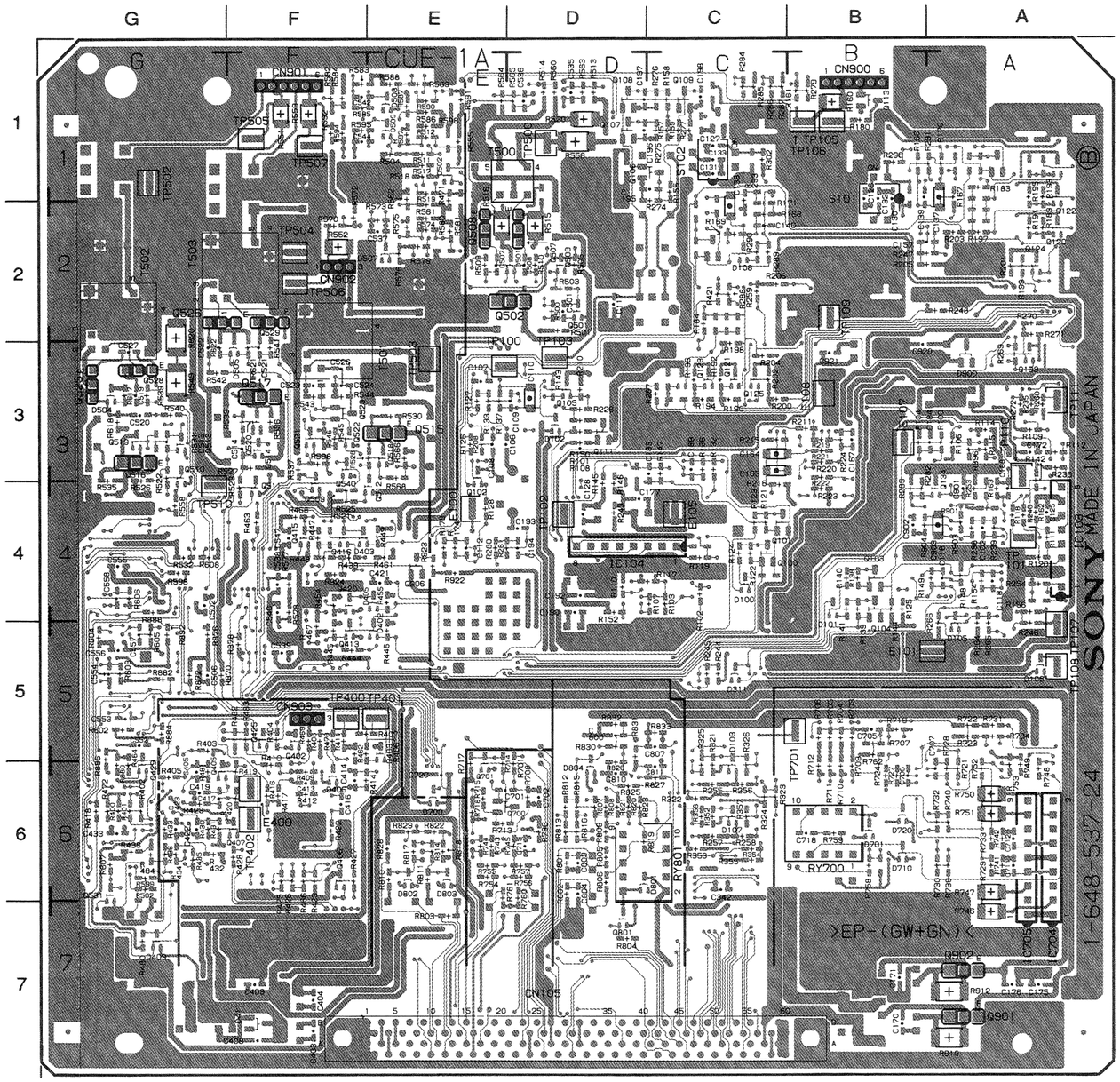


CUE-1A(1-648-537-24)

CN105	D-7	IC404	F-6	Q410	E-4	RY801	D-6
CN900	B-1	IC405	F-6	Q411	F-4		
CN901	F-1	IC406	G-6	Q412	E-5	S101	B-1
CN902	F-2	IC407	G-6	✱Q413	F-5	S102	C-1
CN903	F-5	IC500	G-6	✱Q415	F-4		
		IC501	G-4	✱Q416	F-4	SL1	A-1
✱D100	C-4	IC502	G-5	Q417	F-4	SL100	A-2
✱D101	B-4	IC503	G-4	Q418	F-4	SL701	B-6
✱D102	D-3	IC504	D-1	Q419	E-5	SL702	B-6
✱D103	C-6	IC505	F-4	✱Q420	F-4	SL703	B-5
✱D105	A-5	IC506	E-6	Q423	F-5	SL801	D-6
✱D106	A-5	IC508	F-5	Q424	F-4	SL802	D-6
✱D107	C-6	IC509	E-2	✱Q425	F-5	SL803	D-6
✱D108	C-2	IC510	F-4	✱Q429	G-6		
D310	C-5	IC511	F-2	Q500	D-2	T500	E-1
✱D311	C-5	IC512	F-1	✱Q501	D-2	T501	F-3
D400	F-5	IC513	E-1	Q502	D-2	T502	G-2
D401	E-4	IC515	G-5	✱Q503	D-2	T503	F-2
✱D402	E-5	IC516	G-4	Q507	D-2		
✱D403	F-4	IC517	G-5	Q508	E-2	TH100	A-3
D404	F-4	IC700	B-5	✱Q509	F-4	TH101	C-4
✱D405	E-4	IC701	E-6	✱Q510	G-3		
✱D406	F-6	IC702	B-6	✱Q511	F-3	TP100	E-3
D407	F-4	IC703	E-6	✱Q512	F-4	TP101	A-4
✱D411	F-7	IC704	A-7	✱Q513	G-3	TP102	D-4
✱D501	D-2	IC705	A-7	✱Q514	F-3	TP103	D-3
✱D502	E-1	IC706	A-6	Q515	E-3	TP105	B-1
✱D504	G-3	IC801	E-6	Q516	G-3	TP106	B-1
✱D505	F-3	IC802	D-6	Q517	F-3	TP107	A-4
✱D507	E-2	IC803	D-5	✱Q518	E-3	TP108	A-5
✱D508	E-1			✱Q519	G-3	TP109	B-2
✱D509	E-1	LV100	D-2	✱Q520	F-3	TP110	A-3
✱D700	E-6	LV101	D-2	✱Q521	F-3	TP111	A-3
✱D701	B-6	LV102	D-4	✱Q522	F-3	TP400	F-5
✱D710	B-6	LV500	G-1	✱Q523	F-3	TP401	E-5
✱D720	B-6	LV501	F-1	Q524	F-3	TP402	F-6
✱D801	D-6			Q525	G-2	TP500	D-1
✱D802	E-6	PS101	B-7	Q526	G-2	TP502	G-2
✱D803	E-6	PS102	B-7	Q527	F-3	TP503	E-3
✱D804	D-6	PS501	D-2	Q528	G-2	TP504	F-2
D805	C-6	PS502	E-3	Q529	G-2	TP505	F-1
D806	C-5	PS503	G-3	✱Q531	G-6	TP506	F-2
✱D900	A-3	PS504	F-3	✱Q540	F-3	TP507	F-1
				✱Q700	E-6	TP510	G-4
E100	E-4	✱Q100	C-4	✱Q701	E-6	TP701	B-5
E101	B-5	✱Q101	C-4	Q702	B-6		
E105	C-4	✱Q102	E-3	✱Q801	D-7	X500	G-7
E107	A-2	✱Q103	B-4	Q901	A-7		
E108	B-3	✱Q104	B-4	Q902	A-7		
E400	F-6	✱Q105	D-3	Q903	B-3		
		✱Q106	C-1	Q904	B-3		
IC101	A-3	✱Q107	D-1	Q905	E-4		
IC102	C-4	✱Q108	D-1	✱Q906	E-4		
IC103	A-4	✱Q109	C-1				
IC104	C-4	Q110	B-1	RV100	E-3		
IC105	A-4	✱Q111	D-3	RV102	A-4		
IC106	E-4	✱Q112	C-1	RV103	E-3		
IC107	E-3	✱Q113	B-1	RV104	D-3		
IC108	A-4	✱Q120	A-2	RV106	B-1		
IC109	A-4	✱Q121	C-3	RV107	C-1		
IC110	A-2	✱Q122	A-1	RV108	A-1		
IC111	C-2	✱Q123	C-3	RV110	C-2		
IC112	C-3	✱Q124	A-2	RV114	C-2		
IC113	B-3	✱Q125	C-3	RV120	A-3		
IC116	A-3	✱Q133	A-3	RV121	D-4		
IC117	A-5	✱Q134	A-4	RV122	A-4		
IC118	D-4	Q135	C-1	RV200	B-4		
IC119	D-4	Q136	C-1	RV400	F-6		
IC320	C-5	✱Q402	F-5	RV401	F-6		
IC321	C-6	✱Q403	E-5	RV500	D-2		
IC322	C-6	Q404	F-6	RV502	G-3		
IC324	C-6	✱Q405	F-6	RV700	B-5		
IC400	G-6	✱Q406	F-6	RV801	D-6		
IC401	F-7	✱Q407	F-6	RV901	A-4		
IC402	F-7	Q408	F-5				
IC403	G-6	✱Q409	G-7	RY700	B-6		

✱ : B SIDE

LOT NO. E-7



CUE-1A BOARD -B SIDE-

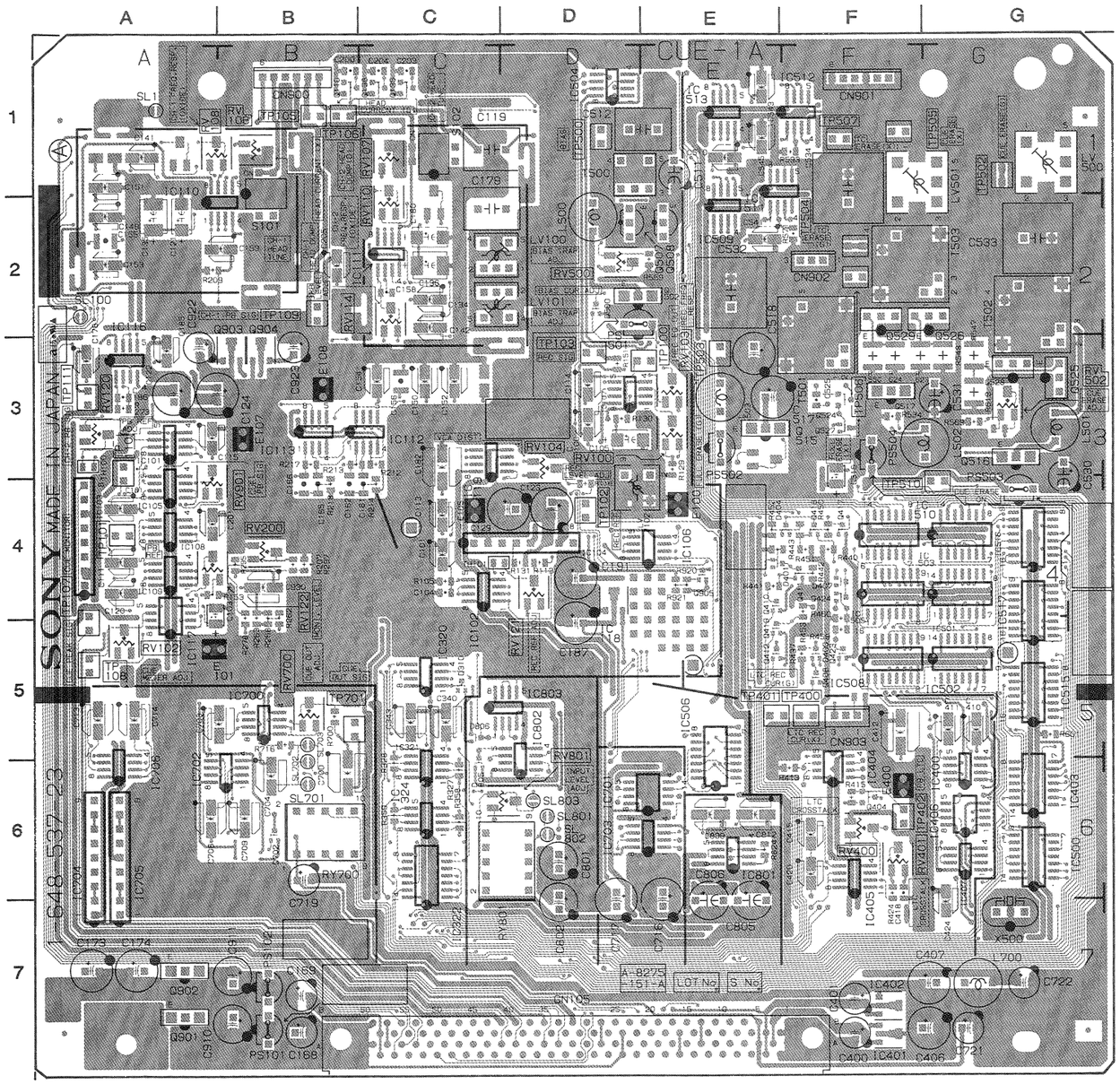
1-648-537-24 (LOT No. 511 -)

DVW-A500(J) ; CUE-1A MCB

DVW-A500(UC) ; CUE-1A MCB

CUE-1A ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for NTSC

(Board's Lot No. 403 through 509)
DVW-A500(J)
DVW-A500(UC)



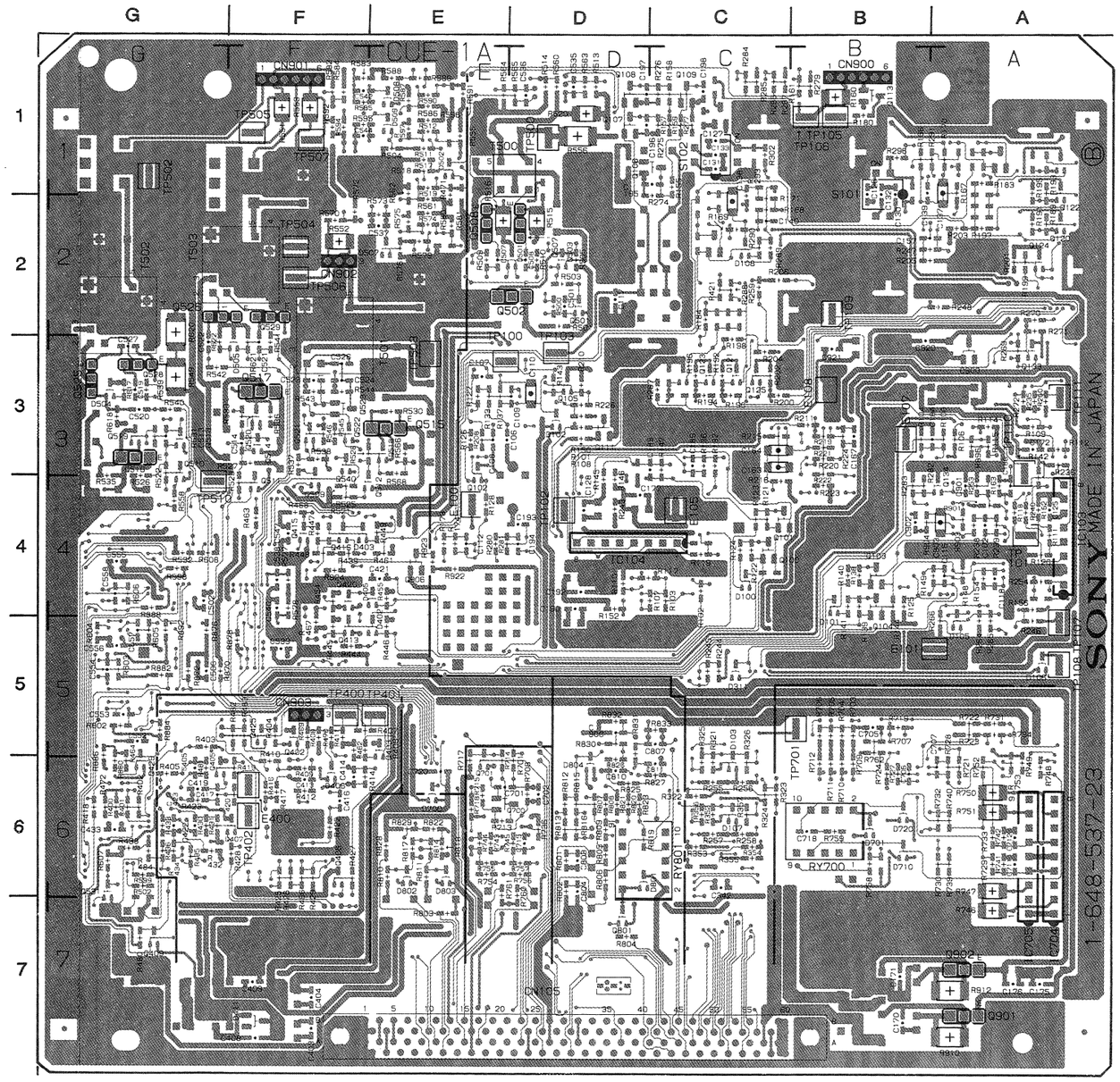
CUE-1A BOARD -A SIDE-
1-648-537-23 (LOT No. 403 - 509)
DVW-A500(J) ; CUE-1A MCB
DVW-A500(UC) ; CUE-1A MCB

CUE-1A(1-648-537-23)

CN105	D-7	IC404	F-6	Q410	E-4	RY801	D-6
CN900	B-1	IC405	F-6	Q411	F-4		
CN901	F-1	IC406	G-6	Q412	E-5	S101	B-1
CN902	F-2	IC407	G-6	✱Q413	F-5	S102	C-1
CN903	F-5	IC500	G-6	✱Q415	F-4		
		IC501	G-4	✱Q416	F-4	SL1	A-1
✱D100	C-4	IC502	G-5	Q417	F-4	SL100	A-2
✱D101	B-4	IC503	G-4	Q418	F-4	SL701	B-6
✱D102	D-3	IC504	D-1	Q419	E-5	SL702	B-6
✱D103	C-6	IC505	F-4	✱Q420	F-4	SL703	B-5
✱D105	A-5	IC506	E-6	Q423	F-5	SL801	D-6
✱D106	A-5	IC508	F-5	Q424	F-4	SL802	D-6
✱D107	C-6	IC509	E-2	✱Q425	F-5	SL803	D-6
✱D108	C-2	IC510	F-4	✱Q429	G-6		
D310	C-5	IC511	F-2	Q500	D-2	T500	E-1
✱D311	C-5	IC512	F-1	✱Q501	D-2	T501	F-3
D400	F-5	IC513	E-1	Q502	D-2	T502	G-2
D401	E-4	IC515	G-5	✱Q503	D-2	T503	F-2
✱D402	E-5	IC516	G-4	Q507	D-2		
✱D403	F-4	IC517	G-5	Q508	E-2	TH100	A-3
D404	F-4	IC700	B-5	✱Q509	F-4	TH101	C-4
✱D405	E-4	IC701	E-6	✱Q510	G-3		
✱D406	F-6	IC702	B-6	✱Q511	F-3	TP100	E-3
D407	F-4	IC703	E-6	✱Q512	F-4	TP101	A-4
✱D411	F-7	IC704	A-7	✱Q513	G-3	TP102	D-4
✱D501	D-2	IC705	A-7	✱Q514	F-3	TP103	D-3
✱D502	E-1	IC706	A-6	Q515	E-3	TP105	B-1
✱D504	G-3	IC801	E-6	Q516	G-3	TP106	B-1
✱D505	F-3	IC802	D-6	Q517	F-3	TP107	A-4
✱D507	E-2	IC803	D-5	✱Q518	E-3	TP108	A-5
✱D508	E-1			✱Q519	G-3	TP109	B-2
✱D509	E-1	LV100	D-2	✱Q520	F-3	TP110	A-3
✱D700	E-6	LV101	D-2	✱Q521	F-3	TP111	A-3
✱D701	B-6	LV102	D-4	✱Q522	F-3	TP400	F-5
✱D710	B-6	LV500	G-1	✱Q523	F-3	TP401	E-5
✱D720	B-6	LV501	F-1	Q524	F-3	TP402	F-6
✱D801	D-6			Q525	G-2	TP500	D-1
✱D802	E-6	PS101	B-7	Q526	G-2	TP502	G-2
✱D803	E-6	PS102	B-7	Q527	F-3	TP503	E-3
✱D804	D-6	PS501	D-2	Q528	G-2	TP504	F-2
D805	C-6	PS502	E-3	Q529	G-2	TP505	F-1
D806	C-5	PS503	G-3	✱Q531	G-6	TP506	F-2
✱D900	A-3	PS504	F-3	✱Q540	F-3	TP507	F-1
				✱Q700	E-6	TP510	G-4
E100	E-4	✱Q100	C-4	✱Q701	E-6	TP701	B-5
E101	B-5	✱Q101	C-4	Q702	B-6		
E105	C-4	✱Q102	E-3	✱Q801	D-7	X500	G-7
E107	A-2	✱Q103	B-4	Q901	A-7		
E108	B-3	✱Q104	B-4	Q902	A-7		
E400	F-6	✱Q105	D-3	Q903	B-3		
		✱Q106	C-1	Q904	B-3		
IC101	A-3	✱Q107	D-1	Q905	E-4		
IC102	C-4	✱Q108	D-1	✱Q906	E-4		
IC103	A-4	✱Q109	C-1				
IC104	C-4	Q110	B-1	RV100	E-3		
IC105	A-4	✱Q111	D-3	RV102	A-4		
IC106	E-4	✱Q112	C-1	RV103	E-3		
IC107	E-3	✱Q113	B-1	RV104	D-3		
IC108	A-4	✱Q120	A-2	RV106	B-1		
IC109	A-4	✱Q121	C-3	RV107	C-1		
IC110	A-2	✱Q122	A-1	RV108	A-1		
IC111	C-2	✱Q123	C-3	RV110	C-2		
IC112	C-3	✱Q124	A-2	RV114	C-2		
IC113	B-3	✱Q125	C-3	RV120	A-3		
IC116	A-3	✱Q133	A-3	RV121	D-4		
IC117	A-5	✱Q134	A-4	RV122	A-4		
IC118	D-4	Q135	C-1	RV200	B-4		
IC119	D-4	Q136	C-1	RV400	F-6		
IC320	C-5	✱Q402	F-5	RV401	F-6		
IC321	C-6	✱Q403	E-5	RV500	D-2		
IC322	C-6	Q404	F-6	RV502	G-3		
IC324	C-6	✱Q405	F-6	RV700	B-5		
IC400	G-6	✱Q406	F-6	RV801	D-6		
IC401	F-7	✱Q407	F-6	RV901	A-4		
IC402	F-7	Q408	F-5				
IC403	G-6	✱Q409	G-7	RY700	B-6		

✱ : B SIDE

LOT NO. E-7

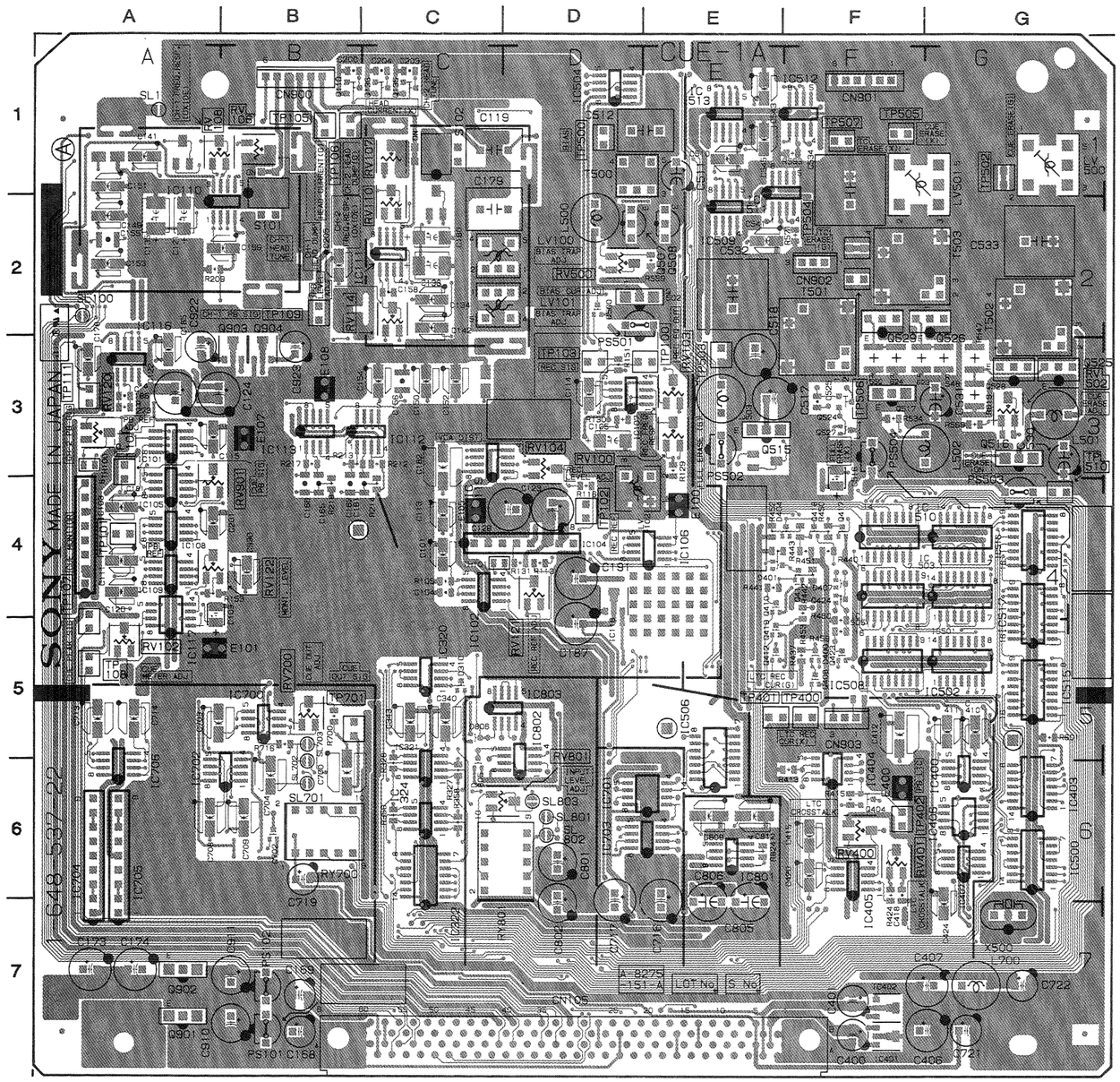


CUE-1A BOARD -B SIDE-

1-648-537-23 (LOT No. 403 - 509)
DVW-A500(J) ; CUE-1A MCB
DVW-A500(UC) ; CUE-1A MCB

CUE-1A ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for NTSC
DUS-194

(Board's Lot No. 307 through 402)
DVW-A500(J)
DVW-A500(UC)

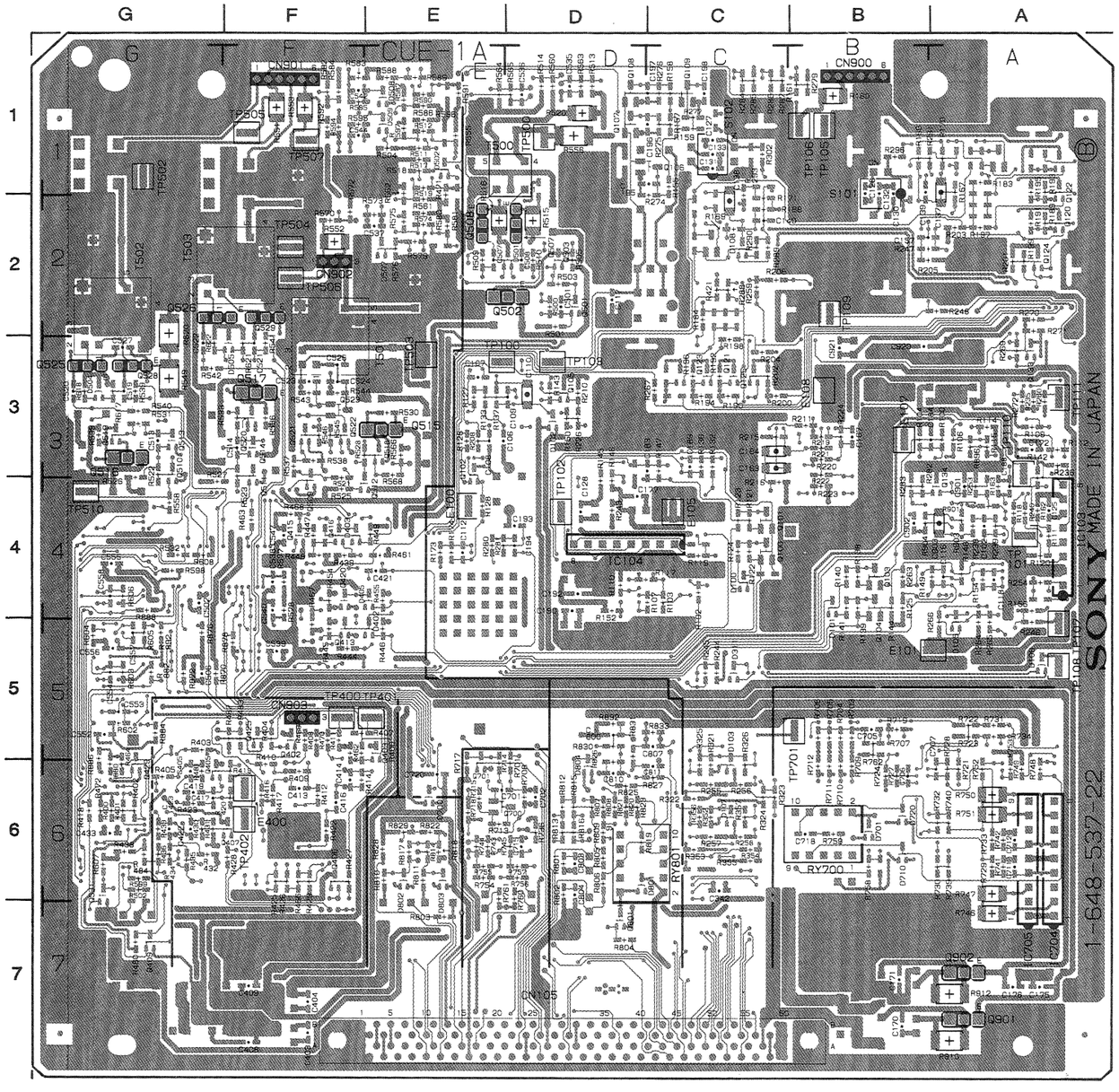


CUE-1A(1-648-537-22)

CN105	D-7	IC407	G-6	Q417	F-4	SL801	D-6
CN900	B-1	IC500	G-6	Q418	F-4	SL802	D-6
CN901	F-1	IC501	G-4	Q419	E-5	SL803	D-6
CN902	F-2	IC502	G-5	✱Q420	F-4		
CN903	F-5	IC503	G-4	Q423	F-5	T500	E-1
		IC504	D-1	Q424	F-4	T501	F-3
✱D100	C-4	IC505	F-4	✱Q425	F-5	T502	G-2
✱D101	B-4	IC506	E-6	✱Q429	G-6	T503	F-2
✱D102	D-3	IC508	F-5	Q500	D-2		
✱D103	C-6	IC509	E-2	✱Q501	D-2	TH100	A-3
✱D105	A-5	IC510	F-4	Q502	D-2	TH101	C-4
✱D106	A-5	IC511	F-2	✱Q503	D-2		
✱D107	C-6	IC512	F-1	Q507	D-2	TP100	E-3
✱D108	C-2	IC513	E-1	Q508	E-2	TP101	A-4
D310	C-5	IC515	G-5	✱Q509	F-4	TP102	D-4
✱D311	C-5	IC516	G-4	✱Q510	G-3	TP103	D-3
D400	F-5	IC517	G-5	✱Q511	F-3	TP105	B-1
D401	E-4	IC700	B-5	✱Q512	F-4	TP106	B-1
✱D402	E-5	IC701	E-6	✱Q513	G-3	TP107	A-4
✱D403	F-4	IC702	B-6	✱Q514	F-3	TP108	A-5
D404	F-4	IC703	E-6	Q515	E-3	TP109	B-2
✱D405	E-4	IC704	A-7	Q516	G-3	TP110	A-3
D407	F-4	IC705	A-7	Q517	F-3	TP111	A-3
✱D501	D-2	IC706	A-6	✱Q518	E-3	TP400	F-5
✱D502	E-1	IC801	E-6	✱Q519	G-3	TP401	E-5
✱D504	G-3	IC802	D-6	✱Q520	F-3	TP402	F-6
✱D505	F-3	IC803	D-5	✱Q521	F-3	TP500	D-1
✱D507	E-2			✱Q522	F-3	TP502	G-2
✱D508	E-1	LV100	D-2	✱Q523	F-3	TP503	E-3
✱D509	E-1	LV101	D-2	Q524	F-3	TP504	F-2
✱D700	E-6	LV102	D-4	Q525	G-2	TP505	F-1
✱D701	B-6	LV500	G-1	Q526	G-2	TP506	F-2
✱D710	B-6	LV501	F-1	Q527	F-3	TP507	F-1
✱D720	B-6			Q528	G-2	TP510	G-4
✱D801	D-6	PS101	B-7	Q529	G-2	TP701	B-5
✱D802	E-6	PS102	B-7	✱Q531	G-6		
✱D803	E-6	PS501	D-2	✱Q700	E-6	X500	G-7
✱D804	D-6	PS502	E-3	✱Q701	E-6		
D805	C-6	PS503	G-3	Q702	B-6		
D806	C-5	PS504	F-3	✱Q801	D-7		
				Q901	A-7		
E100	E-4	✱Q100	C-4	Q902	A-7		
E101	B-5	✱Q101	C-4	Q903	B-3		
E105	C-4	✱Q102	E-3	Q904	B-3		
E107	A-2	✱Q103	B-4				
E108	B-3	✱Q104	B-4	RV100	E-3		
E400	F-6	✱Q105	D-3	RV102	A-4		
		✱Q106	C-1	RV103	E-3		
IC101	A-3	✱Q107	D-1	RV104	D-3		
IC102	C-4	✱Q108	D-1	RV106	B-1		
IC103	A-4	✱Q109	C-1	RV107	C-1		
IC104	C-4	Q110	B-1	RV108	A-1		
IC105	A-4	✱Q120	A-2	RV110	C-2		
IC106	E-4	✱Q121	C-3	RV114	C-2		
IC107	E-3	✱Q122	A-1	RV120	A-3		
IC108	A-4	✱Q123	C-3	RV121	D-4		
IC109	A-4	✱Q124	A-2	RV122	A-4		
IC110	A-2	✱Q125	C-3	RV400	F-6		
IC111	C-2	✱Q133	A-3	RV401	F-6		
IC112	C-3	✱Q134	A-4	RV500	D-2		
IC113	B-3	Q135	C-1	RV502	G-3		
IC116	A-3	Q136	C-1	RV700	B-5		
IC117	A-5	✱Q402	F-5	RV801	D-6		
IC118	D-4	✱Q403	E-5	RV901	A-4		
IC119	D-4	Q404	F-6				
IC320	C-5	✱Q405	F-6	RY700	B-6		
IC321	C-6	✱Q406	F-6	RY801	D-6		
IC322	C-6	✱Q407	F-6				
IC324	C-6	Q408	F-5	S101	B-1		
IC400	G-6	✱Q409	G-7	S102	C-1		
IC401	F-7	Q410	E-4				
IC402	F-7	Q411	F-4	SL1	A-1		
IC403	G-6	Q412	E-5	SL100	A-2		
IC404	F-6	✱Q413	F-5	SL701	B-6		
IC405	F-6	✱Q415	F-4	SL702	B-6		
IC406	G-6	✱Q416	F-4	SL703	B-5		

✱ : B SIDE

LOT NO. E-7

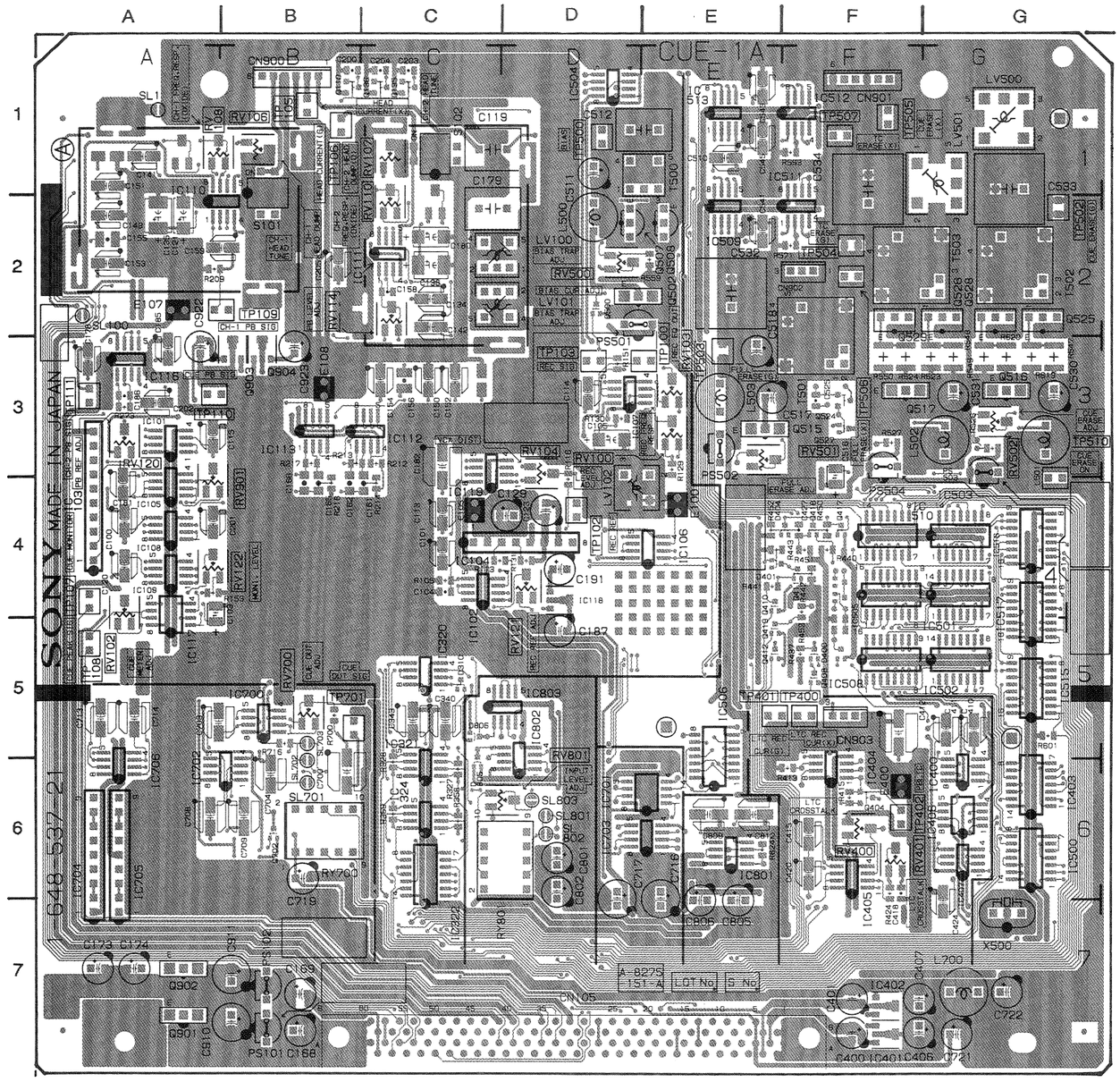


CUE-1A BOARD -B SIDE-

1-648-537-22 (LOT No. 307 - 402)
DVW-A500(J) ; CUE-1A MCB
DVW-A500(UC) ; CUE-1A MCB

CUE-1A ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for NTSC
DUS-723

(Board's Lot No. 303 through 306)
DVW-A500(J)
DVW-A500(UC)

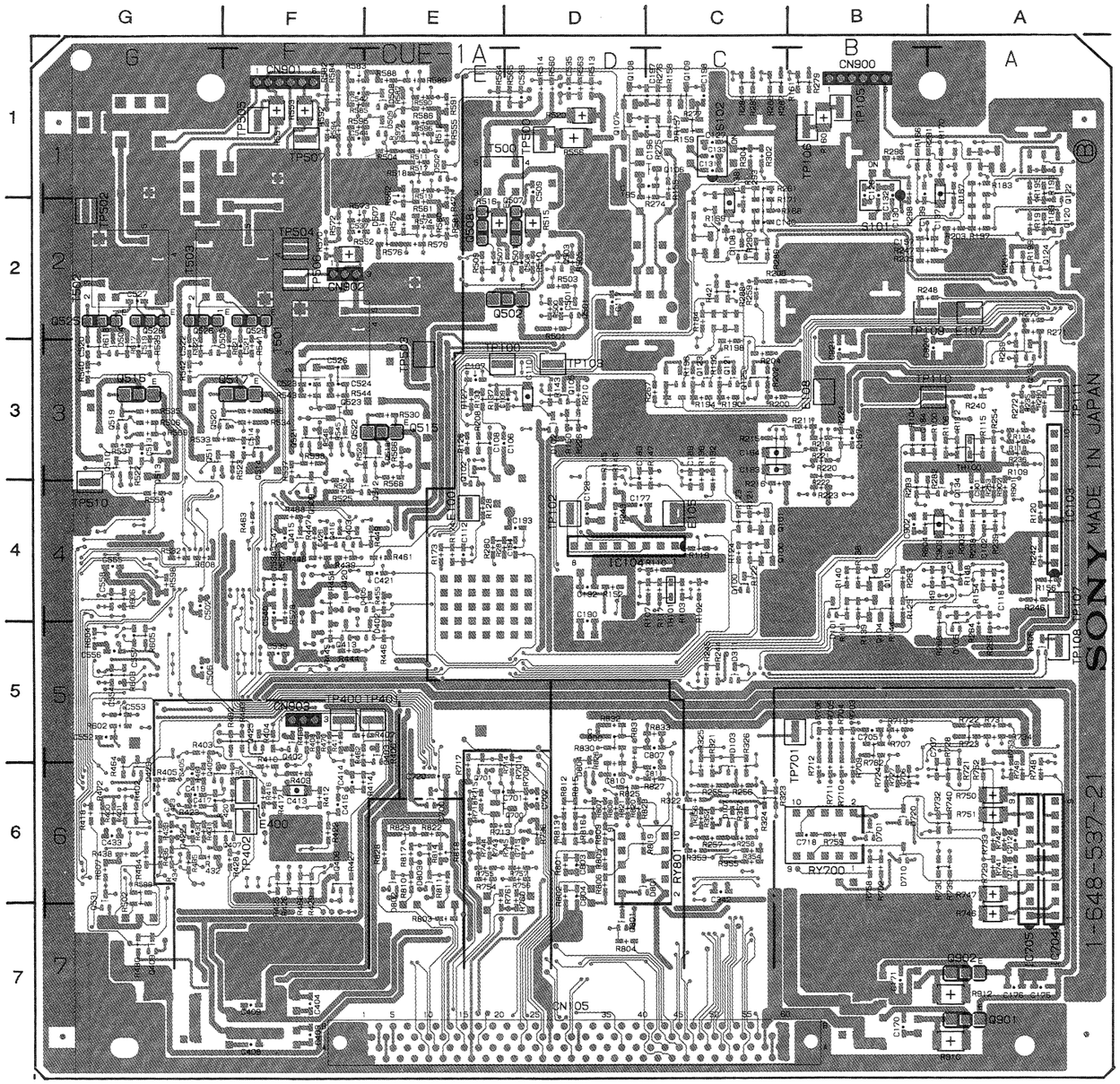


CUE-1A(1-648-537-21)

CN105	D-7	IC501	G-4	Q419	E-5	T500	E-1
CN900	B-1	IC502	G-5	✱Q420	F-4	T501	F-3
CN901	F-1	IC503	G-4	✱Q425	F-5	T502	G-2
CN902	F-2	IC504	D-1	✱Q429	G-6	T503	F-2
CN903	F-5	IC505	F-4	Q500	D-2		
		IC506	E-6	✱Q501	D-2	✱TH100	A-3
✱D100	C-4	IC508	F-5	Q502	D-2	✱TH101	C-4
✱D101	B-4	IC509	E-2	✱Q503	D-2		
✱D102	D-3	IC510	F-4	Q507	D-2	TP100	E-3
✱D103	C-6	IC511	F-2	Q508	E-2	TP102	D-4
✱D105	A-5	IC512	F-1	✱Q509	F-4	TP103	D-3
✱D106	A-5	IC513	E-1	✱Q510	G-3	TP105	B-1
✱D107	C-6	IC515	G-5	✱Q511	F-3	TP106	B-1
✱D108	C-2	IC516	G-4	✱Q512	F-4	TP107	A-4
D310	C-5	IC517	G-5	✱Q513	G-3	TP108	A-5
✱D311	C-5	IC700	B-5	✱Q514	F-3	TP109	B-2
D400	F-5	IC701	E-6	Q515	E-3	TP110	A-3
D401	E-4	IC702	B-6	Q516	G-3	TP111	A-3
✱D402	E-5	IC703	E-6	Q517	F-3	TP400	F-5
✱D403	F-4	IC704	A-7	✱Q518	E-3	TP401	E-5
D404	F-4	IC705	A-7	✱Q519	G-3	TP402	F-6
✱D405	E-4	IC706	A-6	✱Q520	F-3	TP500	D-1
✱D501	D-2	IC801	E-6	✱Q521	F-3	TP502	G-2
✱D502	E-1	IC802	D-6	✱Q522	F-3	TP503	E-3
✱D504	G-3	IC803	D-5	✱Q523	F-3	TP504	F-2
✱D505	F-3			Q524	F-3	TP505	F-1
✱D507	E-2	LV100	D-2	Q525	G-2	TP506	F-2
✱D508	E-1	LV101	D-2	Q526	G-2	TP507	F-1
✱D509	E-1	LV102	D-4	Q527	F-3	TP510	G-4
✱D700	E-6	LV500	G-1	Q528	G-2	TP701	B-5
✱D701	B-6	LV501	F-1	Q529	F-2		
✱D710	B-6			✱Q531	G-6	X500	G-7
✱D720	B-6	PS101	B-7	✱Q700	E-6		
✱D801	D-6	PS102	B-7	✱Q701	E-6		
✱D802	E-6	PS501	D-2	Q702	B-6		
✱D803	E-6	PS502	E-3	✱Q801	D-7		
✱D804	D-6	PS503	G-3	Q901	A-7		
D805	C-6	PS504	F-3	Q902	A-7		
D806	C-5			Q903	B-3		
		✱Q100	C-4	Q904	B-3		
E100	E-4	✱Q101	C-4				
E105	C-4	✱Q102	E-3	RV100	E-3		
E107	A-2	✱Q103	B-4	RV102	A-5		
E108	B-3	✱Q104	B-4	RV103	E-3		
E400	F-6	✱Q105	D-3	RV104	D-3		
		✱Q106	C-1	RV106	B-1		
IC101	A-3	✱Q107	D-1	RV107	C-1		
IC102	C-4	✱Q108	D-1	RV108	A-1		
IC103	A-4	✱Q109	C-1	RV110	C-2		
IC104	C-4	Q110	B-1	RV114	C-2		
IC105	A-4	✱Q120	A-2	RV120	A-3		
IC106	E-4	✱Q121	C-3	RV121	D-4		
IC107	E-3	✱Q122	A-1	RV122	A-4		
IC108	A-4	✱Q123	C-3	RV400	F-6		
IC109	A-4	✱Q124	A-2	RV401	F-6		
IC110	A-2	✱Q125	C-3	RV500	D-2		
IC111	C-2	✱Q133	A-3	RV501	E-3		
IC112	C-3	✱Q134	A-4	RV502	G-3		
IC113	B-3	Q135	C-1	RV700	B-5		
IC116	A-3	Q136	C-1	RV801	D-6		
IC117	A-5	✱Q402	F-5	RV901	A-4		
IC118	D-4	✱Q403	E-5				
IC119	D-4	Q404	F-6	RY700	B-6		
IC320	C-5	✱Q405	F-6	RY801	D-6		
IC321	C-6	✱Q406	F-6				
IC322	C-6	✱Q407	F-6	S101	B-1		
IC324	C-6	Q408	F-5	S102	C-1		
IC400	G-6	✱Q409	G-7				
IC401	F-7	Q410	E-4	SL1	A-1		
IC402	F-7	Q411	F-4	SL100	A-2		
IC403	G-6	Q412	E-5	SL701	B-6		
IC404	F-6	✱Q413	F-5	SL702	B-6		
IC405	F-6	✱Q415	F-4	SL703	B-5		
IC406	G-6	✱Q416	F-4	SL801	D-6		
IC407	G-6	Q417	F-4	SL802	D-6		
IC500	G-6	Q418	F-4	SL803	D-6		

✱: B SIDE

LOT NO. E-7

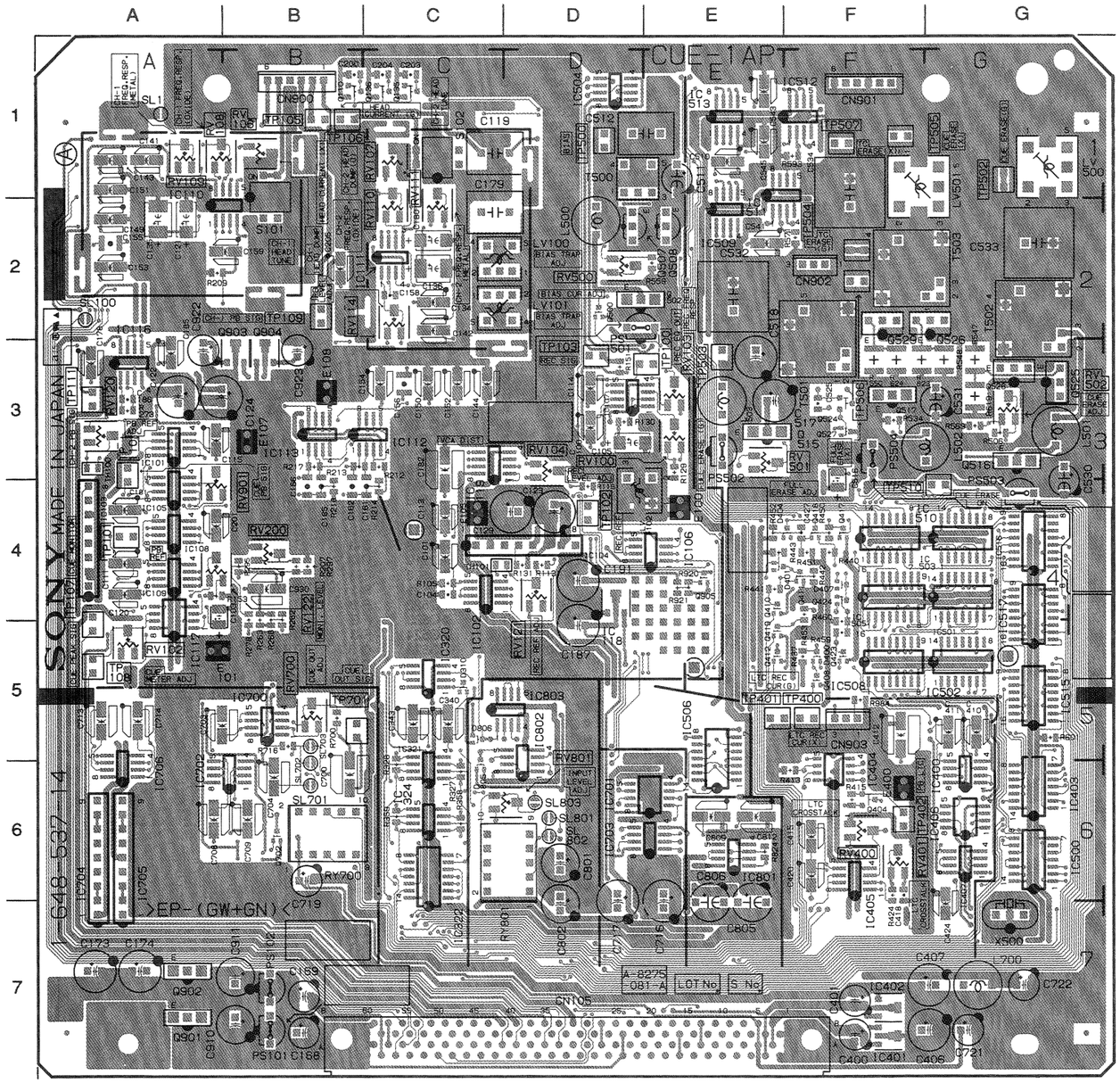


CUE-1A BOARD -B SIDE-

1-648-537-21 (LOT No. 303 - 306)
DVW-A500(J) ; CUE-1A MCB
DVW-A500(UC) ; CUE-1A MCB

CUE-1AP ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for PAL

(Board's Lot No. 509 and higher)
DVW-A500P(EK)
DVW-A500P(UC)



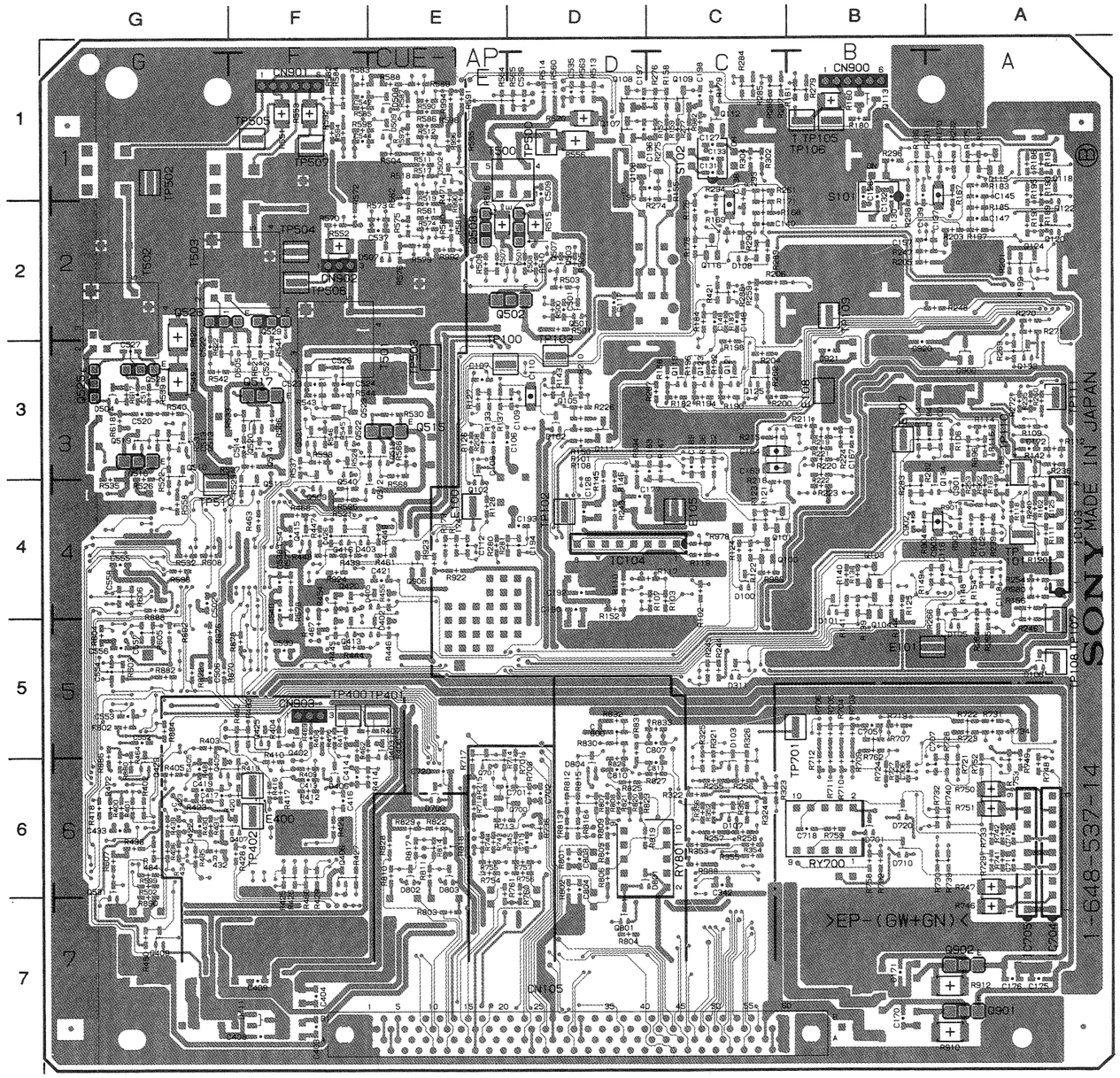
CUE-1AP BOARD -A SIDE-
1-648-537-14 (LOT No. 509 -)
DVW-A500P(EK) ; CUE-1AP MCB
DVW-A500P(UC) ; CUE-1APG MCB

CUE-1AP(1-648-537-14)

CN105	D-7	IC404	F-6	✱Q406	F-6	RV501	E-3
CN900	B-1	IC405	F-6	✱Q407	F-6	RV502	G-3
CN901	F-1	IC406	G-6	Q408	F-5	RV700	B-5
CN902	F-2	IC407	G-6	✱Q409	G-7	RV801	D-6
CN903	F-5	IC500	G-6	Q410	E-4	RV901	A-4
		IC501	G-4	Q411	F-4		
✱D100	C-4	IC502	G-5	Q412	E-5	RY700	B-6
✱D101	B-4	IC503	G-4	✱Q413	F-5	RY801	D-6
✱D102	D-3	IC504	D-1	✱Q415	F-4		
✱D103	C-6	IC505	F-4	✱Q416	F-4	S101	B-1
✱D105	A-5	IC506	E-6	Q417	F-4	S102	C-1
✱D106	A-5	IC508	F-5	Q418	F-4		
✱D107	C-6	IC509	E-2	Q419	E-5	SL1	A-1
✱D108	C-2	IC510	F-4	✱Q420	F-4	SL100	A-2
D310	C-5	IC511	F-2	Q423	F-5	SL701	B-6
✱D311	C-5	IC512	F-1	Q424	F-4	SL702	B-6
D400	F-5	IC513	E-1	✱Q425	F-5	SL703	B-5
D401	E-4	IC515	G-5	✱Q429	G-6	SL801	D-6
✱D402	E-5	IC516	G-4	Q500	D-2	SL802	D-6
✱D403	F-4	IC517	G-5	✱Q501	D-2	SL803	D-6
D404	F-4	IC700	B-5	Q502	D-2		
✱D405	E-4	IC701	E-6	✱Q503	D-2	T500	D-1
✱D406	F-6	IC702	B-6	Q507	D-2	T501	F-3
D407	F-4	IC703	E-6	Q508	E-2	T502	G-2
✱D411	F-7	IC704	A-7	✱Q509	F-4	T503	F-2
✱D501	D-2	IC705	A-7	✱Q510	G-3		
✱D502	E-1	IC706	A-6	✱Q511	F-3	TH100	A-3
✱D504	G-3	IC801	E-6	✱Q512	F-4	TH101	C-4
✱D505	F-3	IC802	D-6	✱Q513	G-3		
✱D507	E-2	IC803	D-5	✱Q514	F-3	TP100	E-3
✱D508	E-1			Q515	E-3	TP101	A-3
✱D509	E-1	LV100	D-2	Q516	G-3	TP102	D-4
✱D700	E-6	LV101	D-2	Q517	F-3	TP103	D-3
✱D701	B-6	LV102	D-4	✱Q518	E-3	TP105	B-1
✱D710	B-6	LV500	G-1	✱Q519	G-3	TP106	B-1
✱D720	B-6	LV501	F-1	✱Q520	F-3	TP107	A-4
✱D801	D-6			✱Q521	F-3	TP108	A-5
✱D802	E-6	PS101	B-7	✱Q522	F-3	TP109	B-2
✱D803	E-6	PS102	B-7	✱Q523	F-3	TP110	A-3
✱D804	D-6	PS501	D-2	Q524	F-3	TP111	A-3
D805	C-6	PS502	E-3	Q525	G-3	TP400	F-5
D806	C-5	PS503	G-3	Q526	G-2	TP401	E-5
✱D900	A-3	PS504	F-3	Q527	F-3	TP402	F-6
				Q528	G-3	TP500	D-1
E100	E-4	✱Q100	C-4	Q529	F-2	TP502	G-1
E101	B-5	✱Q101	C-4	✱Q531	G-6	TP503	E-3
E105	C-4	✱Q102	E-3	✱Q540	F-3	TP504	F-2
E107	B-3	✱Q103	B-4	✱Q700	E-6	TP505	F-1
E108	B-3	✱Q104	B-4	✱Q701	E-6	TP506	F-2
E400	F-6	✱Q105	D-3	Q702	B-6	TP507	F-1
		✱Q106	C-1	✱Q801	D-7	TP510	G-4
IC101	A-3	✱Q107	D-1	Q901	A-7	TP701	B-5
IC102	C-4	✱Q108	D-1	Q902	A-7		
IC103	A-4	✱Q109	C-1	Q903	B-3	X500	G-7
IC104	C-4	Q110	B-1	Q904	B-3		
IC105	A-4	✱Q111	D-3	Q905	E-4		
IC106	E-4	✱Q112	C-1	✱Q906	E-4		
IC107	E-3	✱Q113	B-1				
IC108	A-4	✱Q115	A-1	RV100	E-3		
IC109	A-4	✱Q116	C-2	RV102	A-5		
IC110	A-2	✱Q118	A-1	RV103	E-3		
IC111	C-2	✱Q119	C-3	RV104	D-3		
IC112	C-3	✱Q120	A-2	RV106	B-1		
IC113	B-3	✱Q121	C-3	RV107	C-1		
IC116	A-3	✱Q122	A-1	RV108	A-1		
IC117	A-5	✱Q123	C-3	RV109	A-1		
IC118	D-4	✱Q124	A-2	RV110	C-2		
IC119	C-4	✱Q125	C-3	RV111	C-2		
IC320	C-5	✱Q133	A-3	RV114	C-2		
IC321	C-6	✱Q134	A-4	RV120	A-3		
IC322	C-6	Q135	C-1	RV121	D-4		
IC324	C-6	Q136	C-1	RV122	A-4		
IC400	G-6	✱Q402	F-5	RV200	B-4		
IC401	F-7	✱Q403	E-5	RV400	F-6		
IC402	F-7	Q404	F-6	RV401	F-6		
IC403	G-6	✱Q405	F-6	RV500	D-2		

✱ : B SIDE

LOT NO. E-7



CUE-1AP BOARD -B SIDE-

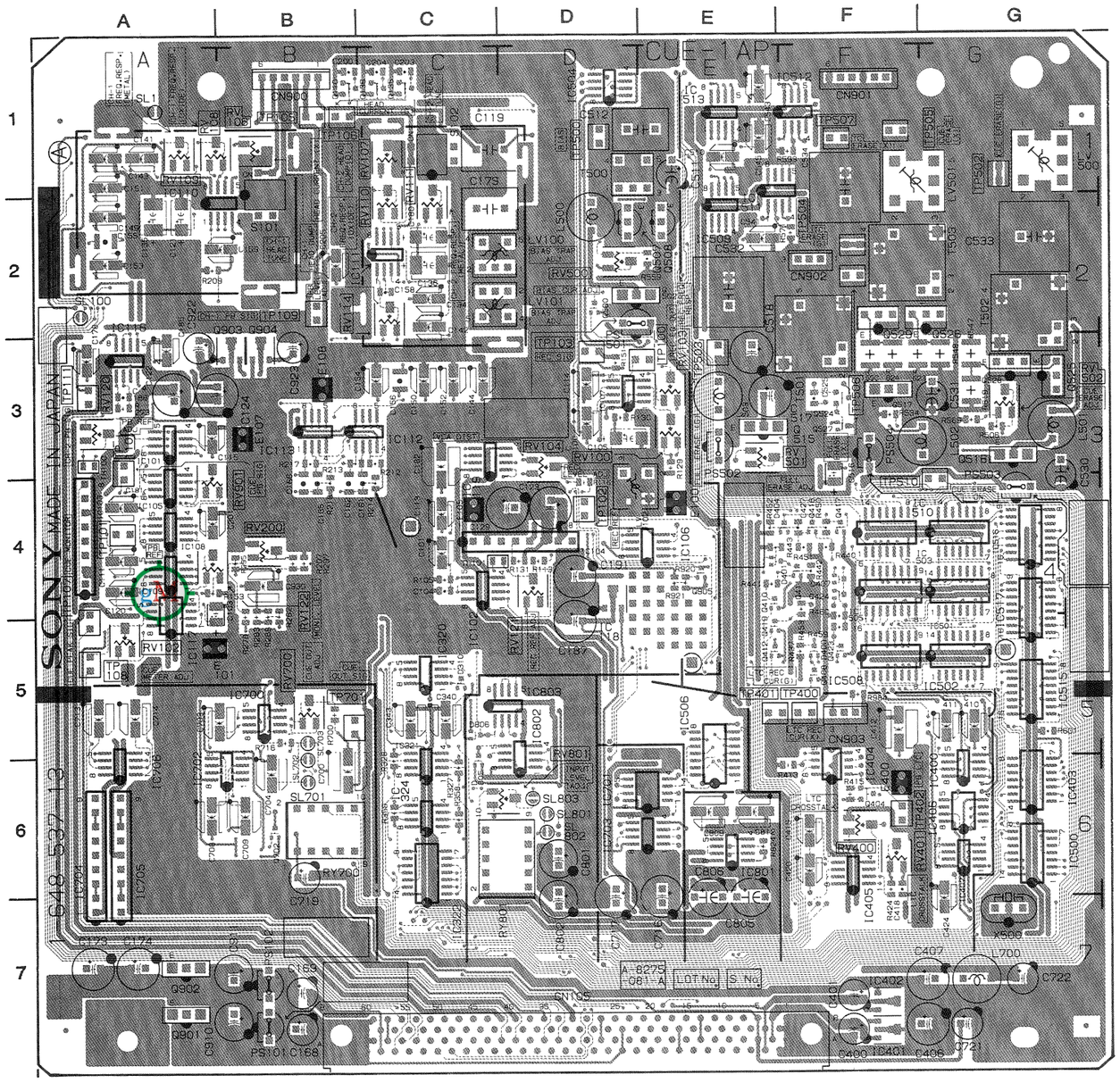
1-648-537-14 (LOT No. 509 -)

DVW-A500P(EK) ; CUE-1AP MCB

DVW-A500P(UC) ; CUE-1APG MCB

CUE-1AP ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for PAL

(Board's Lot No. 403 through 508)
DVW-A500P(EK)
DVW-A500P(UC)



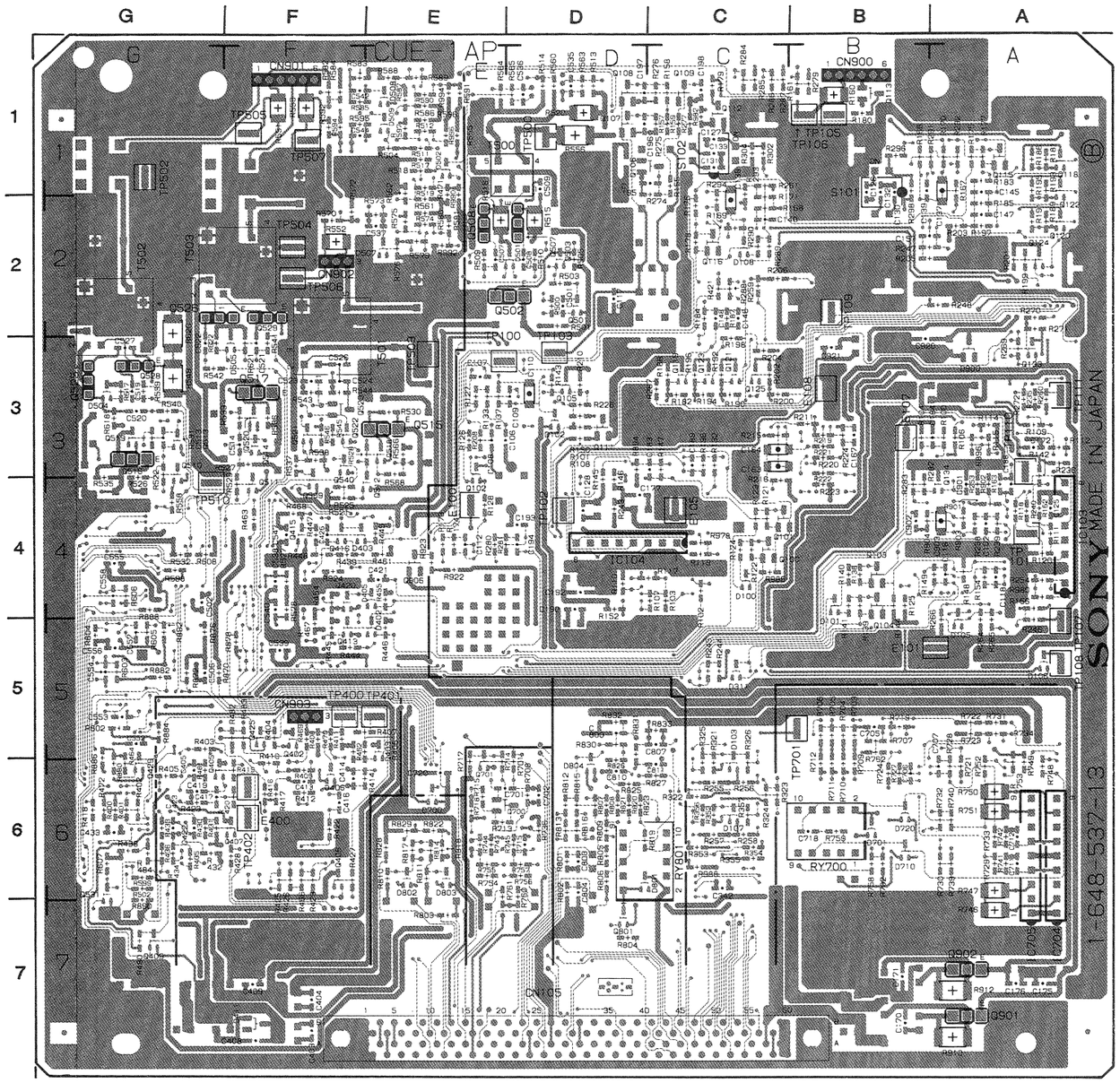
CUE-1AP BOARD -A SIDE-
1-648-537-13 (LOT No. 403 - 508)
DVW-A500P(EK) ; CUE-1AP MCB
DVW-A500P(UC) ; CUE-1APG MCB

CUE-1AP(1-648-537-13)

CN105	D-7	IC404	F-6	✱Q406	F-6	RV501	E-3
CN900	B-1	IC405	F-6	✱Q407	F-6	RV502	G-3
CN901	F-1	IC406	G-6	Q408	F-5	RV700	B-5
CN902	F-2	IC407	G-6	✱Q409	G-7	RV801	D-6
CN903	F-5	IC500	G-6	Q410	E-4	RV901	A-4
		IC501	G-4	Q411	F-4		
✱D100	C-4	IC502	G-5	Q412	E-5	RY700	B-6
✱D101	B-4	IC503	G-4	✱Q413	F-5	RY801	D-6
✱D102	D-3	IC504	D-1	✱Q415	F-4		
✱D103	C-6	IC505	F-4	✱Q416	F-4	S101	B-1
✱D105	A-5	IC506	E-6	Q417	F-4	S102	C-1
✱D106	A-5	IC508	F-5	Q418	F-4		
✱D107	C-6	IC509	E-2	Q419	E-5	SL1	A-1
✱D108	C-2	IC510	F-4	✱Q420	F-4	SL100	A-2
D310	C-5	IC511	F-2	Q423	F-5	SL701	B-6
✱D311	C-5	IC512	F-1	Q424	F-4	SL702	B-6
D400	F-5	IC513	E-1	✱Q425	F-5	SL703	B-5
D401	E-4	IC515	G-5	✱Q429	G-6	SL801	D-6
✱D402	E-5	IC516	G-4	Q500	D-2	SL802	D-6
✱D403	F-4	IC517	G-5	✱Q501	D-2	SL803	D-6
D404	F-4	IC700	B-5	Q502	D-2		
✱D405	E-4	IC701	E-6	✱Q503	D-2	T500	D-1
✱D406	F-6	IC702	B-6	Q507	D-2	T501	F-3
D407	F-4	IC703	E-6	Q508	E-2	T502	G-2
✱D411	F-7	IC704	A-7	✱Q509	F-4	T503	F-2
✱D501	D-2	IC705	A-7	✱Q510	G-3		
✱D502	E-1	IC706	A-6	✱Q511	F-3	TH100	A-3
✱D504	G-3	IC801	E-6	✱Q512	F-4	TH101	C-4
✱D505	F-3	IC802	D-6	✱Q513	G-3		
✱D507	E-2	IC803	D-5	✱Q514	F-3	TP100	E-3
✱D508	E-1			Q515	E-3	TP101	A-3
✱D509	E-1	LV100	D-2	Q516	G-3	TP102	D-4
✱D700	E-6	LV101	D-2	Q517	F-3	TP103	D-3
✱D701	B-6	LV102	D-4	✱Q518	E-3	TP105	B-1
✱D710	B-6	LV500	G-1	✱Q519	G-3	TP106	B-1
✱D720	B-6	LV501	F-1	✱Q520	F-3	TP107	A-4
✱D801	D-6			✱Q521	F-3	TP108	A-5
✱D802	E-6	PS101	B-7	✱Q522	F-3	TP109	B-2
✱D803	E-6	PS102	B-7	✱Q523	F-3	TP110	A-3
✱D804	D-6	PS501	D-2	Q524	F-3	TP111	A-3
D805	C-6	PS502	E-3	Q525	G-3	TP400	F-5
D806	C-5	PS503	G-3	Q526	G-2	TP401	E-5
✱D900	A-3	PS504	F-3	Q527	F-3	TP402	F-6
				Q528	G-3	TP500	D-1
E100	E-4	✱Q100	C-4	Q529	F-2	TP502	G-1
E101	B-5	✱Q101	C-4	✱Q531	G-6	TP503	E-3
E105	C-4	✱Q102	E-3	✱Q540	F-3	TP504	F-2
E107	B-3	✱Q103	B-4	✱Q700	E-6	TP505	F-1
E108	B-3	✱Q104	B-4	✱Q701	E-6	TP506	F-2
E400	F-6	✱Q105	D-3	Q702	B-6	TP507	F-1
		✱Q106	C-1	✱Q801	D-7	TP510	G-4
IC101	A-3	✱Q107	D-1	Q901	A-7	TP701	B-5
IC102	C-4	✱Q108	D-1	Q902	A-7		
IC103	A-4	✱Q109	C-1	Q903	B-3	X500	G-7
IC104	C-4	Q110	B-1	Q904	B-3		
IC105	A-4	✱Q111	D-3	Q905	E-4		
IC106	E-4	✱Q112	C-1	✱Q906	E-4		
IC107	E-3	✱Q113	B-1				
IC108	A-4	✱Q115	A-1	RV100	E-3		
IC109	A-4	✱Q116	C-2	RV102	A-5		
IC110	A-2	✱Q118	A-1	RV103	E-3		
IC111	C-2	✱Q119	C-3	RV104	D-3		
IC112	C-3	✱Q120	A-2	RV106	B-1		
IC113	B-3	✱Q121	C-3	RV107	C-1		
IC116	A-3	✱Q122	A-1	RV108	A-1		
IC117	A-5	✱Q123	C-3	RV109	A-1		
IC118	D-4	✱Q124	A-2	RV110	C-2		
IC119	C-4	✱Q125	C-3	RV111	C-2		
IC320	C-5	✱Q133	A-3	RV114	C-2		
IC321	C-6	✱Q134	A-4	RV120	A-3		
IC322	C-6	Q135	C-1	RV121	D-4		
IC324	C-6	Q136	C-1	RV122	A-4		
IC400	G-6	✱Q402	F-5	RV200	B-4		
IC401	F-7	✱Q403	E-5	RV400	F-6		
IC402	F-7	Q404	F-6	RV401	F-6		
IC403	G-6	✱Q405	F-6	RV500	D-2		

✱ : B SIDE

LOT NO. E-7

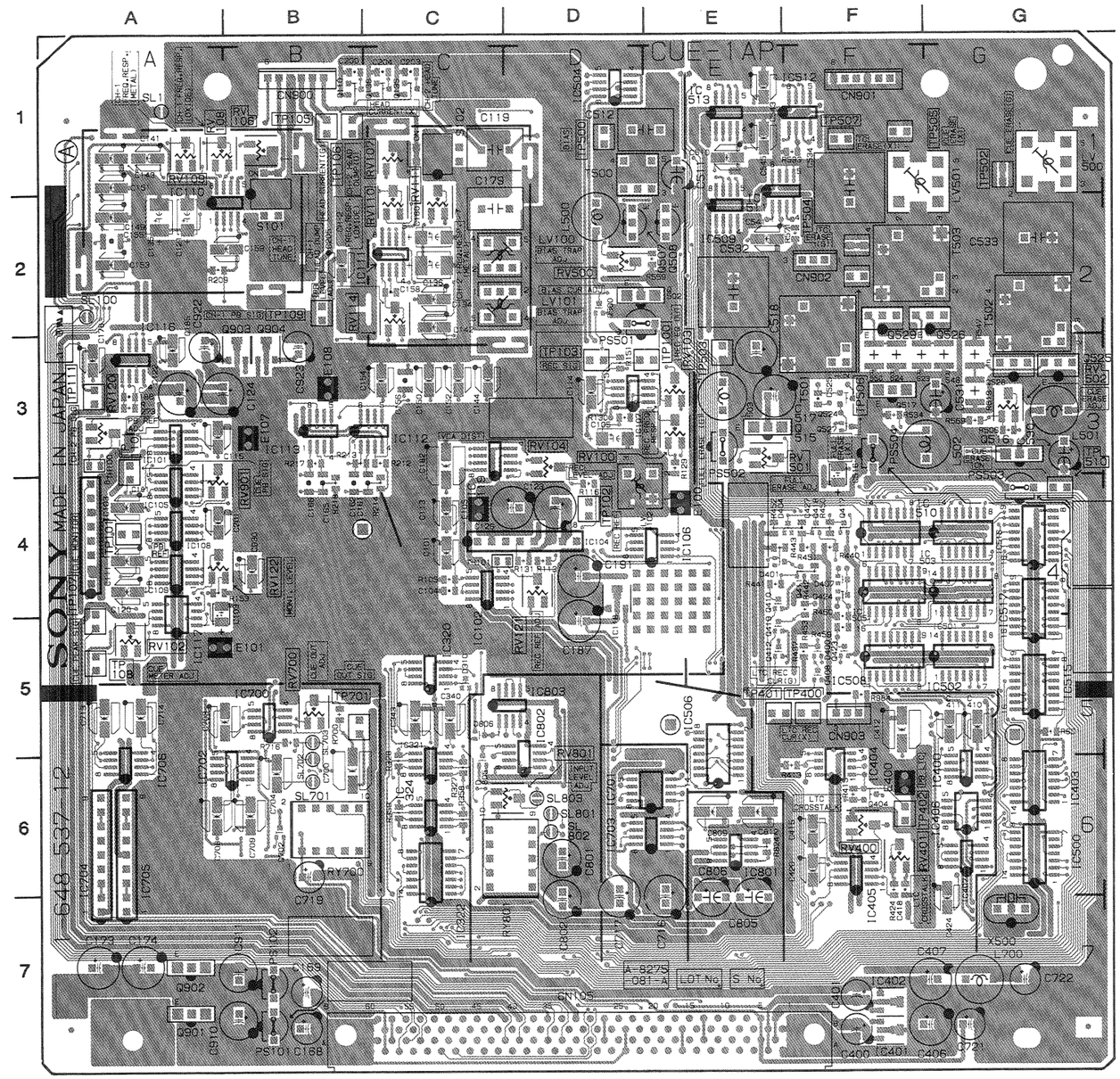


CUE-1AP BOARD -B SIDE-

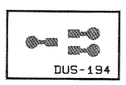
1-648-537-13 (LOT No. 403 - 508)
DVW-A500P(EK) ; CUE-1AP MCB
DVW-A500P(UC) ; CUE-1APG MCB

CUE-1AP ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for PAL
DUS-194

(Board's Lot No. 307 through 402)
DVW-A500P(EK)



CUE-1AP BOARD -A SIDE-
1-648-537-12 (LOT No. 307 - 402)
DVW-A500P(EK) ; CUE-1AP MCB



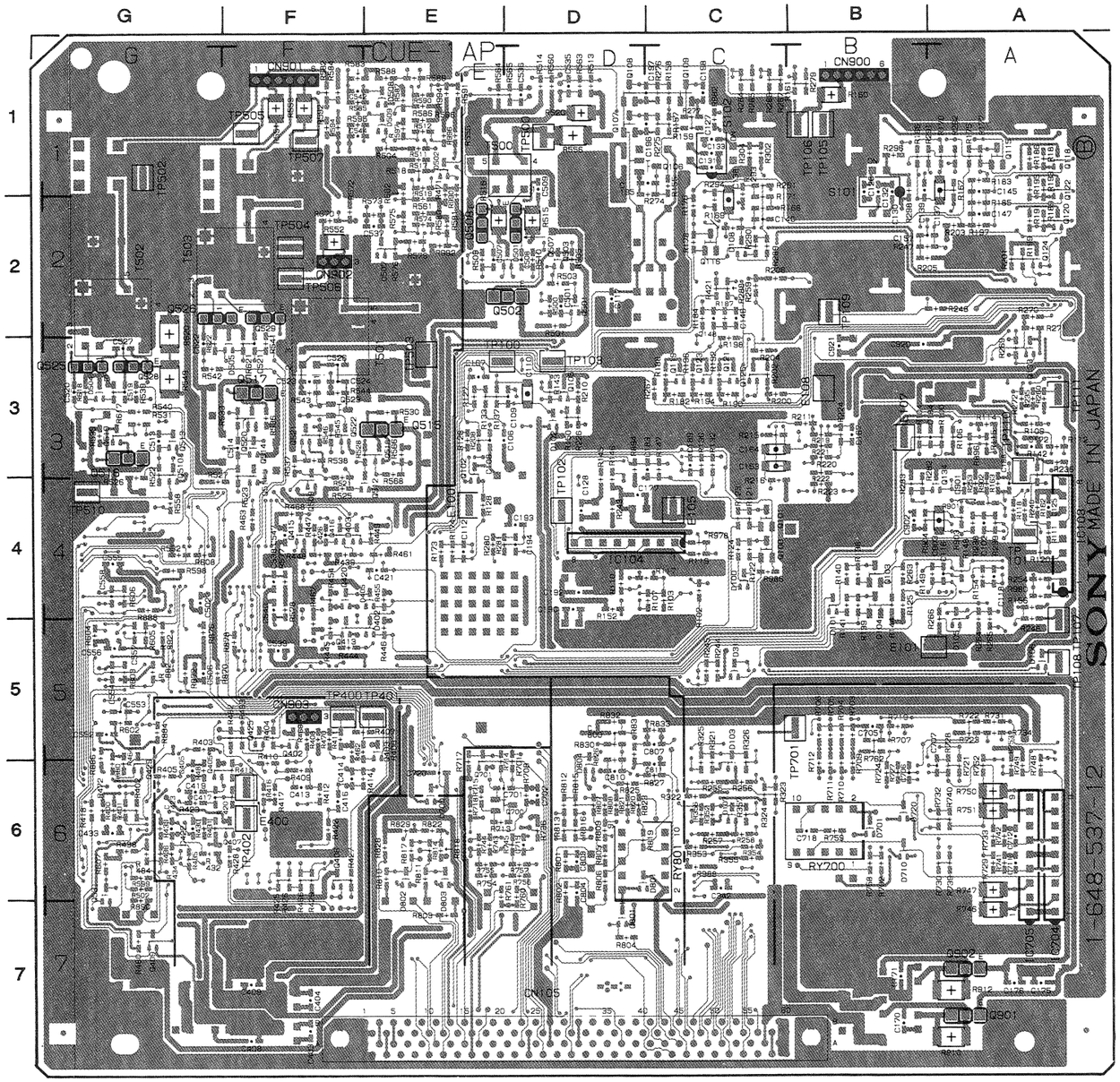
DUS-194 BOARD -SOLDERING SIDE-
1-623-599-12

CUE-1AP(1-648-537-12)

CN105	D-7	IC407	G-6	Q412	E-5	S102	C-1
CN900	B-1	IC500	G-6	✱Q413	F-5		
CN901	F-1	IC501	G-4	✱Q415	F-4	SL1	A-1
CN902	F-2	IC502	G-5	✱Q416	F-4	SL100	A-2
CN903	F-5	IC503	G-4	Q417	F-4	SL701	B-6
		IC504	D-1	Q418	F-4	SL702	B-6
✱D100	C-4	IC505	F-4	Q419	E-5	SL703	B-5
✱D101	B-4	IC506	E-6	✱Q420	F-4	SL801	D-6
✱D102	D-3	IC508	F-5	Q423	F-5	SL802	D-6
✱D103	C-6	IC509	E-2	Q424	F-4	SL803	D-6
✱D105	A-5	IC510	F-4	✱Q425	F-5		
✱D106	A-5	IC511	F-2	✱Q429	G-6	T500	D-1
✱D107	C-6	IC512	F-1	Q500	D-2	T501	F-3
✱D108	C-2	IC513	E-1	✱Q501	D-2	T502	G-2
D310	C-5	IC515	G-5	Q502	D-2	T503	F-2
✱D311	C-5	IC516	G-4	✱Q503	D-2		
D400	F-5	IC517	G-5	Q507	D-2	TH100	A-3
D401	E-4	IC700	B-5	Q508	E-2	TH101	C-4
✱D402	E-5	IC701	E-6	✱Q509	F-4		
✱D403	F-4	IC702	B-6	✱Q510	G-3	TP100	E-3
D404	F-4	IC703	E-6	✱Q511	F-3	TP101	A-3
✱D405	E-4	IC704	A-7	✱Q512	F-4	TP102	D-4
D407	F-4	IC705	A-7	✱Q513	G-3	TP103	D-3
✱D501	D-2	IC706	A-6	✱Q514	F-3	TP105	B-1
✱D502	E-1	IC801	E-6	Q515	E-3	TP106	B-1
✱D504	G-3	IC802	D-6	Q516	G-3	TP107	A-4
✱D505	F-3	IC803	D-5	Q517	F-3	TP108	A-5
✱D507	E-2			✱Q518	E-3	TP109	B-2
✱D508	E-1	LV100	D-2	✱Q519	G-3	TP110	A-3
✱D509	E-1	LV101	D-2	✱Q520	F-3	TP111	A-3
✱D700	E-6	LV102	D-4	✱Q521	F-3	TP400	F-5
✱D701	B-6	LV500	G-1	✱Q522	F-3	TP401	E-5
✱D710	B-6	LV501	F-1	✱Q523	F-3	TP402	F-6
✱D720	B-6			Q524	F-3	TP500	D-1
✱D801	D-6	PS101	B-7	Q525	G-3	TP502	G-1
✱D802	E-6	PS102	B-7	Q526	G-2	TP503	E-3
✱D803	E-6	PS501	D-2	Q527	F-3	TP504	F-2
✱D804	D-6	PS502	E-3	Q528	G-3	TP505	F-1
D805	C-6	PS503	G-3	Q529	F-2	TP506	F-2
D806	C-5	PS504	F-3	✱Q531	G-6	TP507	F-1
				✱Q700	E-6	TP510	G-4
E100	E-4	✱Q100	C-4	✱Q701	E-6	TP701	B-5
E101	B-5	✱Q101	C-4	Q702	B-6		
E105	C-4	✱Q102	E-3	✱Q801	D-7	X500	G-7
E107	B-3	✱Q103	B-4	Q901	A-7		
E108	B-3	✱Q104	B-4	Q902	A-7		
E400	F-6	✱Q105	D-3	Q903	B-3		
		✱Q106	C-1	Q904	B-3		
IC101	A-3	✱Q107	D-1				
IC102	C-4	✱Q108	D-1	RV100	E-3		
IC103	A-4	✱Q109	C-1	RV102	A-5		
IC104	C-4	Q110	B-1	RV103	E-3		
IC105	A-4	✱Q115	A-1	RV104	D-3		
IC106	E-4	✱Q116	C-2	RV106	B-1		
IC107	E-3	✱Q118	A-1	RV107	C-1		
IC108	A-4	✱Q119	C-3	RV108	A-1		
IC109	A-4	✱Q120	A-2	RV109	A-1		
IC110	A-2	✱Q121	C-3	RV110	C-2		
IC111	C-2	✱Q122	A-1	RV111	C-2		
IC112	C-3	✱Q123	C-3	RV114	C-2		
IC113	B-3	✱Q124	A-2	RV120	A-3		
IC116	A-3	✱Q125	C-3	RV121	D-4		
IC117	A-5	✱Q133	A-3	RV122	A-4		
IC118	D-4	✱Q134	A-4	RV400	F-6		
IC119	C-4	Q135	C-1	RV401	F-6		
IC320	C-5	Q136	C-1	RV500	D-2		
IC321	C-6	✱Q402	F-5	RV501	E-3		
IC322	C-6	✱Q403	E-5	RV502	G-3		
IC324	C-6	Q404	F-6	RV700	B-5		
IC400	G-6	✱Q405	F-6	RV801	D-6		
IC401	F-7	✱Q406	F-6	RV901	A-4		
IC402	F-7	✱Q407	F-6				
IC403	G-6	Q408	F-5	RY700	B-6		
IC404	F-6	✱Q409	G-7	RY801	D-6		
IC405	F-6	Q410	E-4				
IC406	G-6	Q411	F-4	S101	B-1		

✱ : B SIDE

LOT NO. E-7



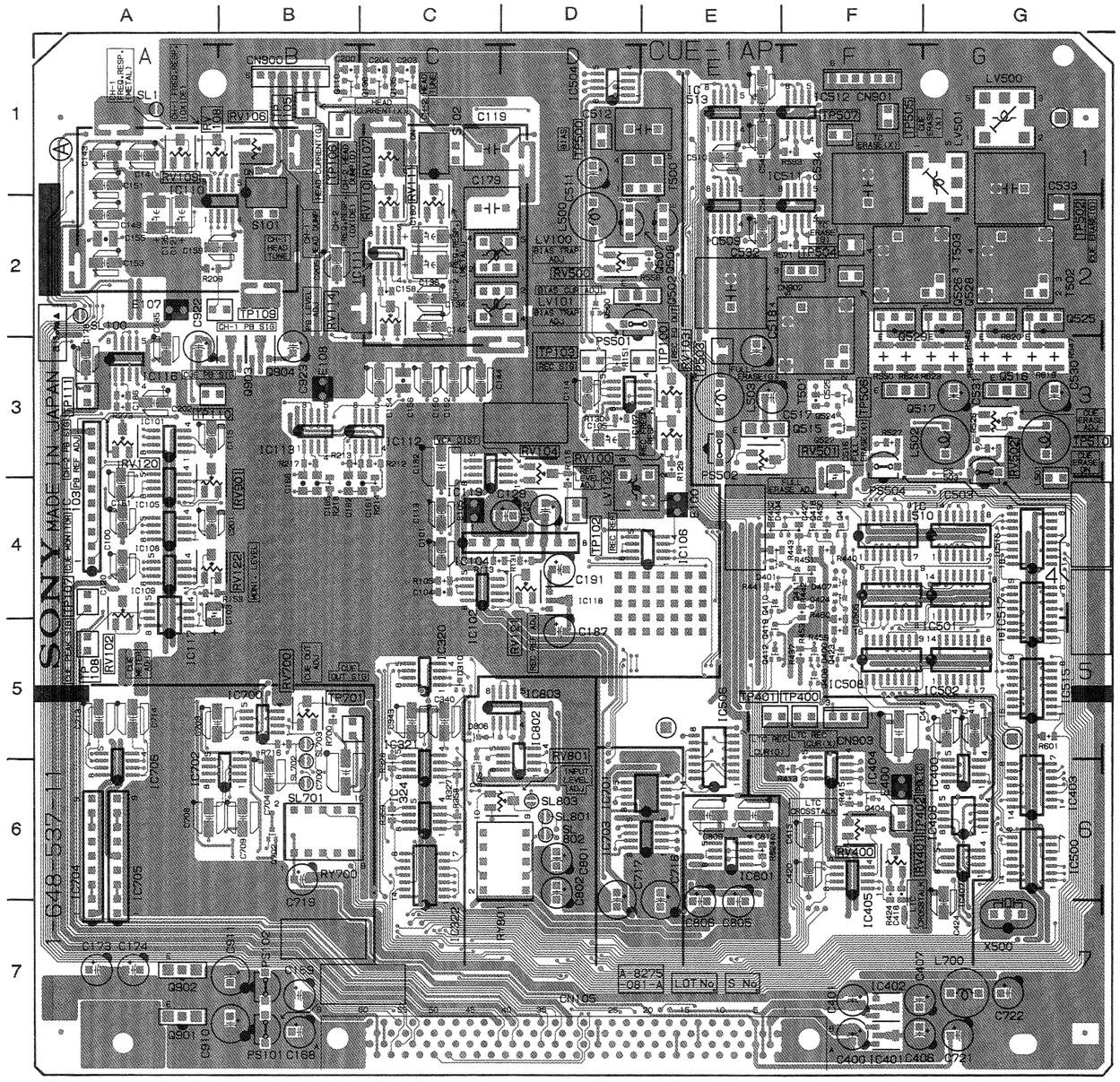
CUE-1AP BOARD -B SIDE-

1-648-537-12 (LOT No. 307 - 402)

DVW-A500P(EK) ; CUE-1AP MCB

CUE-1AP ; CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC for PAL
DUS-723

(Board's Lot No. 302 through 306)
DVW-A500P(EK)
DVW-A500P(UC)

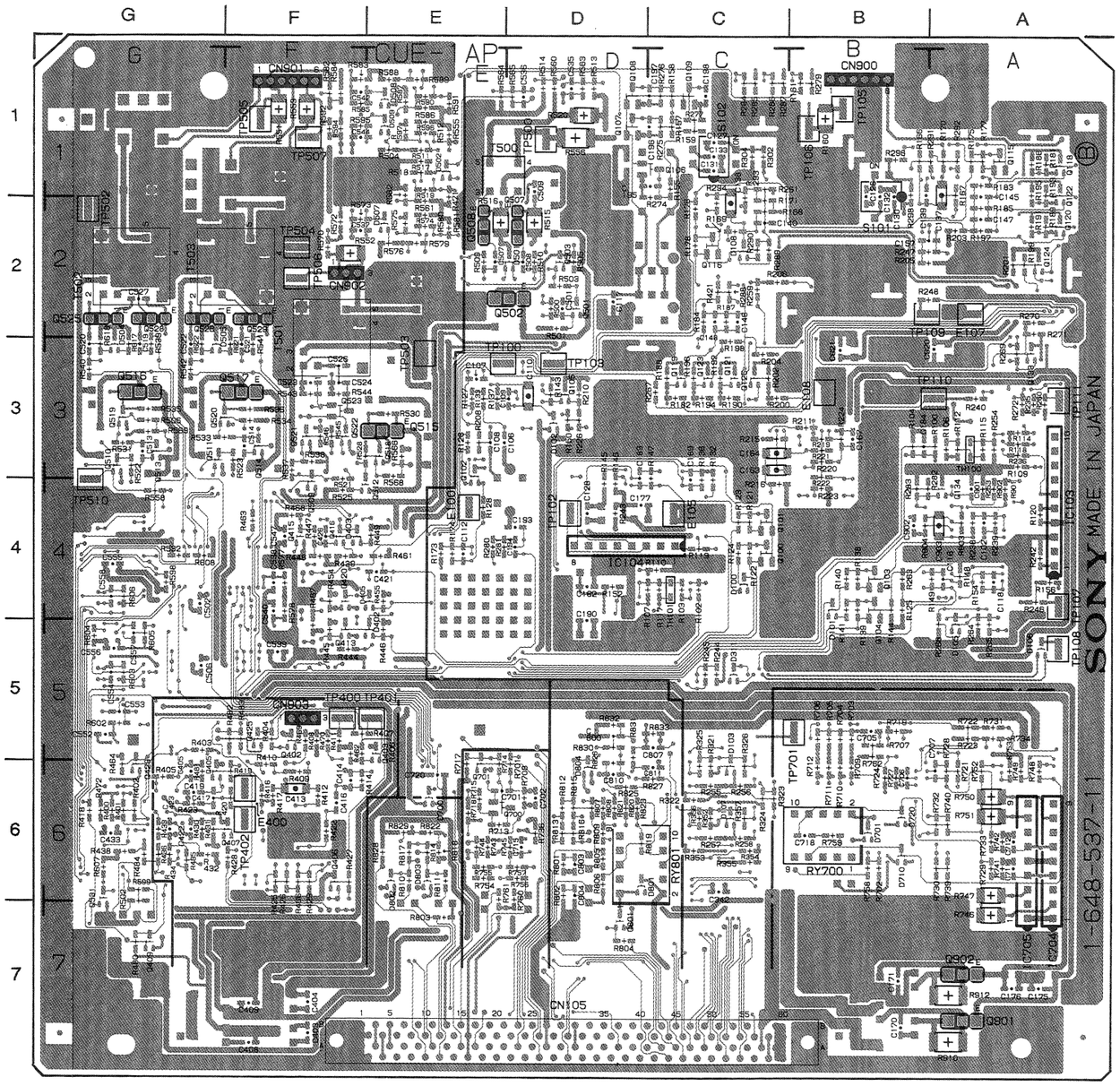


CUE-1AP(1-648-537-11)

CN105	D-7	IC500	G-6	✱Q413	F-5	SL1	A-1
CN900	B-1	IC501	G-4	✱Q415	F-4	SL100	A-2
CN901	F-1	IC502	G-5	✱Q416	F-4	SL701	B-6
CN902	F-2	IC503	G-4	Q417	F-4	SL702	B-6
CN903	F-5	IC504	D-1	Q418	F-4	SL703	B-5
		IC505	F-4	Q419	E-5	SL801	D-6
✱D100	C-4	IC506	E-6	✱Q420	F-4	SL802	D-6
✱D101	B-4	IC508	F-5	Q423	F-5	SL803	D-6
✱D102	D-3	IC509	E-2	Q424	F-4		
✱D103	C-6	IC510	F-4	✱Q425	F-5	T500	E-1
✱D105	A-5	IC511	F-2	✱Q429	G-6	T501	F-3
✱D106	A-5	IC512	F-1	Q500	D-2	T502	G-2
✱D107	C-6	IC513	E-1	✱Q501	D-2	T503	F-2
✱D108	C-2	IC515	G-5	Q502	D-2		
D310	C-5	IC516	G-4	✱Q503	D-2	✱TH100	A-3
✱D311	C-5	IC517	G-5	Q507	D-2	✱TH101	C-4
D400	F-5	IC700	B-5	Q508	E-2		
D401	E-4	IC701	E-6	✱Q509	F-4	TP100	E-3
✱D402	E-5	IC702	B-6	✱Q510	G-3	TP102	D-4
✱D403	F-4	IC703	E-6	✱Q511	F-3	TP103	D-3
D404	F-4	IC704	A-7	✱Q512	F-4	TP105	B-1
✱D405	E-4	IC705	A-7	✱Q513	G-3	TP106	B-1
D407	F-4	IC706	A-6	✱Q514	F-3	TP107	A-4
✱D501	D-2	IC801	E-6	Q515	E-3	TP108	A-5
✱D502	E-1	IC802	D-6	Q516	G-3	TP109	B-2
✱D504	G-3	IC803	D-5	Q517	F-3	TP110	A-3
✱D505	F-3			✱Q518	E-3	TP111	A-3
✱D507	E-2	LV100	D-2	✱Q519	G-3	TP400	F-5
✱D508	E-1	LV101	D-2	✱Q520	F-3	TP401	E-5
✱D509	E-1	LV102	D-4	✱Q521	F-3	TP402	F-6
✱D700	E-6	LV500	G-1	✱Q522	F-3	TP500	D-1
✱D701	B-6	LV501	F-1	✱Q523	F-3	TP502	G-2
✱D710	B-6			Q524	F-3	TP503	E-3
✱D720	B-6	PS101	B-7	Q525	G-2	TP504	F-2
✱D801	D-6	PS102	B-7	Q526	G-2	TP505	F-1
✱D802	E-6	PS501	D-2	Q527	F-3	TP506	F-2
✱D803	E-6	PS502	E-3	Q528	G-2	TP507	F-1
✱D804	D-6	PS503	G-3	Q529	F-2	TP510	G-4
D805	C-6	PS504	F-3	✱Q531	G-6	TP701	B-5
D806	C-5			✱Q700	E-6		
		✱Q100	C-4	✱Q701	E-6	X500	G-7
E100	E-4	✱Q101	C-4	Q702	B-6		
E105	C-4	✱Q102	E-3	✱Q801	D-7		
E107	A-2	✱Q103	B-4	Q901	A-7		
E108	B-3	✱Q104	B-4	Q902	A-7		
E400	F-6	✱Q105	D-3	Q903	B-3		
		✱Q106	C-1	Q904	B-3		
IC101	A-3	✱Q107	D-1				
IC102	C-4	✱Q108	D-1	RV100	E-3		
IC103	A-4	✱Q109	C-1	RV102	A-5		
IC104	C-4	Q110	B-1	RV103	E-3		
IC105	A-4	✱Q115	A-1	RV104	D-3		
IC106	E-4	✱Q116	C-2	RV106	B-1		
IC107	E-3	✱Q118	A-1	RV107	C-1		
IC108	A-4	✱Q119	C-3	RV108	A-1		
IC109	A-4	✱Q120	A-2	RV109	A-1		
IC110	A-2	✱Q121	C-3	RV110	C-2		
IC111	C-2	✱Q122	A-1	RV111	C-2		
IC112	C-3	✱Q123	C-3	RV114	C-2		
IC113	B-3	✱Q124	A-2	RV120	A-3		
IC116	A-3	✱Q125	C-3	RV121	D-4		
IC117	A-5	✱Q133	A-3	RV122	A-4		
IC118	D-4	✱Q134	A-4	RV400	F-6		
IC119	C-4	Q135	C-1	RV401	F-6		
IC320	C-5	Q136	C-1	RV500	D-2		
IC321	C-6	✱Q402	F-5	RV501	E-3		
IC322	C-6	✱Q403	E-5	RV502	G-3		
IC324	C-6	Q404	F-6	RV700	B-5		
IC400	G-6	✱Q405	F-6	RV801	D-6		
IC401	F-7	✱Q406	F-6	RV901	A-4		
IC402	F-7	✱Q407	F-6				
IC403	G-6	Q408	F-5	RY700	B-6		
IC404	F-6	✱Q409	G-7	RY801	D-6		
IC405	F-6	Q410	E-4				
IC406	G-6	Q411	F-4	S101	B-1		
IC407	G-6	Q412	E-5	S102	C-1		

✱ : B SIDE

LOT NO. E-7

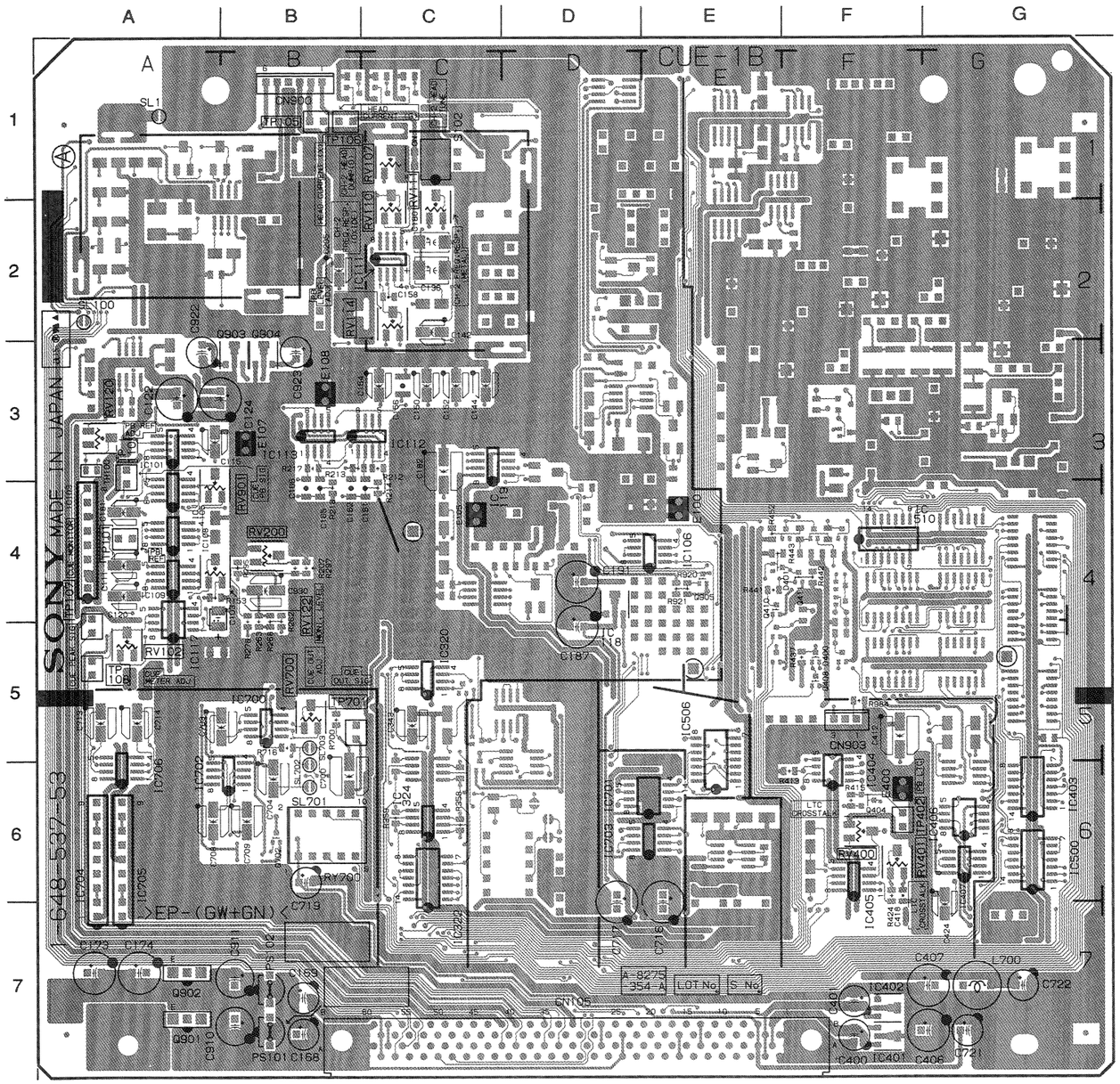


CUE-1AP BOARD -B SIDE-

1-648-537-11 (LOT No. 302 - 306)
DVW-A500P(EK) ; CUE-1AP MCB
DVW-A500P(UC) ; CUE-1APG MCB

CUE-1B ; CUE/LTC PB circuits

(Board's Lot No. 509 and higher)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)



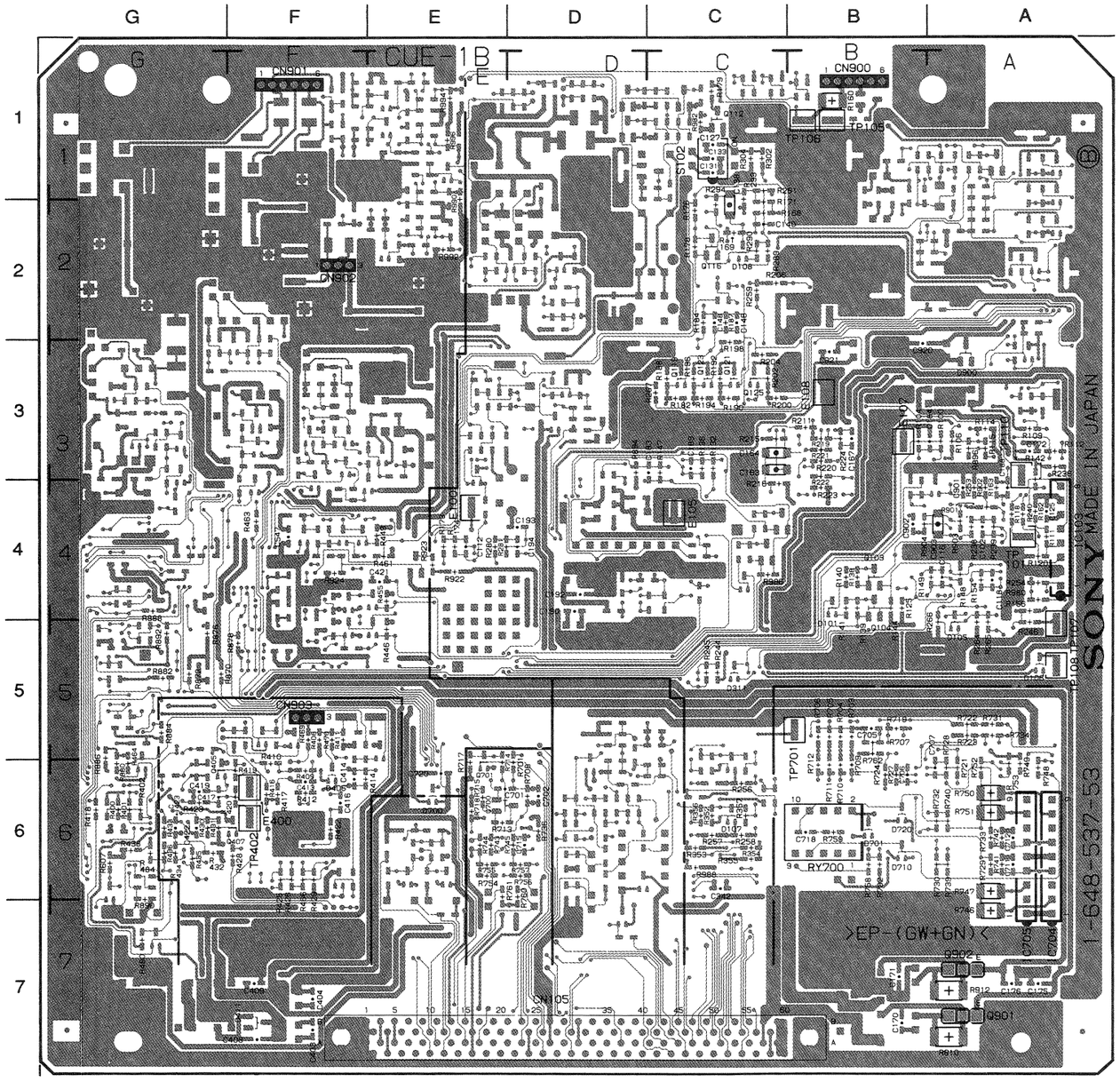
CUE-1B BOARD -A SIDE-
1-648-537-53 (LOT No. 509 -)
DVW-510(J) ; CUE-1B MCB
DVW-510(UC) ; CUE-1B MCB
DVW-510P(EK) ; CUE-1BP MCB

CUE-1B(1-648-537-53)

CN105	D-7	✱Q701	E-6
CN900	B-1	Q702	B-6
CN903	F-5	Q901	A-7
		Q902	A-7
✱D101	B-4	Q903	B-3
✱D105	A-5	Q904	B-3
✱D106	A-5	Q905	E-4
✱D107	C-6	✱Q906	E-4
✱D108	C-2		
✱D311	C-5	RV102	A-4
D400	F-5	RV107	C-1
D401	E-4	RV110	C-2
✱D406	F-6	RV111	C-2
✱D411	F-7	RV114	C-2
✱D700	E-6	RV120	A-3
✱D701	B-6	RV122	A-4
✱D710	B-6	RV200	B-4
✱D720	B-6	RV400	F-6
✱D900	A-3	RV401	F-6
		RV700	B-5
E100	E-4	RV901	A-4
E105	C-4		
E107	B-3	RY700	B-6
E108	B-3		
E400	F-6	S102	C-1
IC101	A-3	SL1	A-1
IC103	A-4	SL100	A-2
IC105	A-4	SL701	B-6
IC106	E-4	SL702	B-6
IC108	A-4	SL703	B-5
IC109	A-4		
IC111	C-2	TH100	A-3
IC112	C-3		
IC113	B-3	TP101	A-4
IC117	A-5	TP105	B-1
IC118	D-4	TP106	B-1
IC119	D-4	TP107	A-5
IC320	C-5	TP108	A-5
IC322	C-6	TP110	A-4
IC324	C-6	TP402	F-6
IC401	F-7	TP701	B-5
IC402	F-7		
IC403	G-6		
IC404	F-6		
IC405	F-6		
IC406	G-6		
IC407	G-6		
IC500	G-6		
IC506	E-6		
IC510	F-4		
IC700	B-5		
IC701	E-6		
IC702	B-6		
IC703	E-6		
IC704	A-7		
IC705	A-7		
IC706	A-6		
PS101	B-7		
PS102	B-7		
✱Q103	B-4		
✱Q104	B-4		
✱Q111	D-3		
✱Q119	C-3		
✱Q121	C-3		
✱Q123	C-3		
✱Q125	C-3		
Q404	F-6		
✱Q405	F-6		
✱Q407	F-6		
Q408	F-5		
Q410	E-4		
Q411	F-4		
✱Q700	E-6		

✱ : B SIDE

LOT NO. E-7



CUE-1B BOARD -B SIDE-

1-648-537-53 (LOT No. 509 -)

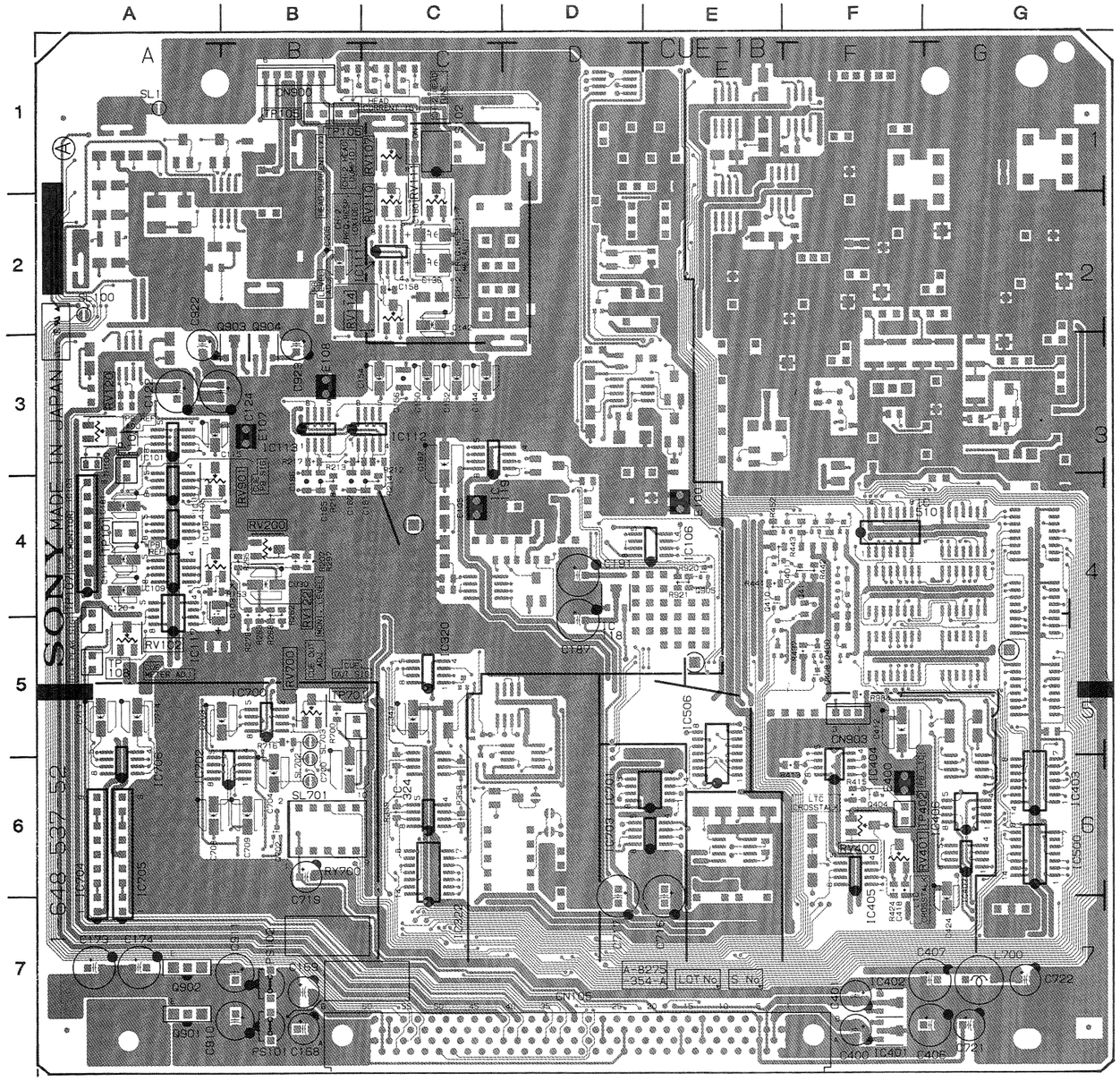
DVW-510(J) ; CUE-1B MCB

DVW-510(UC) ; CUE-1B MCB

DVW-510P(EK) ; CUE-1BP MCB

CUE-1B ; CUE/LTC PB circuits

(Board's Lot No. 403 through 508)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)



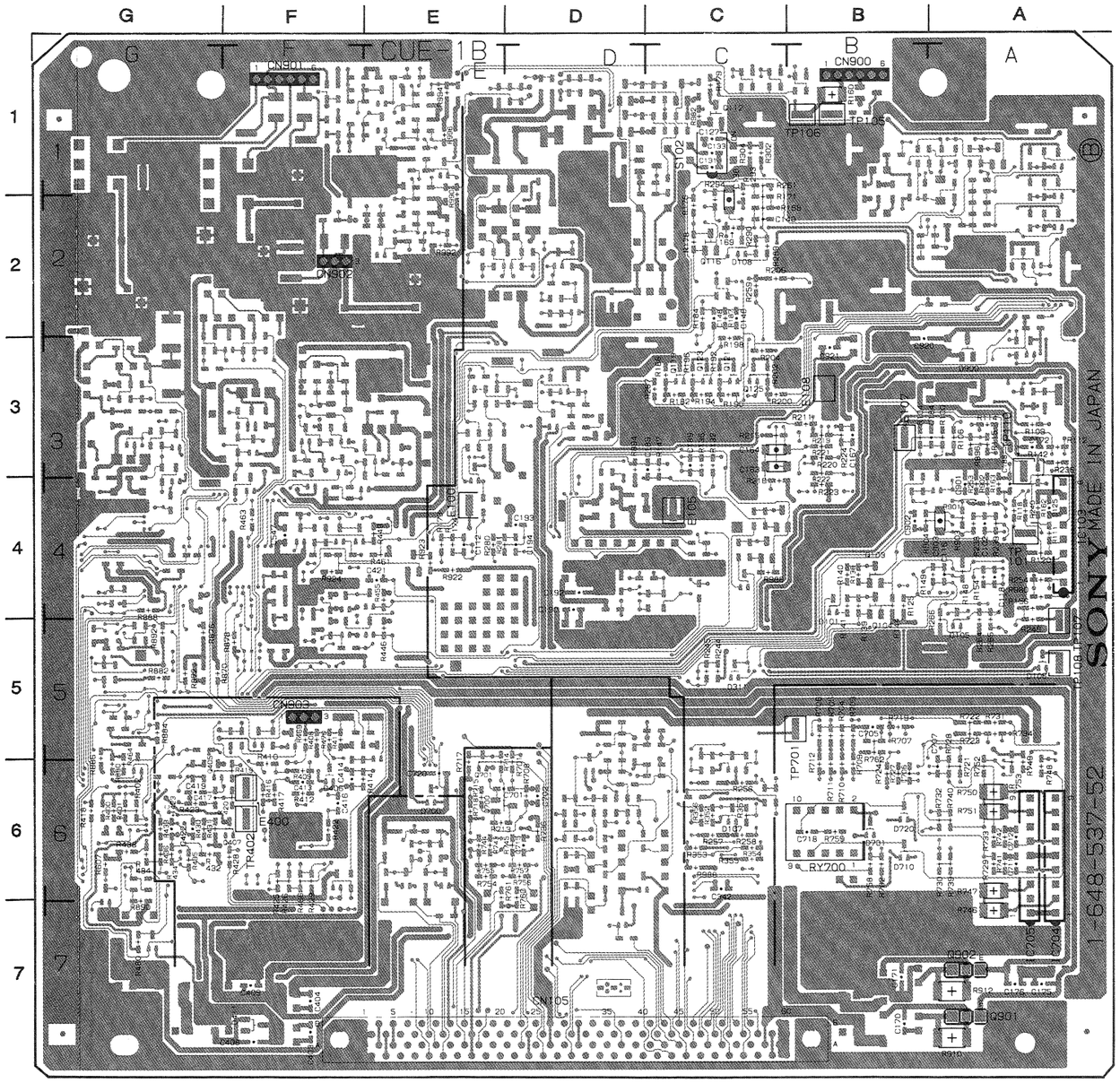
CUE-1B BOARD -A SIDE-
1-648-537-52 (LOT No. 403 - 508)
DVW-510(J) ; CUE-1B MCB
DVW-510(UC) ; CUE-1B MCB
DVW-510P(EK) ; CUE-1BP MCB

CUE-1B(1-648-537-52)

CN105	D-7	✱Q701	E-6
CN900	B-1	Q702	B-6
CN903	F-5	Q901	A-7
		Q902	A-7
✱D101	B-4	Q903	B-3
✱D105	A-5	Q904	B-3
✱D106	A-5	Q905	E-4
✱D107	C-6	✱Q906	E-4
✱D108	C-2		
✱D311	C-5	RV102	A-4
D400	F-5	RV107	C-1
D401	E-4	RV110	C-2
✱D406	F-6	RV111	C-2
✱D411	F-7	RV114	C-2
✱D700	E-6	RV120	A-3
✱D701	B-6	RV122	A-4
✱D710	B-6	RV200	B-4
✱D720	B-6	RV400	F-6
✱D900	A-3	RV401	F-6
		RV700	B-5
E100	E-4	RV901	A-4
E105	C-4		
E107	B-3	RY700	B-6
E108	B-3		
E400	F-6	S102	C-1
IC101	A-3	SL1	A-1
IC103	A-4	SL100	A-2
IC105	A-4	SL701	B-6
IC106	E-4	SL702	B-6
IC108	A-4	SL703	B-5
IC109	A-4		
IC111	C-2	TH100	A-3
IC112	C-3		
IC113	B-3	TP101	A-4
IC117	A-5	TP105	B-1
IC118	D-4	TP106	B-1
IC119	D-4	TP107	A-5
IC320	C-5	TP108	A-5
IC322	C-6	TP110	A-4
IC324	C-6	TP402	F-6
IC401	F-7	TP701	B-5
IC402	F-7		
IC403	G-6		
IC404	F-6		
IC405	F-6		
IC406	G-6		
IC407	G-6		
IC500	G-6		
IC506	E-6		
IC510	F-4		
IC700	B-5		
IC701	E-6		
IC702	B-6		
IC703	E-6		
IC704	A-7		
IC705	A-7		
IC706	A-6		
PS101	B-7		
PS102	B-7		
✱Q103	B-4		
✱Q104	B-4		
✱Q111	D-3		
✱Q119	C-3		
✱Q121	C-3		
✱Q123	C-3		
✱Q125	C-3		
Q404	F-6		
✱Q405	F-6		
✱Q407	F-6		
Q408	F-5		
Q410	E-4		
Q411	F-4		
✱Q700	E-6		

✱ : B SIDE

LOT NO. E-7



CUE-1B BOARD -B SIDE-

1-648-537-52 (LOT No. 403 - 508)

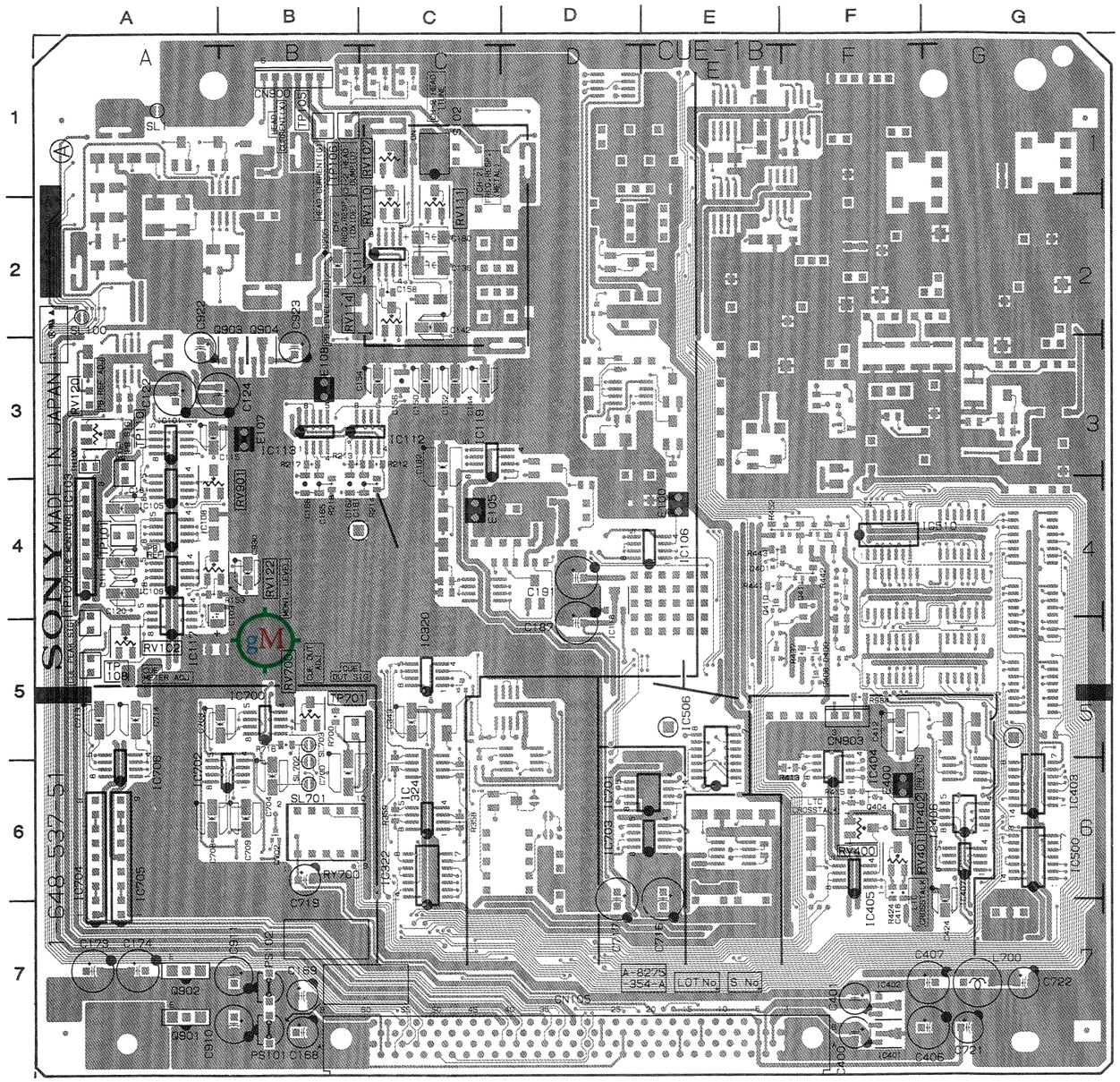
DVW-510(J) ; CUE-1B MCB

DVW-510(UC) ; CUE-1B MCB

DVW-510P(EK) ; CUE-1BP MCB

CUE-1B ; CUE/LTC PB circuits

(Board's Lot No. 308 through 402)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)

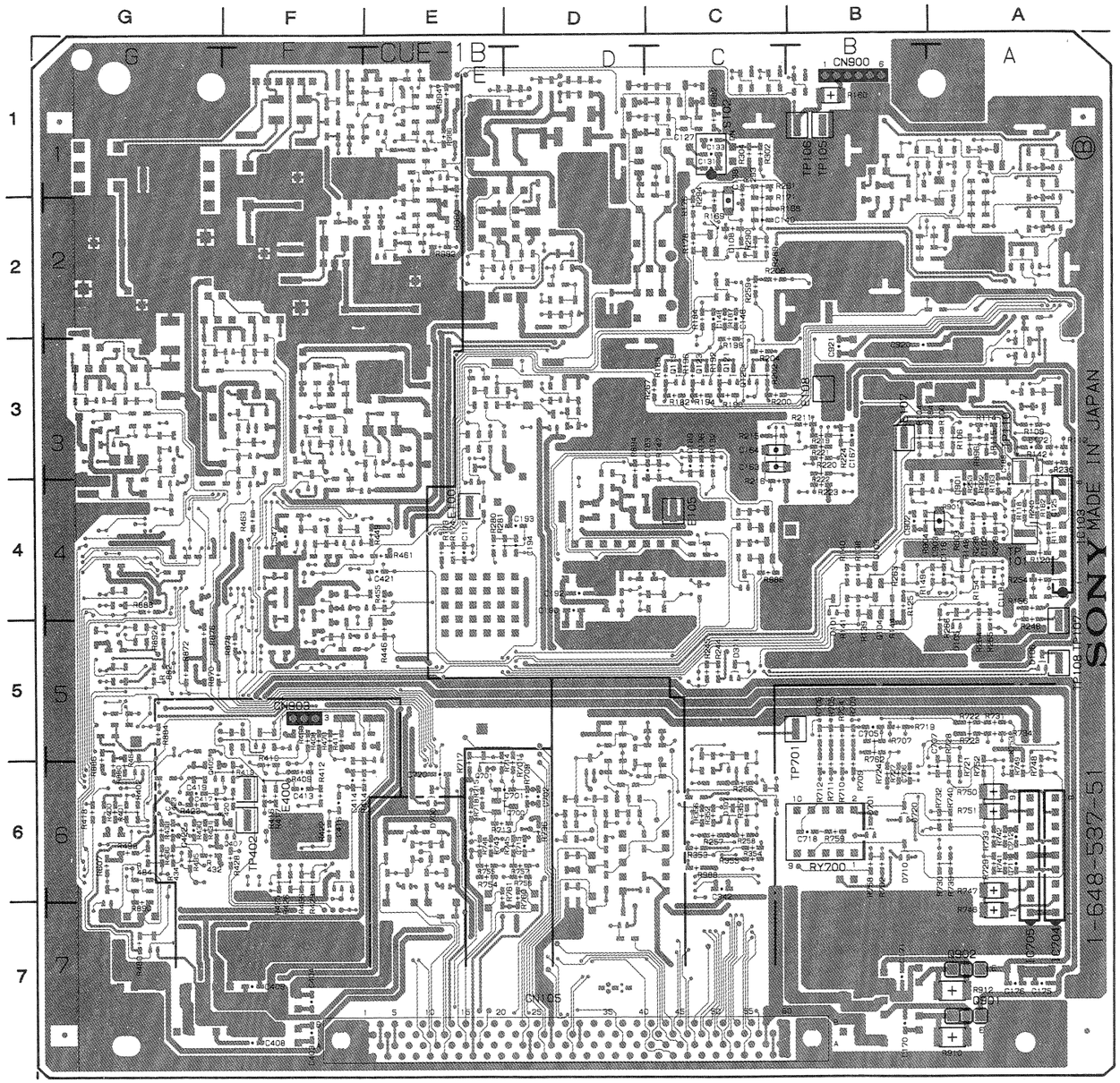


CUE-1B(1-648-537-51)

CN105	D-7	Q903	B-3
CN900	B-1	Q904	B-3
CN903	F-5		
		RV102	A-4
✱D101	B-4	RV107	C-1
✱D105	A-5	RV110	C-2
✱D106	A-5	RV111	C-2
✱D107	C-6	RV114	C-2
✱D108	C-2	RV120	A-3
✱D311	C-5	RV122	A-4
D400	F-5	RV400	F-6
D401	E-4	RV401	F-6
✱D700	E-6	RV700	B-5
✱D701	B-6	RV901	A-4
✱D710	B-6		
✱D720	B-6	RY700	B-6
E100	E-4	S102	C-1
E105	C-4		
E107	B-3	SL1	A-1
E108	B-3	SL100	A-2
E400	F-6	SL701	B-6
		SL702	B-6
IC101	A-3	SL703	B-5
IC103	A-4		
IC105	A-4	TH100	A-3
IC106	E-4		
IC108	A-4	TP101	A-4
IC109	A-4	TP105	B-1
IC111	C-2	TP106	B-1
IC112	C-3	TP107	A-5
IC113	B-3	TP108	A-5
IC117	A-5	TP110	A-4
IC118	D-4	TP402	F-6
IC119	D-4	TP701	B-5
IC320	C-5		
IC322	C-6		
IC324	C-6		
IC401	F-7		
IC402	F-7		
IC403	G-6		
IC404	F-6		
IC405	F-6		
IC406	G-6		
IC407	G-6		
IC500	G-6		
IC506	E-6		
IC510	F-4		
IC700	B-5		
IC701	E-6		
IC702	B-6		
IC703	E-6		
IC704	A-7		
IC705	A-7		
IC706	A-6		
PS101	B-7		
PS102	B-7		
✱Q103	B-4		
✱Q104	B-4		
✱Q119	C-3		
✱Q121	C-3		
✱Q123	C-3		
✱Q125	C-3		
Q404	F-6		
✱Q405	F-6		
✱Q407	F-6		
Q408	F-5		
Q410	E-4		
Q411	F-4		
✱Q700	E-6		
✱Q701	E-6		
Q702	B-6		
Q901	A-7		
Q902	A-7		

✱ : B SIDE

LOT NO. E-7

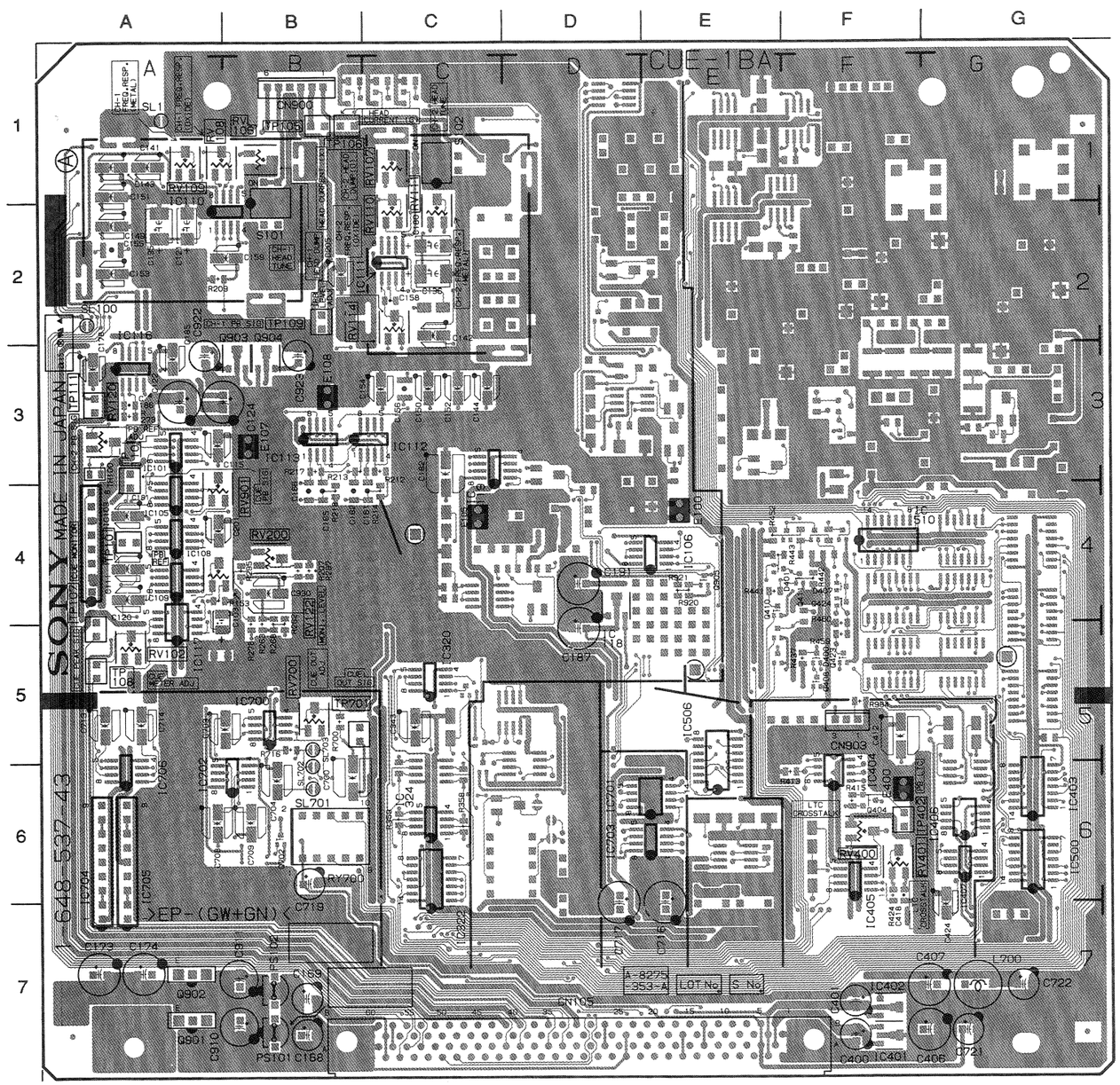


CUE-1B BOARD -B SIDE-

1-648-537-51 (LOT No. 308 - 402)
DVW-510(J) ; CUE-1B MCB
DVW-510(UC) ; CUE-1B MCB
DVW-510P(EK) ; CUE-1BP MCB

CUE-1BA ; CUE/LTC/LAU PB circuits

(Board's Lot No. 511 and higher)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)

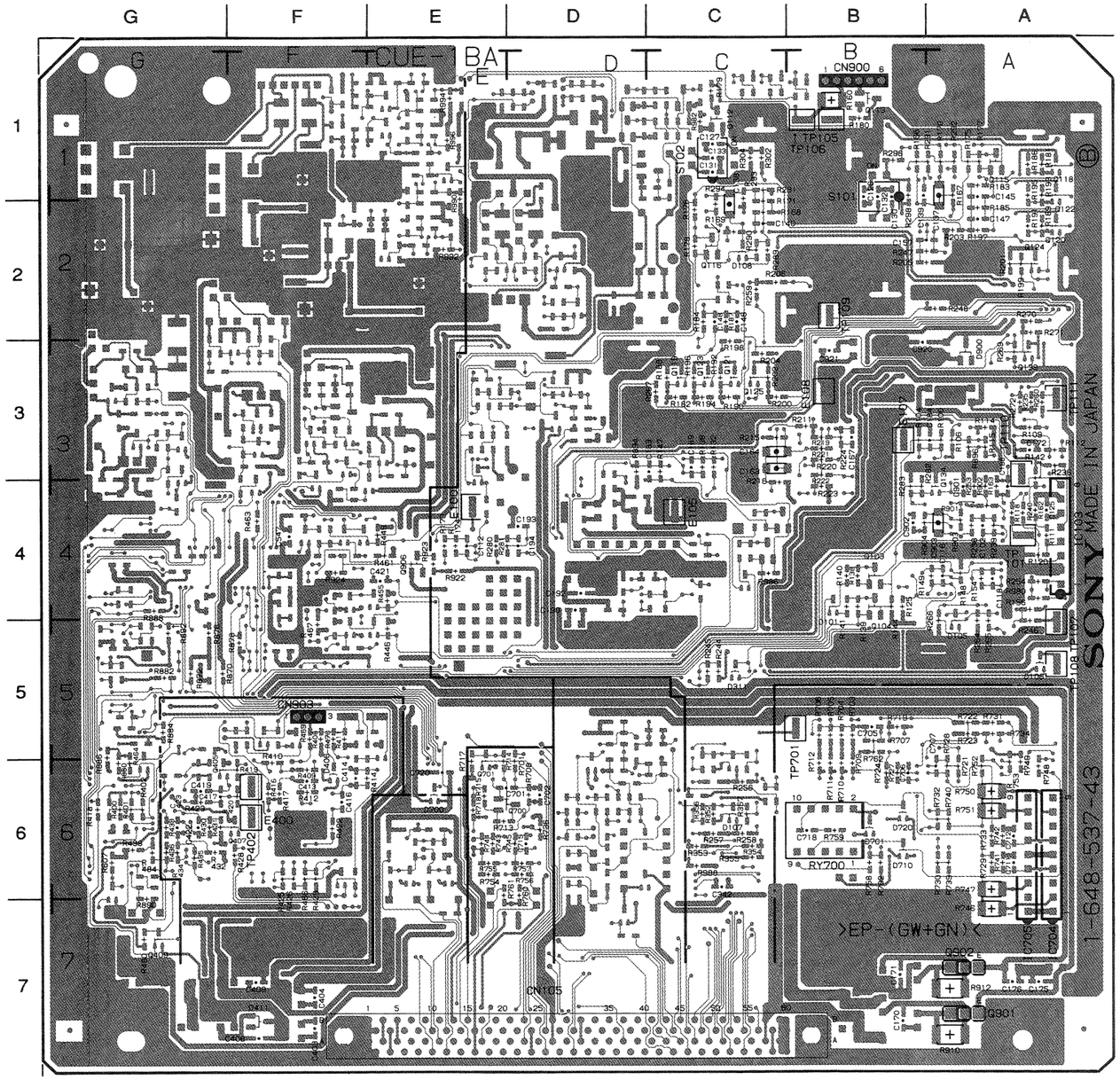


CUE-1BA(1-648-537-43)

CN105	D-7	✱Q123	C-3
CN900	B-1	✱Q124	A-2
CN903	F-5	✱Q125	C-3
		✱Q133	A-3
✱D101	B-4	Q404	F-6
✱D105	A-5	✱Q405	F-6
✱D106	A-5	✱Q407	F-6
✱D107	C-6	Q408	F-5
✱D108	C-2	✱Q409	G-7
✱D311	C-5	Q410	E-4
D400	F-5	Q411	F-4
D401	E-4	Q423	F-5
✱D406	F-6	Q424	F-4
D407	F-4	✱Q700	E-6
✱D411	F-7	✱Q701	E-6
✱D700	E-6	Q702	B-6
✱D701	B-6	Q901	A-7
✱D710	B-6	Q902	A-7
✱D720	B-6	Q903	B-3
✱D900	A-3	Q904	B-3
		Q905	E-4
E100	E-4	✱Q906	E-4
E105	C-4		
E107	B-3	RV102	A-5
E108	B-3	RV106	B-1
E400	F-6	RV107	C-1
		RV108	A-1
IC101	A-3	RV109	A-1
IC103	A-4	RV110	C-2
IC105	A-4	RV111	C-2
IC106	E-4	RV114	C-2
IC108	A-4	RV120	A-3
IC109	A-4	RV122	A-4
IC110	A-2	RV200	B-4
IC111	C-2	RV400	F-6
IC112	C-3	RV401	F-6
IC113	B-3	RV700	B-5
IC116	A-3	RV901	A-4
IC117	A-5		
IC118	D-4	RY700	B-6
IC119	D-4		
IC320	C-5	S101	B-1
IC322	C-6	S102	C-1
IC324	C-6		
IC401	F-7	SL1	A-1
IC402	F-7	SL100	A-2
IC403	G-6	SL701	B-6
IC404	F-6	SL702	B-6
IC405	F-6	SL703	B-5
IC406	G-6		
IC407	G-6	TH100	A-3
IC500	G-6		
IC506	E-6	TP105	B-1
IC510	F-4	TP106	B-1
IC700	B-5	TP107	A-5
IC701	E-6	TP108	A-5
IC702	B-6	TP109	B-2
IC703	E-6	TP110	A-4
IC704	A-7	TP111	A-3
IC705	A-7	TP402	F-6
IC706	A-6	TP701	B-5
PS101	B-7		
PS102	B-7		
✱Q103	B-4		
✱Q104	B-4		
✱Q112	C-1		
✱Q113	B-1		
✱Q115	A-1		
✱Q116	C-2		
✱Q118	A-1		
✱Q119	C-3		
✱Q120	A-2		
✱Q121	C-3		
✱Q122	A-1		

✱ : B SIDE

LOT NO. E-7



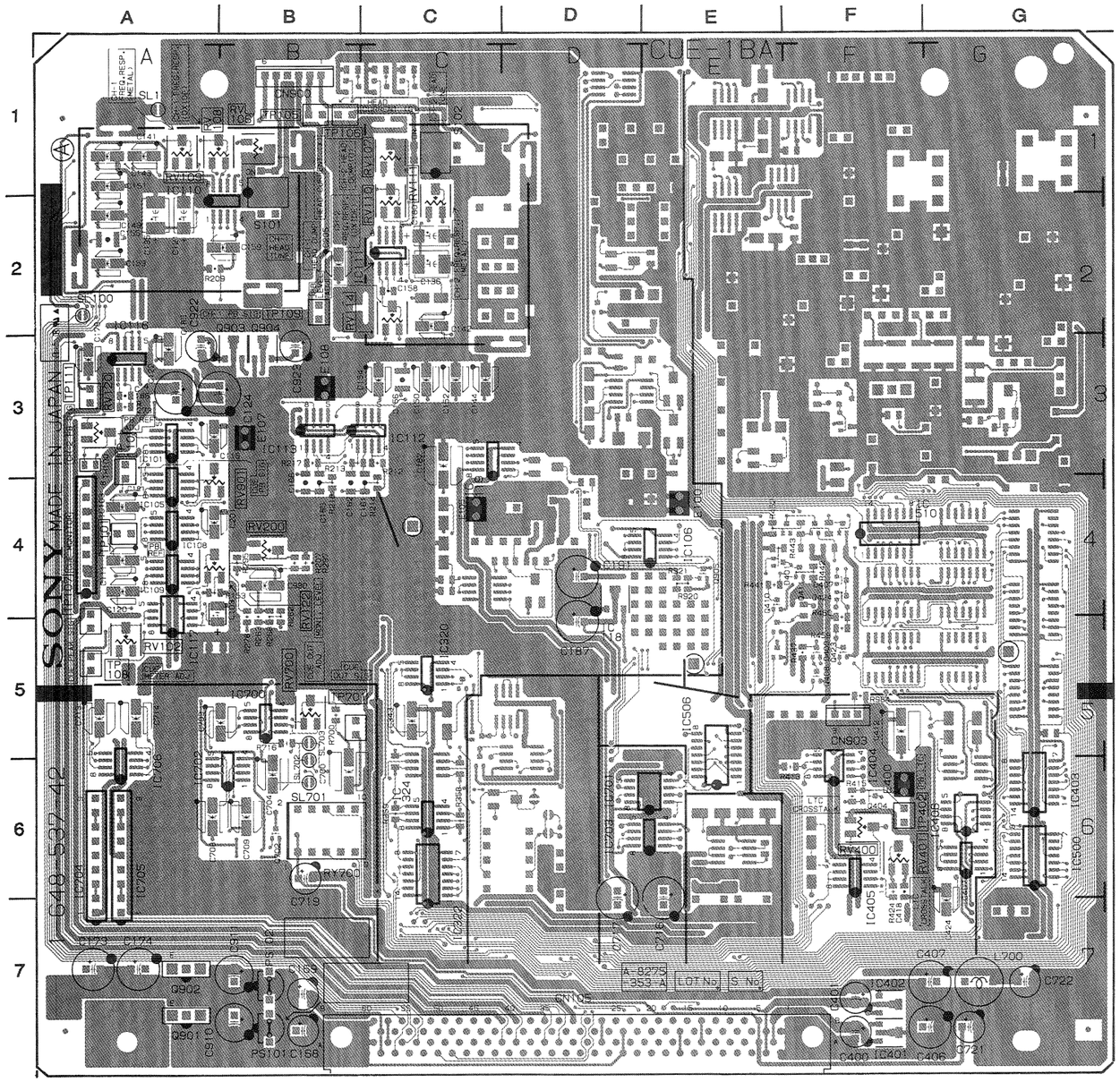
CUE-1BA BOARD -B SIDE-

1-648-537-43 (LOT No. 511 -)

DVW-A510(J) ; CUE-1BA MCB
DVW-A510(UC) ; CUE-1BA MCB
DVW-A510P(EK) ; CUE-1BAP MCB
DVW-CA510(J) ; CUE-1BA MCB
DVW-CA510(UC) ; CUE-1BA MCB
DVW-CA510P(EK) ; CUE-1BAP MCB

CUE-1BA ; CUE/LTC/LAU PB circuits

(Board's Lot No. 403 through 509)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



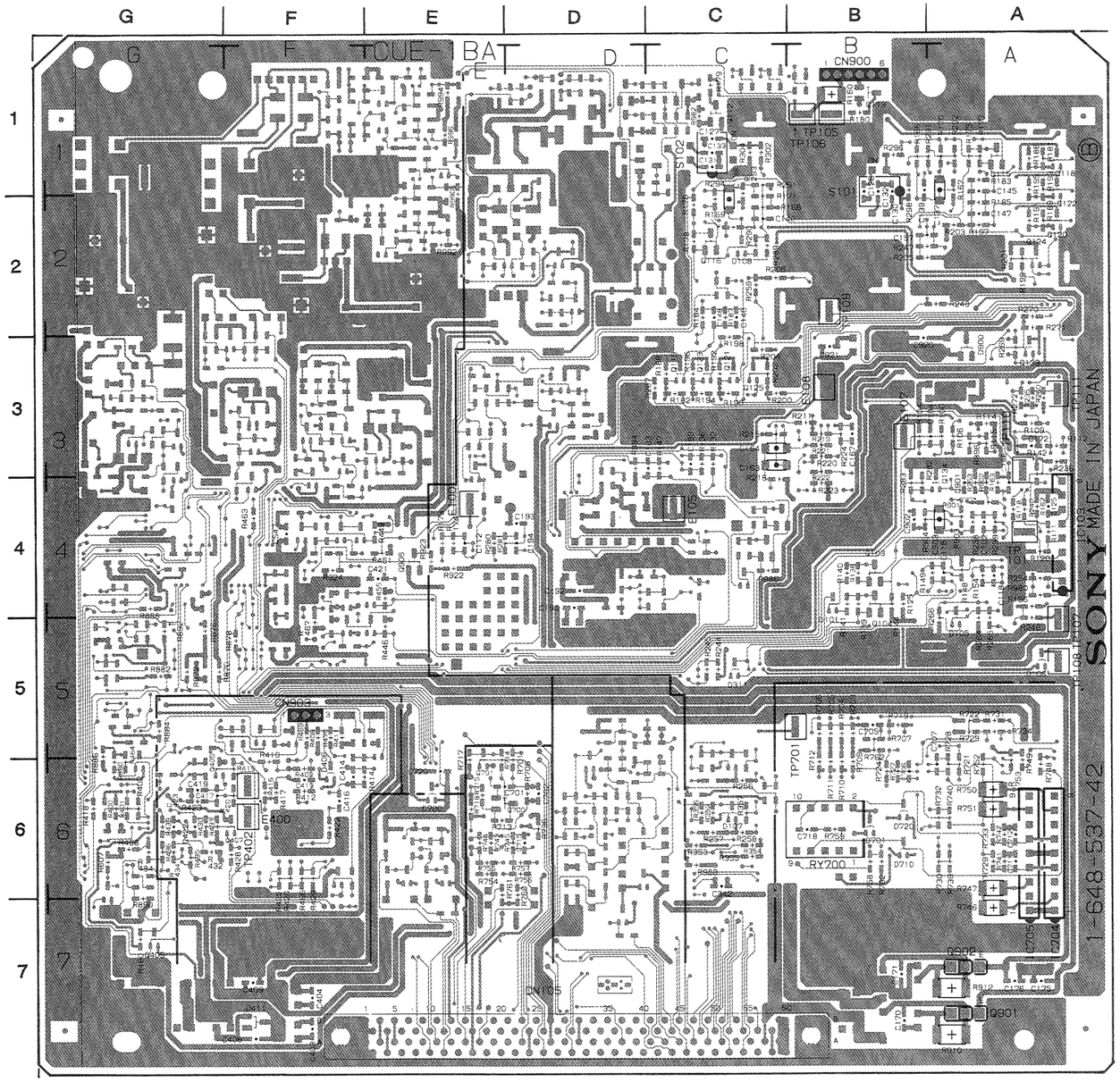
CUE-1BA(1-648-537-42)

CN105	D-7	✱Q123	C-3
CN900	B-1	✱Q124	A-2
CN903	F-5	✱Q125	C-3
		✱Q133	A-3
✱D101	B-4	Q404	F-6
✱D105	A-5	✱Q405	F-6
✱D106	A-5	✱Q407	F-6
✱D107	C-6	Q408	F-5
✱D108	C-2	✱Q409	G-7
✱D311	C-5	Q410	E-4
D400	F-5	Q411	F-4
D401	E-4	Q423	F-5
✱D406	F-6	Q424	F-4
D407	F-4	✱Q700	E-6
✱D411	F-7	✱Q701	E-6
✱D700	E-6	Q702	B-6
✱D701	B-6	Q901	A-7
✱D710	B-6	Q902	A-7
✱D720	B-6	Q903	B-3
✱D900	A-3	Q904	B-3
		Q905	E-4
E100	E-4	✱Q906	E-4
E105	C-4		
E107	B-3	RV102	A-5
E108	B-3	RV106	B-1
E400	F-6	RV107	C-1
		RV108	A-1
IC101	A-3	RV109	A-1
IC103	A-4	RV110	C-2
IC105	A-4	RV111	C-2
IC106	E-4	RV114	C-2
IC108	A-4	RV120	A-3
IC109	A-4	RV122	A-4
IC110	A-2	RV200	B-4
IC111	C-2	RV400	F-6
IC112	C-3	RV401	F-6
IC113	B-3	RV700	B-5
IC116	A-3	RV901	A-4
IC117	A-5		
IC118	D-4	RY700	B-6
IC119	D-4		
IC320	C-5	S101	B-1
IC322	C-6	S102	C-1
IC324	C-6		
IC401	F-7	SL1	A-1
IC402	F-7	SL100	A-2
IC403	G-6	SL701	B-6
IC404	F-6	SL702	B-6
IC405	F-6	SL703	B-5
IC406	G-6		
IC407	G-6	TH100	A-3
IC500	G-6		
IC506	E-6	TP105	B-1
IC510	F-4	TP106	B-1
IC700	B-5	TP107	A-5
IC701	E-6	TP108	A-5
IC702	B-6	TP109	B-2
IC703	E-6	TP110	A-4
IC704	A-7	TP111	A-3
IC705	A-7	TP402	F-6
IC706	A-6	TP701	B-5
PS101	B-7		
PS102	B-7		

✱Q103	B-4
✱Q104	B-4
✱Q112	C-1
✱Q113	B-1
✱Q115	A-1
✱Q116	C-2
✱Q118	A-1
✱Q119	C-3
✱Q120	A-2
✱Q121	C-3
✱Q122	A-1

✱ : B SIDE

LOT NO. E-7



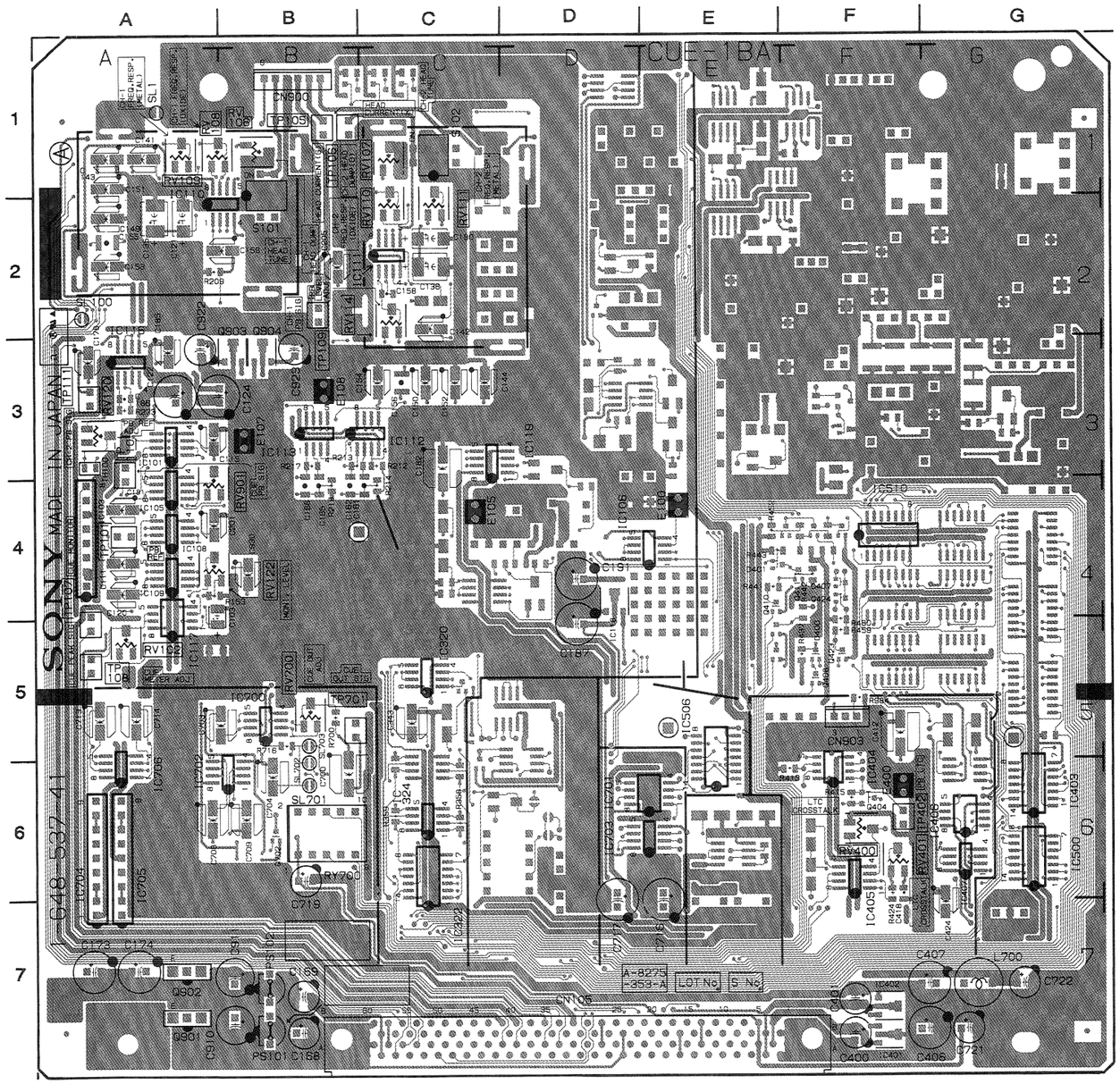
CUE-1BA BOARD -B SIDE-

1-648-537-42 (LOT No. 403 - 509)

DVW-A510(J)	; CUE-1BA MCB
DVW-A510(UC)	; CUE-1BA MCB
DVW-A510P(EK)	; CUE-1BAP MCB
DVW-CA510(J)	; CUE-1BA MCB
DVW-CA510(UC)	; CUE-1BA MCB
DVW-CA510P(EK)	; CUE-1BAP MCB

CUE-1BA ; CUE/LTC/LAU PB circuits

(Board's Lot No. 307 through 402)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)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CUE-1BAT
SONY MADE IN JAPAN
1-648-537-41
A-8225-359-A
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CN903
IC700
IC701
IC705
IC506
IC405
IC324
SL701
RV700
RV400
PST01
Q902
Q901
C719
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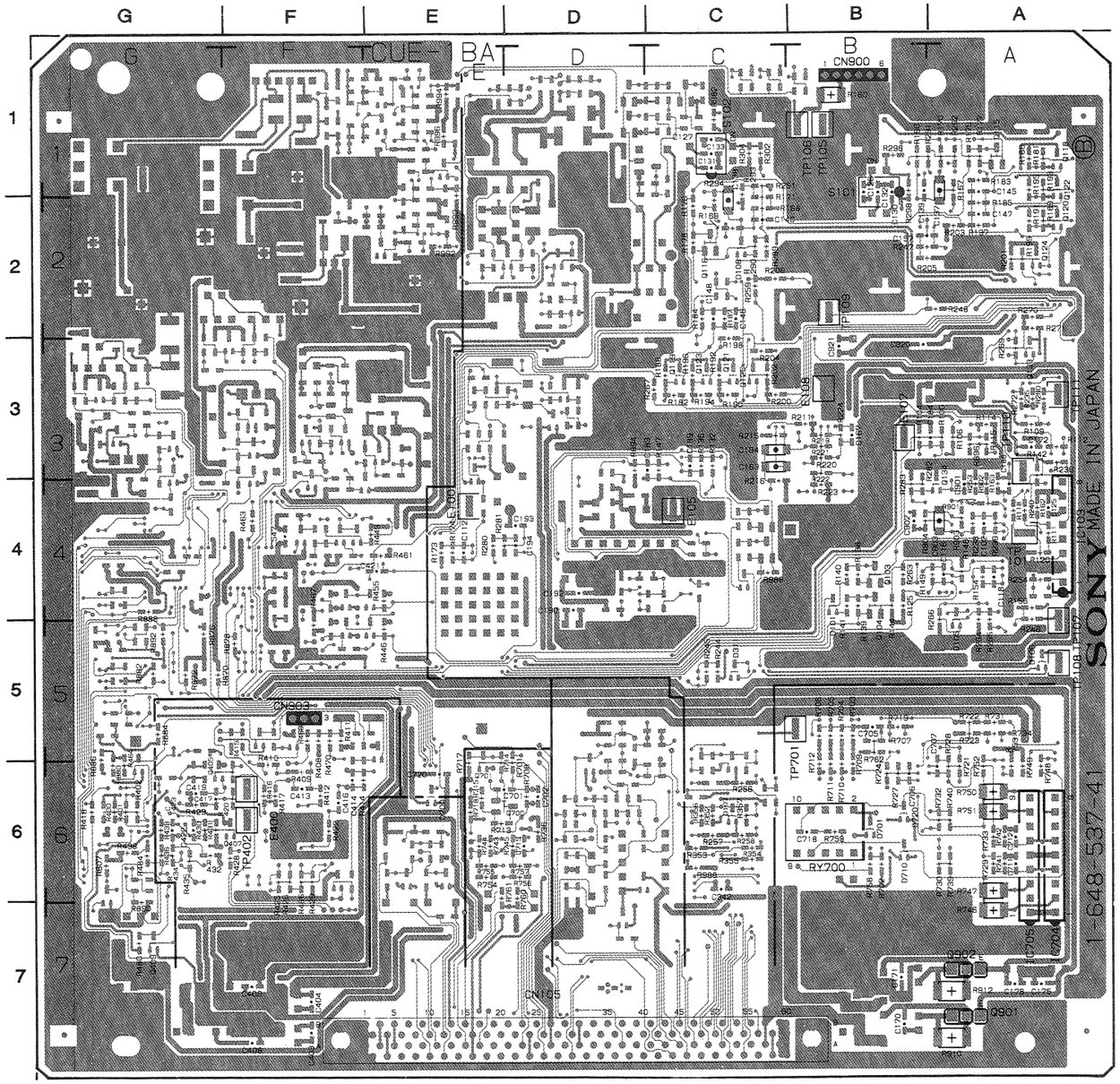
C449

CUE-1BA(1-648-537-41)

CN105	D-7	✱Q405	F-6
CN900	B-1	✱Q407	F-6
CN903	F-5	Q408	F-5
		✱Q409	G-7
✱D101	B-4	Q410	E-4
✱D105	A-5	Q411	F-4
✱D106	A-5	Q423	F-5
✱D107	C-6	Q424	F-4
✱D108	C-2	✱Q700	E-6
✱D311	C-5	✱Q701	E-6
D400	F-5	Q702	B-6
D401	E-4	Q901	A-7
D407	F-4	Q902	A-7
✱D700	E-6	Q903	B-3
✱D701	B-6	Q904	B-3
✱D710	B-6		
✱D720	B-6	RV102	A-5
		RV106	B-1
E100	E-4	RV107	C-1
E105	C-4	RV108	A-1
E107	B-3	RV109	A-1
E108	B-3	RV110	C-2
E400	F-6	RV111	C-2
		RV114	C-2
IC101	A-3	RV120	A-3
IC103	A-4	RV122	A-4
IC105	A-4	RV400	F-6
IC106	E-4	RV401	F-6
IC108	A-4	RV700	B-5
IC109	A-4	RV901	A-4
IC110	A-2		
IC111	C-2	RY700	B-6
IC112	C-3		
IC113	B-3	S101	B-1
IC116	A-3	S102	C-1
IC117	A-5		
IC118	D-4	SL1	A-1
IC119	D-4	SL100	A-2
IC320	C-5	SL701	B-6
IC322	C-6	SL702	B-6
IC324	C-6	SL703	B-5
IC401	F-7		
IC402	F-7	TH100	A-3
IC403	G-6		
IC404	F-6	TP105	B-1
IC405	F-6	TP106	B-1
IC406	G-6	TP107	A-5
IC407	G-6	TP108	A-5
IC500	G-6	TP109	B-2
IC506	E-6	TP110	A-4
IC510	F-4	TP111	A-3
IC700	B-5	TP402	F-6
IC701	E-6	TP701	B-5
IC702	B-6		
IC703	E-6		
IC704	A-7		
IC705	A-7		
IC706	A-6		
PS101	B-7		
PS102	B-7		
✱Q103	B-4		
✱Q104	B-4		
✱Q115	A-1		
✱Q116	C-2		
✱Q118	A-1		
✱Q119	C-3		
✱Q120	A-2		
✱Q121	C-3		
✱Q122	A-1		
✱Q123	C-3		
✱Q124	A-2		
✱Q125	C-3		
✱Q133	A-3		
Q404	F-6		

✱ : B SIDE

LOT NO. E-7



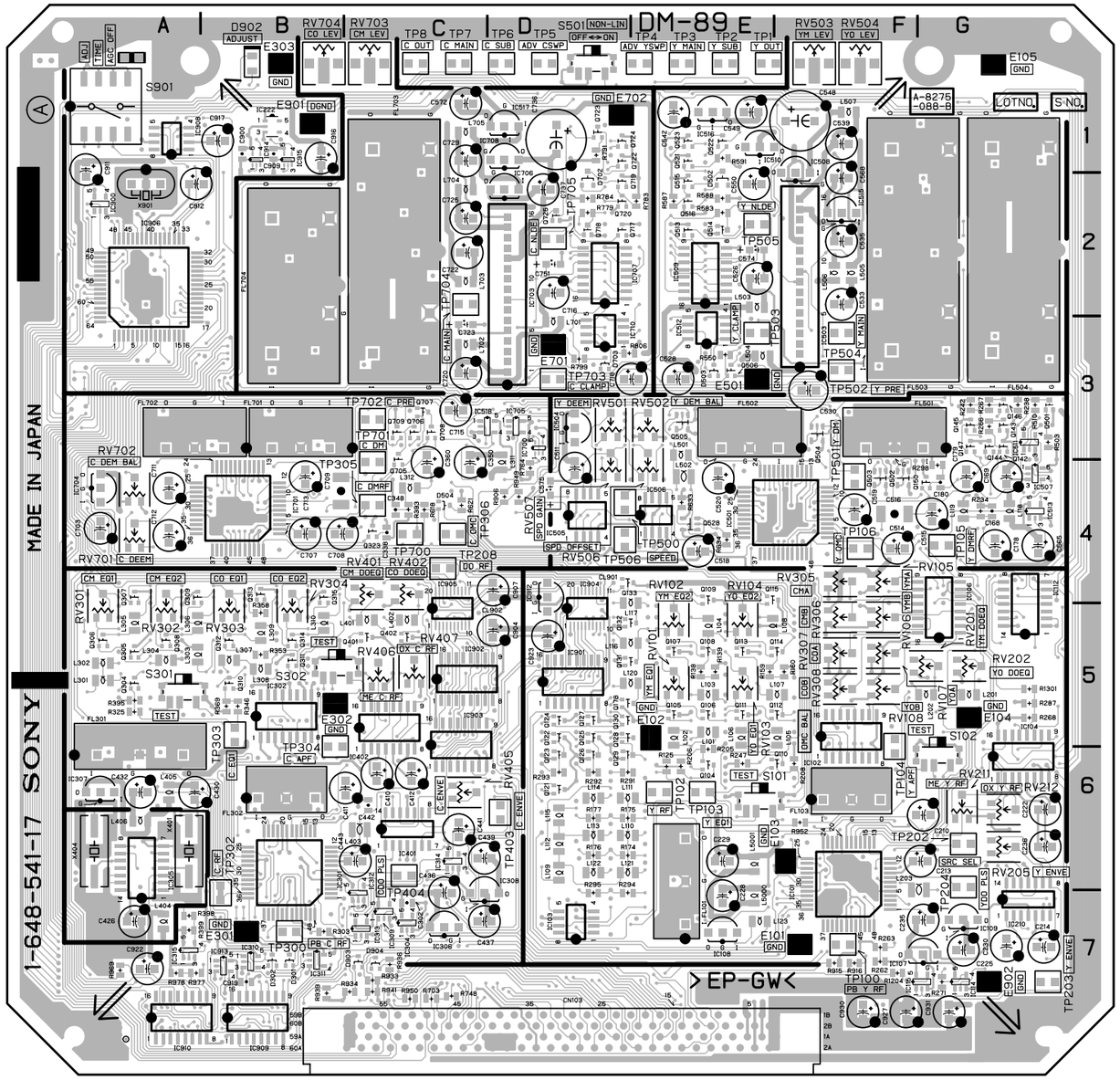
CUE-1BA BOARD -B SIDE-

1-648-537-41 (LOT No. 307 - 402)

DVW-A510(J) ; CUE-1BA MCB
DVW-A510(UC) ; CUE-1BA MCB
DVW-A510P(EK) ; CUE-1BAP MCB
DVW-CA510(UC) ; CUE-1BA MCB
DVW-CA510P(EK) ; CUE-1BAP MCB

DM-89 ; RF demodulator for Betacam PB

(Board's Lot No. 803 and higher)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



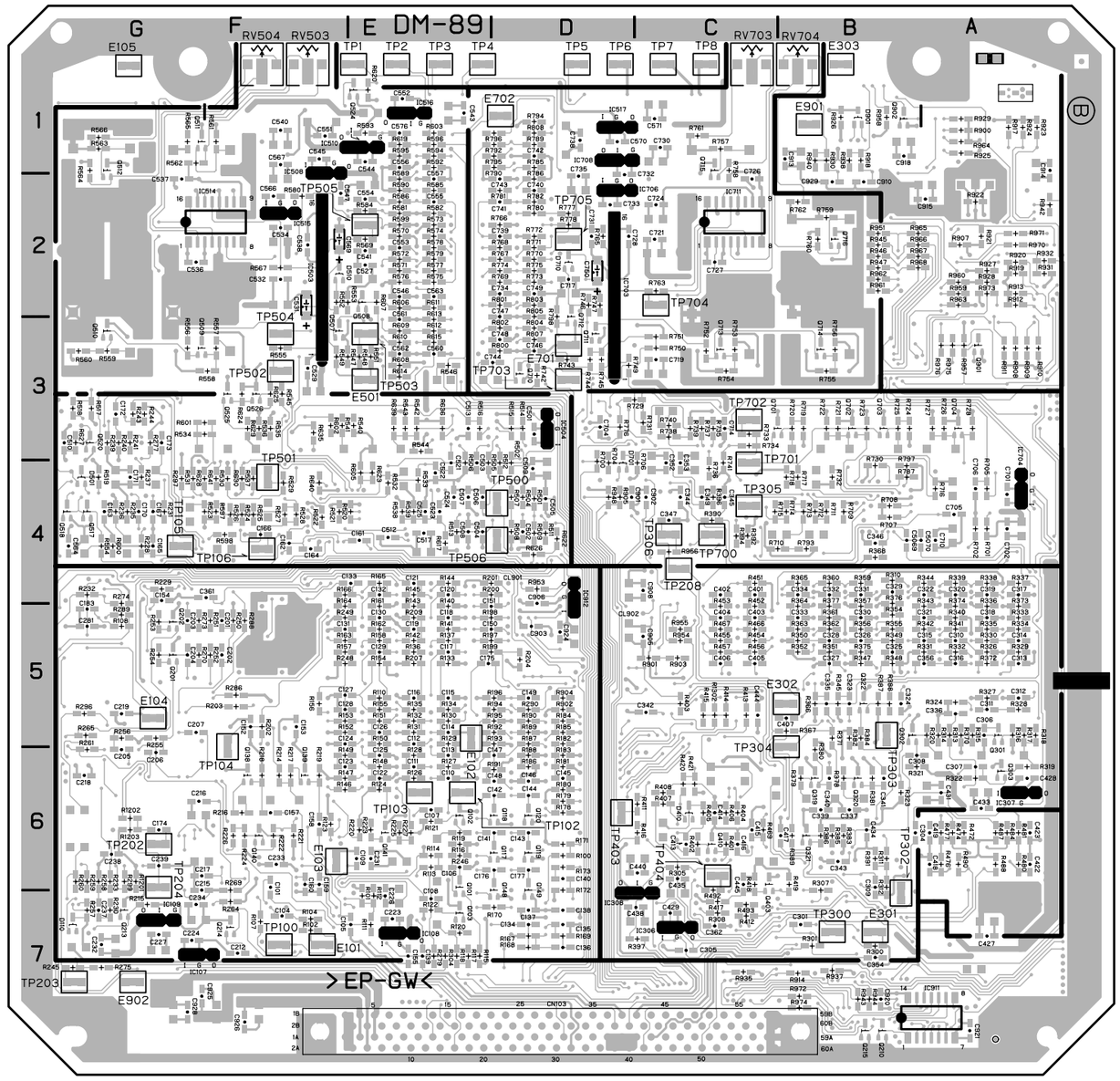
DM-89 BOARD -A SIDE-

1-648-541-17 (LOT No. 803 -)

DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A500P(UC)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(J)	; DM-89	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

DM-89 (1-648-541-17)

CN103	D7	IC518	C3	Q314	B5	RV503	F1
		IC700	D3	Q315	B4	RV504	F1
D110	*G8	IC701	B4	Q319	*B7	RV506	E4
D301	B7	IC703	D3	Q320	*B7	RV507	D4
D302	B7	IC704	A4	Q321	*B7	RV701	A4
D410	*C7	IC705	D3	Q322	*B6	RV702	A4
D501	*G4	IC706	D2	Q323	C4	RV703	C1
D502	E2	IC707	D2	Q401	C5	RV704	B1
D503	E3	IC708	D1	Q402	C5		
D504	C4	IC710	D3	Q403	*C7	S101	E6
D510	*F2	IC711	*C2	Q410	*C7	S102	G6
D701	*D4	IC900	A2	Q501	G3	S301	A5
D702	D2	IC901	D5	Q502	F4	S302	B5
D703	D3	IC902	C5	Q503	F4	S501	D1
D710	*D2	IC903	C6	Q504	F3	S901	A1
D901	*B1	IC904	D5	Q505	E3		
D902	B1	IC905	C5	Q506	E3	TP1	E1
D903	C7	IC906	A2	Q507	*F3	TP2	E1
D904	C7	IC908	A1	Q508	*E2	TP3	E1
		IC909	B7	Q509	*G3	TP4	E1
E101	F7	IC910	A7	Q510	*G3	TP5	D1
E102	E5	IC911	*B8	Q511	*G1	TP6	D1
E103	F6	IC912	D4	Q512	*G1	TP7	C1
E104	G5	IC913	B7	Q513	E2	TP8	C1
E105	G1	IC914	B1	Q514	E2	TP100	F7
E301	B7	IC915	B1	Q515	E2	TP102	E6
E302	B5			Q516	E2	TP103	E6
E303	B1	Q101	*E7	Q517	*G4	TP104	F5
E501	E3	Q102	*E7	Q518	*G4	TP105	G4
E701	D3	Q103	*E8	Q520	*G3	TP106	F4
E702	D1	Q104	E6	Q521	E1	TP202	G6
E901	B1	Q105	E5	Q522	E1	TP203	G7
E902	G7	Q106	E5	Q523	E1	TP204	G6
		Q107	E5	Q524	*E1	TP208	C4
FL101	E6	Q108	E5	Q525	*F3	TP300	B7
FL103	F6	Q109	E4	Q526	*F3	TP302	B7
FL301	A6	Q110	F6	Q528	E4	TP303	B5
FL302	B6	Q111	E5	Q701	*B3	TP304	B5
FL501	F3	Q112	F5	Q702	*B3	TP305	C4
FL502	E3	Q113	E5	Q703	*B3	TP306	C4
FL503	F2	Q114	F5	Q704	*A3	TP403	D6
FL504	G2	Q115	E4	Q705	C3	TP404	C6
FL701	B3	Q117	*D7	Q706	C3	TP500	D4
FL702	A3	Q118	*D7	Q707	C3	TP501	F4
FL703	C2	Q119	*D7	Q708	C3	TP502	F3
FL704	B2	Q120	*D7	Q709	C3	TP503	E3
		Q121	D6	Q710	*D3	TP504	F3
IC101	F6	Q122	D5	Q711	*D3	TP505	E2
IC102	F6	Q123	D6	Q712	*D2	TP506	D4
IC103	D7	Q124	D5	Q713	*C3	TP700	C4
IC104	G6	Q125	D5	Q714	*B3	TP701	C4
IC106	G5	Q126	D6	Q715	*C1	TP702	C3
IC107	G7	Q127	D5	Q716	*B2	TP703	D3
IC108	E7	Q128	D5	Q717	D2	TP704	C2
IC109	G7	Q129	D6	Q718	D2	TP705	D2
IC112	G5	Q130	D5	Q719	D2		
IC114	G7	Q131	D5	Q720	D2	X401	A6
IC115	G7	Q132	D5	Q722	D1	X404	A6
IC210	G7	Q133	D4	Q723	D1	X901	A2
IC222	B1	Q138	*F7	Q724	D1		
IC301	B6	Q139	*F7	Q725	D2	*:B SIDE	
IC302	B5	Q140	*F7	Q901	*A3		
IC304	C7	Q141	*E7	Q902	*B1		
IC305	A6	Q142	G3				
IC306	C7	Q143	G3	RV101	E5		
IC307	A6	Q144	G3	RV102	E5		
IC308	C7	Q145	G3	RV103	E5		
IC309	C7	Q146	G3	RV104	E5		
IC310	B7	Q147	G3	RV105	F4		
IC311	B7	Q148	*D7	RV106	F5		
IC312	C7	Q149	*D7	RV107	F5		
IC313	C7	Q150	G4	RV108	F5		
IC314	C6	Q178	D5	RV201	G5		
IC315	A7	Q201	*G6	RV202	G5		
IC401	C6	Q202	*G6	RV205	G6		
IC402	C6	Q210	*B8	RV211	G6		
IC501	F4	Q213	*G8	RV212	G6		
IC503	F3	Q214	*F8	RV301	A5		
IC504	D3	Q215	*B8	RV302	A5		
IC505	D4	Q301	*A6	RV303	B5		
IC506	E4	Q302	*B6	RV304	B5		
IC507	G4	Q303	*A7	RV305	F4		
IC508	F1	Q304	A5	RV306	F5		
IC509	E2	Q305	A5	RV307	F5		
IC510	E1	Q306	A5	RV308	F5		
IC511	G3	Q307	A4	RV401	C4		
IC512	E3	Q308	A5	RV402	C4		
IC513	G4	Q309	A4	RV405	C6		
IC514	*G2	Q310	B5	RV406	C5		
IC515	F2	Q311	B5	RV407	C5		
IC516	E1	Q312	B5	RV501	D3		
IC517	D1	Q313	B4	RV502	E3		



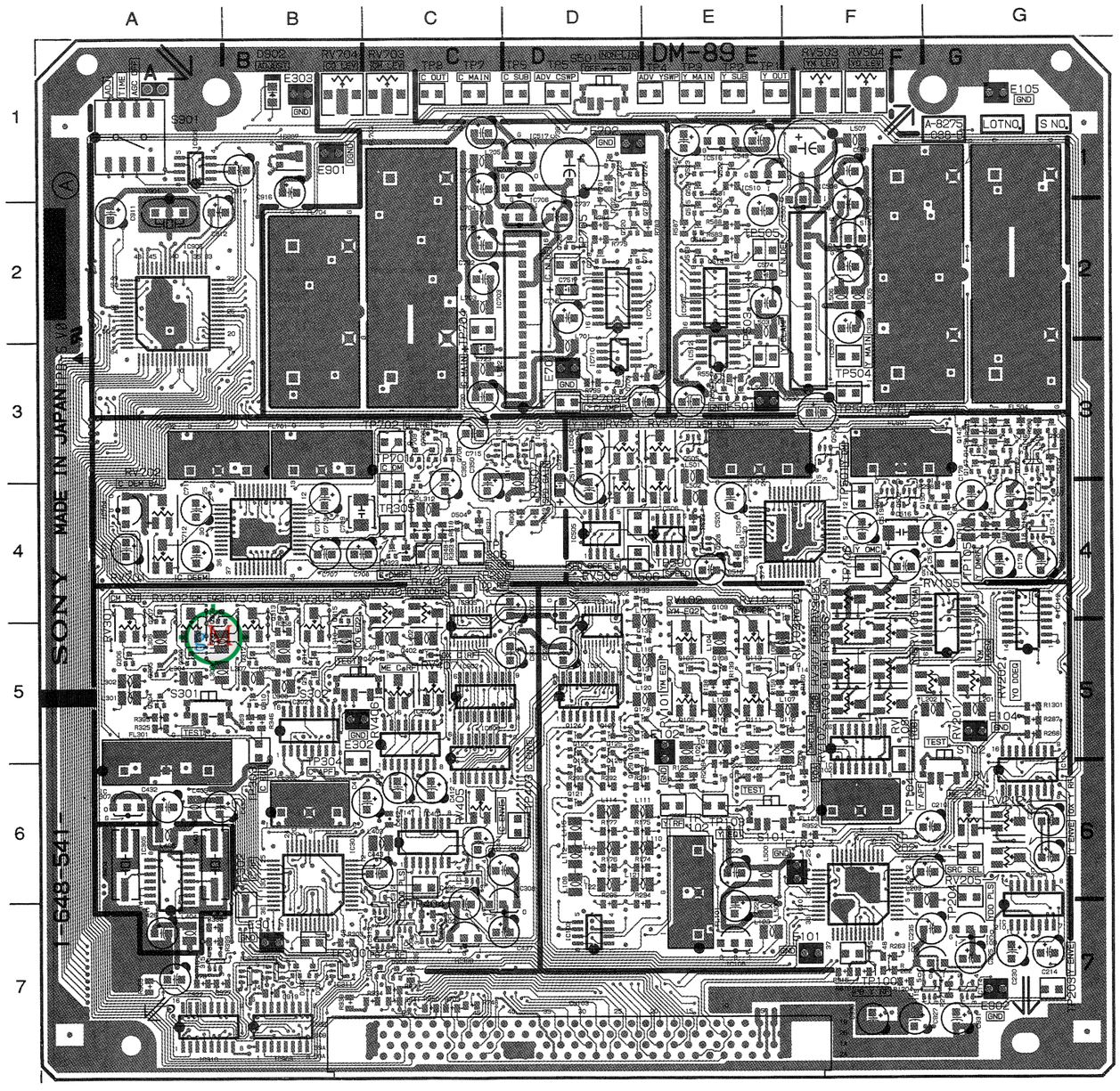
DM-89 BOARD -B SIDE-

1-648-541-17 (LOT No. 803 -)

DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A500P(UC)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(J)	; DM-89	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

DM-89 ; RF demodulator for Betacam PB

(Board's Lot No. 509 through 802)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)

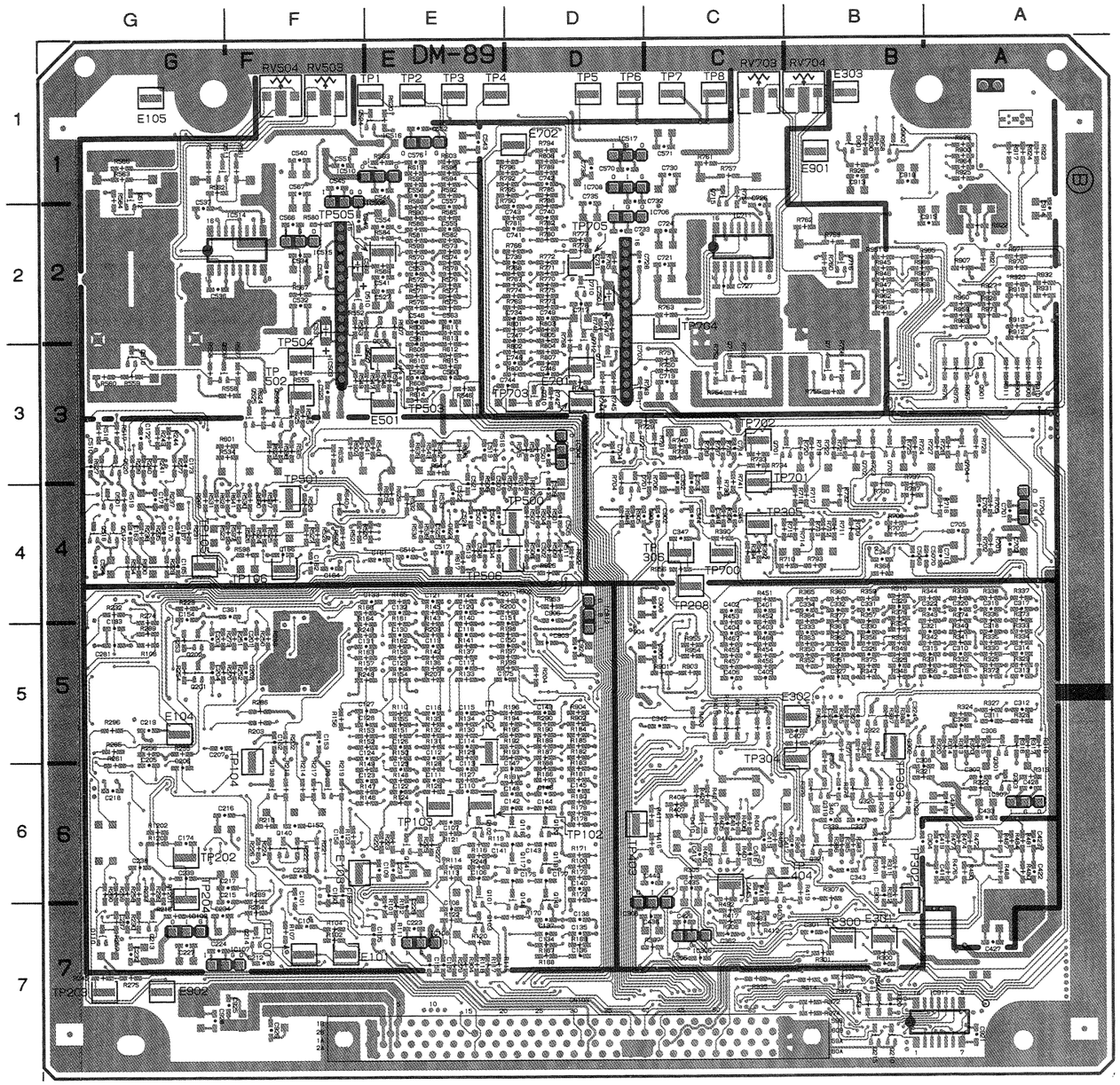


DM-89(1-648-541-15,16)

CN103	D-7	IC503	F-3	Q143	G-3	✱Q712	D-2	TP203	G-7
		IC504	D-3	Q144	G-3	✱Q713	C-3	TP204	G-6
✱D110	G-7	IC505	D-4	Q145	G-3	✱Q714	B-3	TP208	C-4
D301	B-7	IC506	E-4	Q146	G-3	✱Q715	C-1	TP300	B-7
D302	B-7	IC507	G-4	Q147	G-3	✱Q716	B-2	TP302	B-7
✱D410	C-6	IC508	F-2	✱Q148	D-6	Q717	D-2	TP303	B-5
✱D501	G-4	IC509	E-2	✱Q149	D-6	Q718	D-2	TP304	B-5
D502	E-2	IC510	E-1	Q150	G-4	Q719	D-2	TP305	C-4
D503	E-3	IC511	G-3	Q178	D-5	Q720	D-2	TP306	C-4
D504	C-4	IC512	E-3	✱Q201	G-5	✱Q721	D-3	TP403	D-6
✱D510	F-2	IC513	G-4	✱Q202	G-5	Q722	D-1	TP404	C-6
✱D701	D-4	✱IC514	G-2	✱Q210	B-7	Q723	D-1	TP500	D-4
D702	D-2	IC515	F-2	✱Q213	G-7	Q724	D-1	TP501	F-4
D703	D-3	IC516	E-1	✱Q214	F-7	Q725	D-2	TP502	F-3
✱D710	D-2	IC517	D-1	✱Q215	B-7	✱Q901	A-3	TP503	E-3
✱D901	B-1	IC518	C-3	✱Q301	A-5	✱Q902	B-1	TP504	F-3
D902	B-1	IC701	B-4	✱Q302	B-5			TP505	E-2
D903	C-7	IC703	D-3	✱Q303	A-6	RV101	E-5	TP506	D-4
D904	C-7	IC704	A-4	Q304	A-5	RV102	E-5	TP700	C-4
		IC705	D-3	Q305	A-5	RV103	E-5	TP701	C-4
E101	F-7	IC706	D-2	Q306	A-5	RV104	E-5	TP702	C-3
E102	E-5	IC707	D-2	Q307	A-4	RV105	F-4	TP703	D-3
E103	F-6	IC708	D-1	Q308	A-5	RV106	F-5	TP704	C-2
E104	G-5	IC710	D-3	Q309	A-4	RV107	F-5	TP705	D-2
E105	G-1	✱IC711	C-2	Q310	B-5	RV108	F-5		
E301	B-7	IC901	D-5	Q311	B-5	RV201	G-5	X401	A-6
E302	B-5	IC902	C-5	Q312	B-5	RV202	G-5	X404	A-6
E303	B-1	IC903	C-6	Q313	B-4	RV205	G-6	X901	A-2
E501	E-3	IC904	D-5	Q314	B-5	RV211	G-6		
E701	D-3	IC905	C-5	Q315	B-4	RV212	G-6		
E702	D-1	IC906	A-2	✱Q319	B-6	RV301	A-5		
E901	B-1	IC907	B-1	✱Q320	B-6	RV302	A-5		
E902	G-7	IC908	A-1	✱Q321	B-6	RV303	B-5		
		IC909	B-7	✱Q322	B-5	RV304	B-5		
FL101	E-7	IC910	A-7	Q323	C-4	RV305	F-4		
FL103	F-6	✱IC911	B-7	Q401	C-5	RV306	F-5		
FL301	A-6	IC912	D-4	Q402	C-5	RV307	F-5		
FL302	B-6	IC913	B-7	✱Q403	C-6	RV308	F-5		
FL501	F-3			✱Q410	C-6	RV401	C-4		
FL502	E-3	✱Q101	E-6	Q501	G-3	RV402	C-4		
FL503	F-3	✱Q102	E-6	Q502	F-4	RV405	C-6		
FL504	G-3	✱Q103	E-7	Q503	F-4	RV406	C-5		
FL701	B-3	Q104	E-6	Q504	F-3	RV407	C-5		
FL702	A-3	Q105	E-5	Q505	E-3	RV501	D-3		
FL703	C-1	Q106	E-5	Q506	E-3	RV502	E-3		
FL704	B-2	Q107	E-5	✱Q507	F-3	RV503	F-1		
		Q108	E-5	✱Q508	E-2	RV504	F-1		
IC101	F-6	Q109	E-4	✱Q509	G-3	RV506	E-4		
IC102	F-6	Q110	F-6	✱Q510	G-3	RV507	D-4		
IC103	D-7	Q111	E-5	✱Q511	G-1	RV701	A-4		
IC104	G-6	Q112	F-5	✱Q512	G-1	RV702	A-4		
IC106	G-5	Q113	E-5	Q513	E-2	RV703	C-1		
IC107	F-7	Q114	F-5	Q514	E-2	RV704	B-1		
IC108	E-7	Q115	E-4	Q515	E-2				
IC109	G-7	✱Q117	D-6	Q516	E-2	S101	E-6		
IC112	G-5	✱Q118	D-6	✱Q517	G-4	S102	G-6		
IC114	G-7	✱Q119	D-6	✱Q518	G-4	S301	A-5		
IC115	F-7	✱Q120	D-6	✱Q520	G-3	S302	B-5		
IC210	G-7	Q121	D-6	Q521	E-1	S501	D-1		
IC301	B-6	Q122	D-5	Q522	E-1	S901	A-1		
IC302	B-5	Q123	D-6	Q523	E-1				
IC304	C-7	Q124	D-5	✱Q524	E-1	TP1	E-1		
IC305	A-6	Q125	D-5	✱Q525	F-3	TP2	E-1		
IC306	C-7	Q126	D-6	✱Q526	F-3	TP3	E-1		
IC307	A-6	Q127	D-5	Q528	E-4	TP4	E-1		
IC308	C-7	Q128	D-5	✱Q701	B-3	TP5	D-1		
IC309	C-7	Q129	D-6	✱Q702	B-3	TP6	D-1		
IC310	B-7	Q130	D-5	✱Q703	B-3	TP7	C-1		
IC311	B-7	Q131	D-5	✱Q704	A-3	TP8	C-1		
IC312	C-7	Q132	D-5	Q705	C-4	TP100	F-7		
IC313	C-7	Q133	D-4	Q706	C-3	TP102	E-6		
IC314	C-6	✱Q138	F-6	Q707	C-3	TP103	E-6		
IC315	A-7	✱Q139	F-6	Q708	C-3	TP104	F-5		
IC401	C-6	✱Q140	F-6	Q709	C-3	TP105	G-4		
IC402	C-5	✱Q141	E-6	✱Q710	D-3	TP106	F-4		
IC501	F-4	Q142	G-3	✱Q711	D-3	TP202	G-6		

✱ : B SIDE

LOT NO. G-1



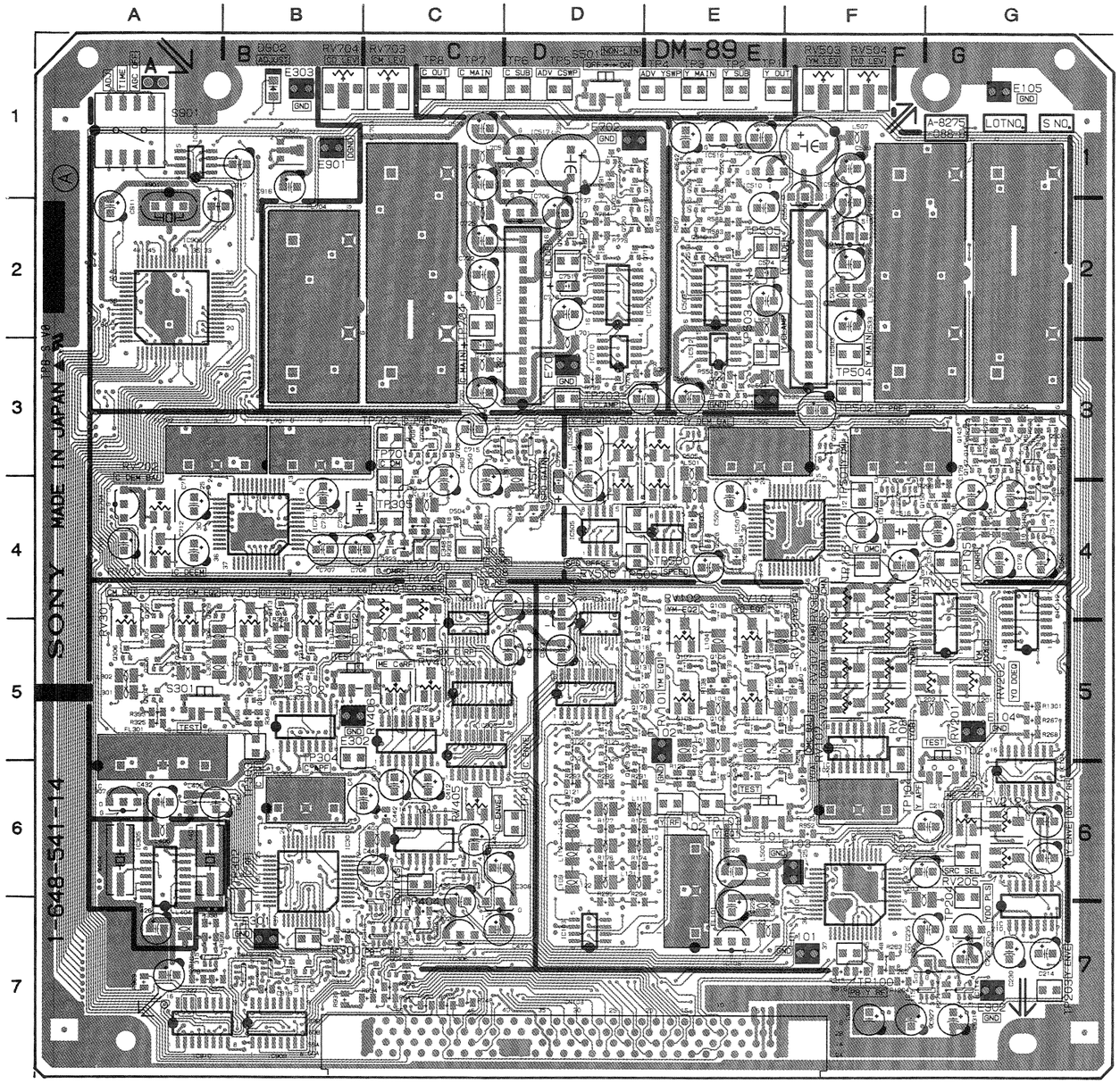
DM-89 BOARD -B SIDE-

1-648-541-15 (LOT No. 509 - 603)
1-648-541-16 (LOT No. 605 - 802)

DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A500P(UC)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(J)	; DM-89	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

DM-89 ; RF demodulator for Betacam PB

(Board's Lot No. 503 through 508)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)

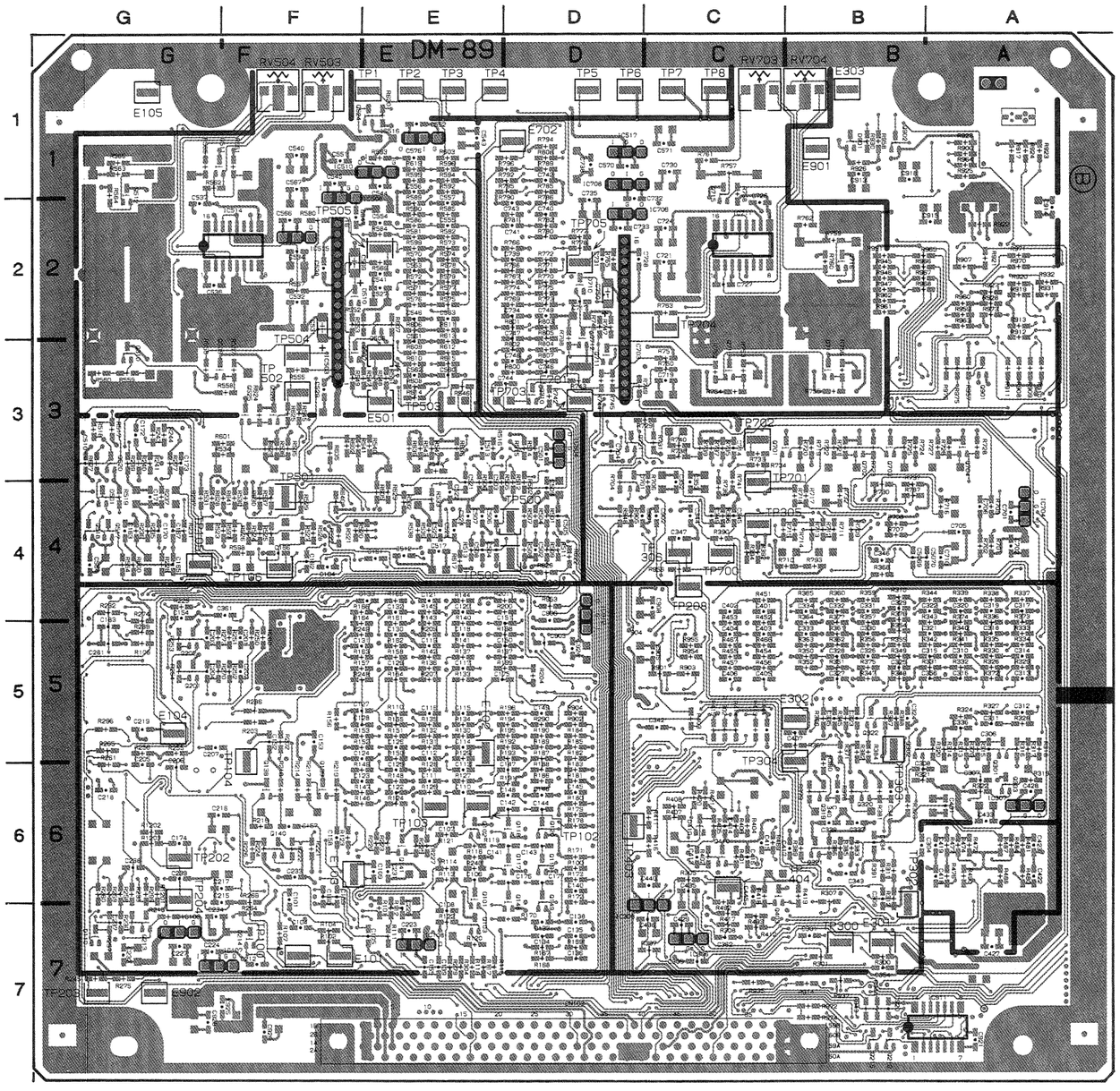


DM-89(1-648-541-14)

CN103	D-7	IC503	F-3	Q143	G-3	✱Q712	D-2	TP203	G-7
		IC504	D-3	Q144	G-3	✱Q713	C-3	TP204	G-6
✱D110	G-7	IC505	D-4	Q145	G-3	✱Q714	B-3	TP208	C-4
D301	B-7	IC506	E-4	Q146	G-3	✱Q715	C-1	TP300	B-7
D302	B-7	IC507	G-4	Q147	G-3	✱Q716	B-2	TP302	B-7
✱D410	C-6	IC508	F-2	✱Q148	D-6	Q717	D-2	TP303	B-5
✱D501	G-4	IC509	E-2	✱Q149	D-6	Q718	D-2	TP304	B-5
D502	E-2	IC510	E-1	Q150	G-4	Q719	D-2	TP305	C-4
D503	E-3	IC511	G-3	Q178	D-5	Q720	D-2	TP306	C-4
D504	C-4	IC512	E-3	✱Q201	G-5	✱Q721	D-3	TP403	D-6
✱D510	F-2	IC513	G-4	✱Q202	G-5	Q722	D-1	TP404	C-6
✱D701	D-4	✱IC514	G-2	✱Q210	B-7	Q723	D-1	TP500	D-4
D702	D-2	IC515	F-2	✱Q213	G-7	Q724	D-1	TP501	F-4
D703	D-3	IC516	E-1	✱Q214	F-7	Q725	D-2	TP502	F-3
✱D710	D-2	IC517	D-1	✱Q215	B-7	✱Q901	A-3	TP503	E-3
✱D901	B-1	IC518	C-3	✱Q301	A-5	✱Q902	B-1	TP504	F-3
D902	B-1	IC701	B-4	✱Q302	B-5			TP505	E-2
D903	C-7	IC703	D-3	✱Q303	A-6	RV101	E-5	TP506	D-4
D904	C-7	IC704	A-4	Q304	A-5	RV102	E-5	TP700	C-4
		IC705	D-3	Q305	A-5	RV103	E-5	TP701	C-4
E101	F-7	IC706	D-2	Q306	A-5	RV104	E-5	TP702	C-3
E102	E-5	IC707	D-2	Q307	A-4	RV105	F-4	TP703	D-3
E103	F-6	IC708	D-1	Q308	A-5	RV106	F-5	TP704	C-2
E104	G-5	IC710	D-3	Q309	A-4	RV107	F-5	TP705	D-2
E105	G-1	✱IC711	C-2	Q310	B-5	RV108	F-5		
E301	B-7	IC901	D-5	Q311	B-5	RV201	G-5	X401	A-6
E302	B-5	IC902	C-5	Q312	B-5	RV202	G-5	X404	A-6
E303	B-1	IC903	C-6	Q313	B-4	RV205	G-6	X901	A-2
E501	E-3	IC904	D-5	Q314	B-5	RV211	G-6		
E701	D-3	IC905	C-5	Q315	B-4	RV212	G-6		
E702	D-1	IC906	A-2	✱Q319	B-6	RV301	A-5		
E901	B-1	IC907	B-1	✱Q320	B-6	RV302	A-5		
E902	G-7	IC908	A-1	✱Q321	B-6	RV303	B-5		
		IC909	B-7	✱Q322	B-5	RV304	B-5		
FL101	E-7	IC910	A-7	Q323	C-4	RV305	F-4		
FL103	F-6	✱IC911	B-7	Q401	C-5	RV306	F-5		
FL301	A-6	IC912	D-4	Q402	C-5	RV307	F-5		
FL302	B-6	IC913	B-7	✱Q403	C-6	RV308	F-5		
FL501	F-3			✱Q410	C-6	RV401	C-4		
FL502	E-3	✱Q101	E-6	Q501	G-3	RV402	C-4		
FL503	F-3	✱Q102	E-6	Q502	F-4	RV405	C-6		
FL504	G-3	✱Q103	E-7	Q503	F-4	RV406	C-5		
FL701	B-3	Q104	E-6	Q504	F-3	RV407	C-5		
FL702	A-3	Q105	E-5	Q505	E-3	RV501	D-3		
FL703	C-1	Q106	E-5	Q506	E-3	RV502	E-3		
FL704	B-2	Q107	E-5	✱Q507	F-3	RV503	F-1		
		Q108	E-5	✱Q508	E-2	RV504	F-1		
IC101	F-6	Q109	E-4	✱Q509	G-3	RV506	E-4		
IC102	F-6	Q110	F-6	✱Q510	G-3	RV507	D-4		
IC103	D-7	Q111	E-5	✱Q511	G-1	RV701	A-4		
IC104	G-6	Q112	F-5	✱Q512	G-1	RV702	A-4		
IC106	G-5	Q113	E-5	Q513	E-2	RV703	C-1		
IC107	F-7	Q114	F-5	Q514	E-2	RV704	B-1		
IC108	E-7	Q115	E-4	Q515	E-2				
IC109	G-7	✱Q117	D-6	Q516	E-2	S101	E-6		
IC112	G-5	✱Q118	D-6	✱Q517	G-4	S102	G-6		
IC114	G-7	✱Q119	D-6	✱Q518	G-4	S301	A-5		
IC115	F-7	✱Q120	D-6	✱Q520	G-3	S302	B-5		
IC210	G-7	Q121	D-6	Q521	E-1	S501	D-1		
IC301	B-6	Q122	D-5	Q522	E-1	S901	A-1		
IC302	B-5	Q123	D-6	Q523	E-1				
IC304	C-7	Q124	D-5	✱Q524	E-1	TP1	E-1		
IC305	A-6	Q125	D-5	✱Q525	F-3	TP2	E-1		
IC306	C-7	Q126	D-6	✱Q526	F-3	TP3	E-1		
IC307	A-6	Q127	D-5	Q528	E-4	TP4	E-1		
IC308	C-7	Q128	D-5	✱Q701	B-3	TP5	D-1		
IC309	C-7	Q129	D-6	✱Q702	B-3	TP6	D-1		
IC310	B-7	Q130	D-5	✱Q703	B-3	TP7	C-1		
IC311	B-7	Q131	D-5	✱Q704	A-3	TP8	C-1		
IC312	C-7	Q132	D-5	Q705	C-4	TP100	F-7		
IC313	C-7	Q133	D-4	Q706	C-3	TP102	E-6		
IC314	C-6	✱Q138	F-6	Q707	C-3	TP103	E-6		
IC315	A-7	✱Q139	F-6	Q708	C-3	TP104	F-5		
IC401	C-6	✱Q140	F-6	Q709	C-3	TP105	G-4		
IC402	C-5	✱Q141	E-6	✱Q710	D-3	TP106	F-4		
IC501	F-4	Q142	G-3	✱Q711	D-3	TP202	G-6		

✱ : B SIDE

LOT NO. G-1



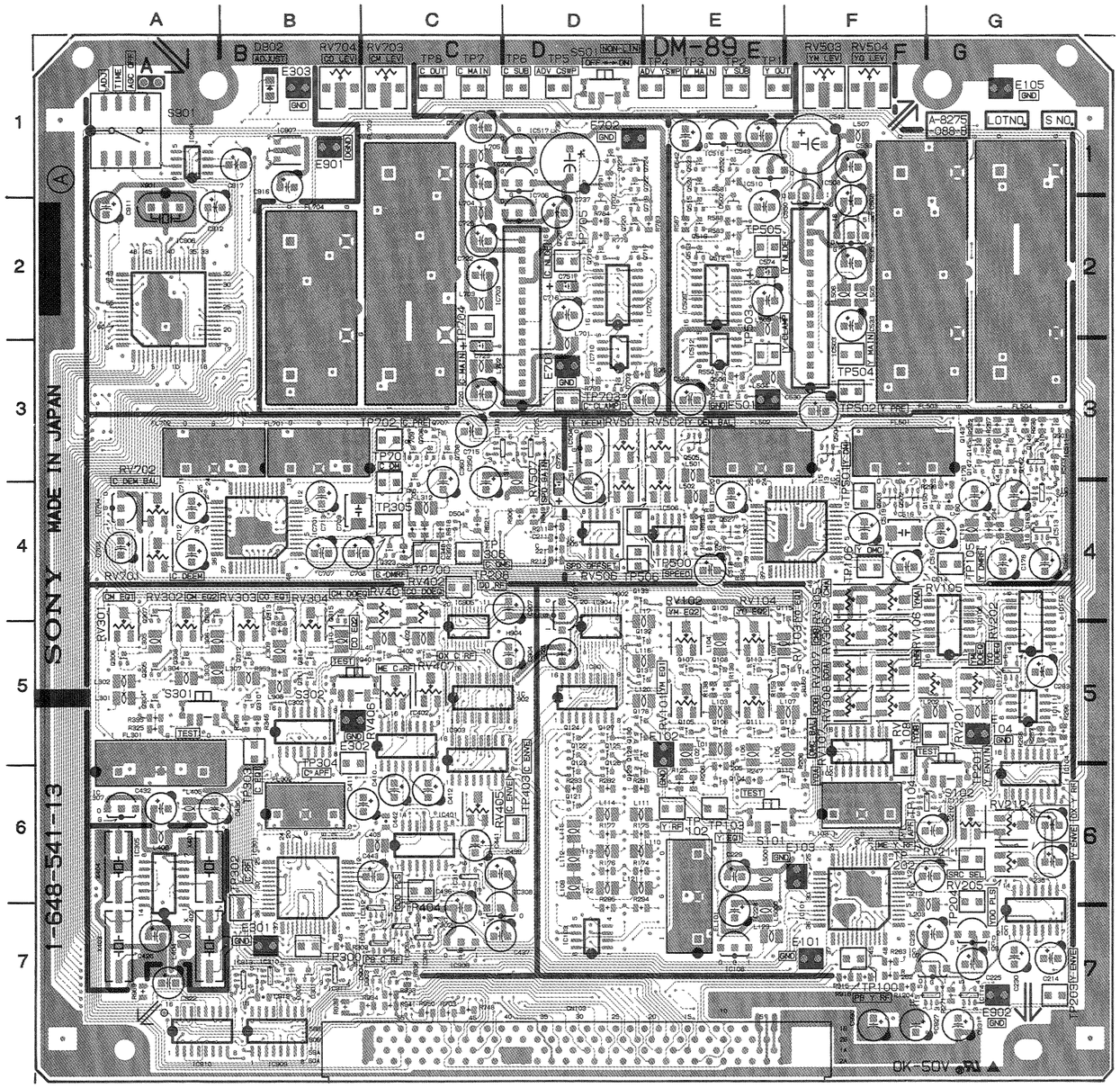
DM-89 BOARD -B SIDE-

1-648-541-14 (LOT No. 503 - 508)

DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A500P(UC)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(J)	; DM-89	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

DM-89 ; RF demodulator for Betacam PB

(Board's Lot No. 403 through 502)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



DM-89 BOARD -A SIDE-

1-648-541-13 (LOT No. 403 - 502)

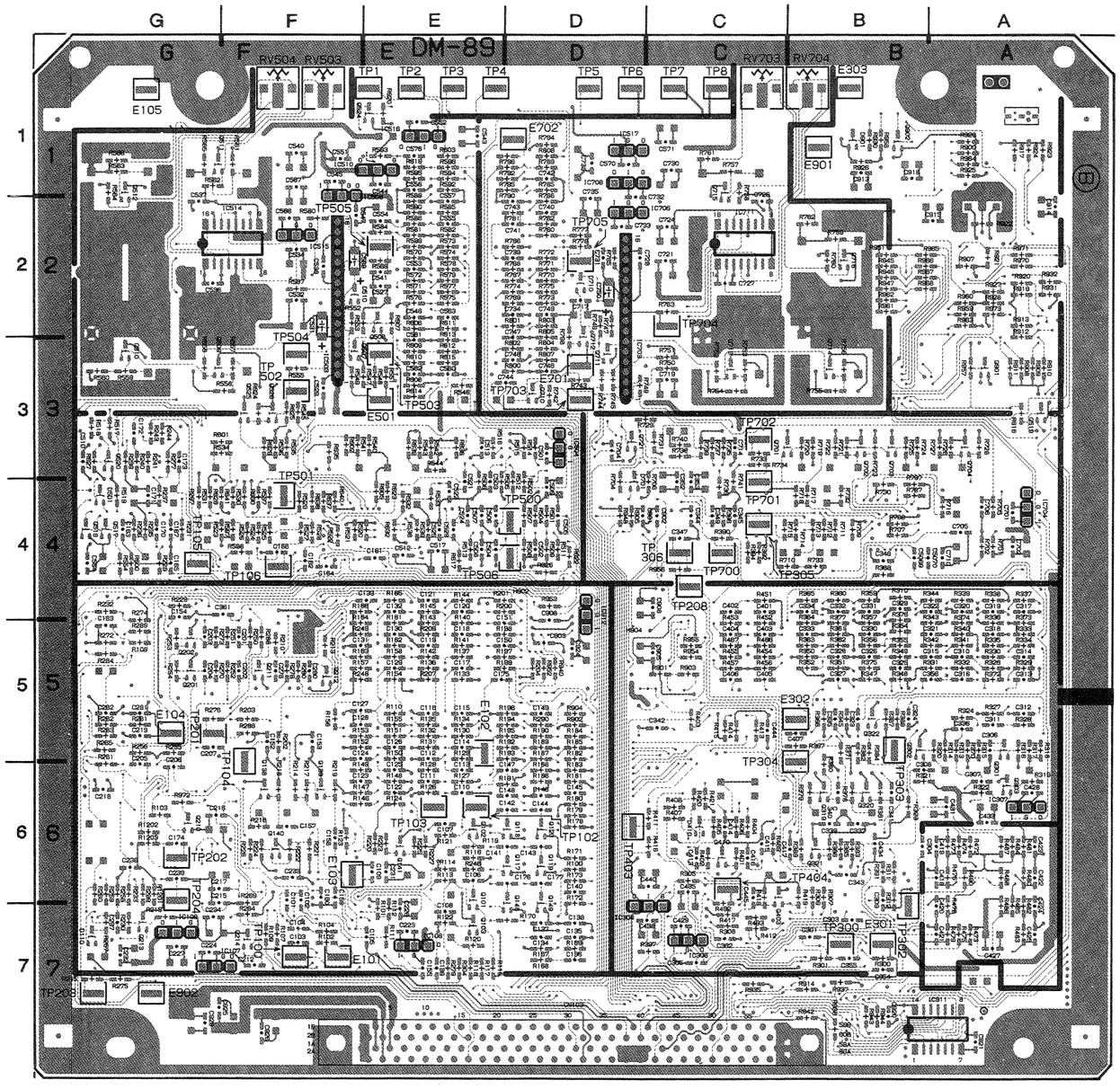
DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A500P(UC)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

DM-89(1-648-541-13)

CN103	D-7	IC402	C-5	✱Q141	E-6	Q707	C-3	TP103	E-6
		IC501	F-4	Q142	G-3	Q708	C-3	TP104	F-5
✱D110	G-7	IC503	F-3	Q143	G-3	Q709	C-3	TP105	G-4
D301	B-7	IC504	D-3	Q144	G-3	✱Q710	D-3	TP106	F-4
D302	B-7	IC505	D-4	Q145	G-3	✱Q711	D-3	TP201	G-5
✱D410	C-6	IC506	E-4	Q146	G-3	✱Q712	D-2	TP202	G-6
✱D501	G-4	IC507	G-4	Q147	G-3	✱Q713	C-3	TP203	G-7
D502	E-2	IC508	F-2	✱Q148	D-6	✱Q714	B-3	TP204	G-6
D503	E-3	IC509	E-2	✱Q149	D-6	✱Q715	C-1	TP208	C-4
D504	C-4	IC510	E-1	Q150	G-4	✱Q716	B-2	TP300	B-7
✱D510	F-2	IC511	G-3	Q178	D-5	Q717	D-2	TP302	B-7
✱D701	D-4	IC512	E-3	✱Q201	G-5	Q718	D-2	TP303	B-5
D702	D-2	IC513	G-4	✱Q202	G-5	Q719	D-2	TP304	B-5
D703	D-3	✱IC514	G-2	✱Q210	G-6	Q720	D-2	TP305	C-4
✱D710	D-2	IC515	F-2	✱Q211	F-5	✱Q721	D-3	TP306	C-4
✱D901	B-1	IC516	E-1	✱Q212	F-5	Q722	D-1	TP403	D-6
D902	B-1	IC517	D-1	✱Q213	G-7	Q723	D-1	TP404	C-6
D903	C-7	IC518	C-3	✱Q214	F-7	Q724	D-1	TP500	D-4
D904	C-7	IC701	B-4	✱Q301	A-5	Q725	D-2	TP501	F-4
		IC703	D-3	✱Q302	B-5	✱Q901	A-3	TP502	F-3
E101	F-7	IC704	A-4	✱Q303	A-6	✱Q902	B-1	TP503	E-3
E102	E-5	IC705	D-3	Q304	A-5			TP504	F-3
E103	F-6	IC706	D-2	Q305	A-5	RV101	E-5	TP505	E-2
E104	G-5	IC707	D-2	Q306	A-5	RV102	E-5	TP506	D-4
E105	G-1	IC708	D-1	Q307	A-4	RV103	E-5	TP700	C-4
E301	B-7	IC710	D-3	Q308	A-5	RV104	E-5	TP701	C-4
E302	B-5	✱IC711	C-2	Q309	A-4	RV105	F-4	TP702	C-3
E303	B-1	IC901	D-5	Q310	B-5	RV106	F-5	TP703	D-3
E501	E-3	IC902	C-5	Q311	B-5	RV107	F-5	TP704	C-2
E701	D-3	IC903	C-6	Q312	B-5	RV108	F-5	TP705	D-2
E702	D-1	IC904	D-5	Q313	B-4	RV201	G-5		
E901	B-1	IC905	C-5	Q314	B-5	RV202	G-5	X401	A-6
E902	G-7	IC906	A-2	Q315	B-4	RV205	G-6	X402	A-7
		IC907	B-1	✱Q319	B-6	RV211	G-6	X403	A-7
FL101	E-7	IC908	A-1	✱Q320	B-6	RV212	G-6	X404	A-6
FL103	F-6	IC909	B-7	✱Q321	B-6	RV301	A-5	X901	A-2
FL301	A-6	IC910	A-7	✱Q322	B-5	RV302	A-5		
FL302	B-6	✱IC911	B-7	Q323	C-4	RV303	B-5		
FL501	F-3	IC912	D-4	Q401	C-5	RV304	B-5		
FL502	E-3	IC913	B-7	Q402	C-5	RV305	F-4		
FL503	F-3			✱Q403	C-6	RV306	F-5		
FL504	G-3	✱Q101	E-6	✱Q410	C-6	RV307	F-5		
FL701	B-3	✱Q102	E-6	Q501	G-3	RV308	F-5		
FL702	A-3	✱Q103	E-7	Q502	F-4	RV401	C-4		
FL703	C-1	Q104	E-6	Q503	F-4	RV402	C-4		
FL704	B-2	Q105	E-5	Q504	F-3	RV405	C-6		
		Q106	E-5	Q505	E-3	RV406	C-5		
IC101	F-6	Q107	E-5	Q506	E-3	RV407	C-5		
IC102	F-6	Q108	E-5	✱Q507	F-3	RV501	D-3		
IC103	D-7	Q109	E-4	✱Q508	E-2	RV502	E-3		
IC104	G-6	Q110	F-6	✱Q509	G-3	RV503	F-1		
IC106	G-5	Q111	E-5	✱Q510	G-3	RV504	F-1		
IC107	F-7	Q112	F-5	✱Q511	G-1	RV506	E-4		
IC108	E-7	Q113	E-5	✱Q512	G-1	RV507	D-4		
IC109	G-7	Q114	F-5	Q513	E-2	RV701	A-4		
IC110	G-6	Q115	E-4	Q514	E-2	RV702	A-4		
IC111	G-5	✱Q117	D-6	Q515	E-2	RV703	C-1		
IC112	G-5	✱Q118	D-6	Q516	E-2	RV704	B-1		
IC113	G-5	✱Q119	D-6	✱Q517	G-4				
IC114	G-7	✱Q120	D-6	✱Q518	G-4	S101	E-6		
IC115	F-7	Q121	D-6	✱Q519	A-3	S102	G-6		
IC210	G-7	Q122	D-5	✱Q520	G-3	S301	A-5		
IC301	B-6	Q123	D-6	Q521	E-1	S302	B-5		
IC302	B-5	Q124	D-5	Q522	E-1	S501	D-1		
IC304	C-7	Q125	D-5	Q523	E-1	S901	A-1		
IC305	A-6	Q126	D-6	✱Q524	E-1				
IC306	C-7	Q127	D-5	✱Q525	F-3	TP1	E-1		
IC307	A-6	Q128	D-5	✱Q526	F-3	TP2	E-1		
IC308	C-7	Q129	D-6	Q527	E-4	TP3	E-1		
IC309	C-7	Q130	D-5	Q528	E-4	TP4	E-1		
IC310	B-7	Q131	D-5	✱Q701	B-3	TP5	D-1		
IC311	B-7	Q132	D-5	✱Q702	B-3	TP6	D-1		
IC312	C-7	Q133	D-4	✱Q703	B-3	TP7	C-1		
IC313	C-7	✱Q138	F-6	✱Q704	A-3	TP8	C-1		
IC314	C-6	✱Q139	F-6	Q705	C-4	TP100	F-7		
IC401	C-6	✱Q140	F-6	Q706	C-3	TP102	E-6		

✱ : B SIDE

LOT NO. G-1



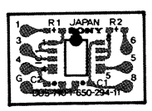
DM-89 BOARD -B SIDE-

1-648-541-13 (LOT No. 403 - 502)

DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A500P(UC)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

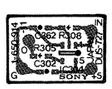
DM-89 ; RF demodulator for Betacam PB
DUS-710/727

(Board's Lot No. 305 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



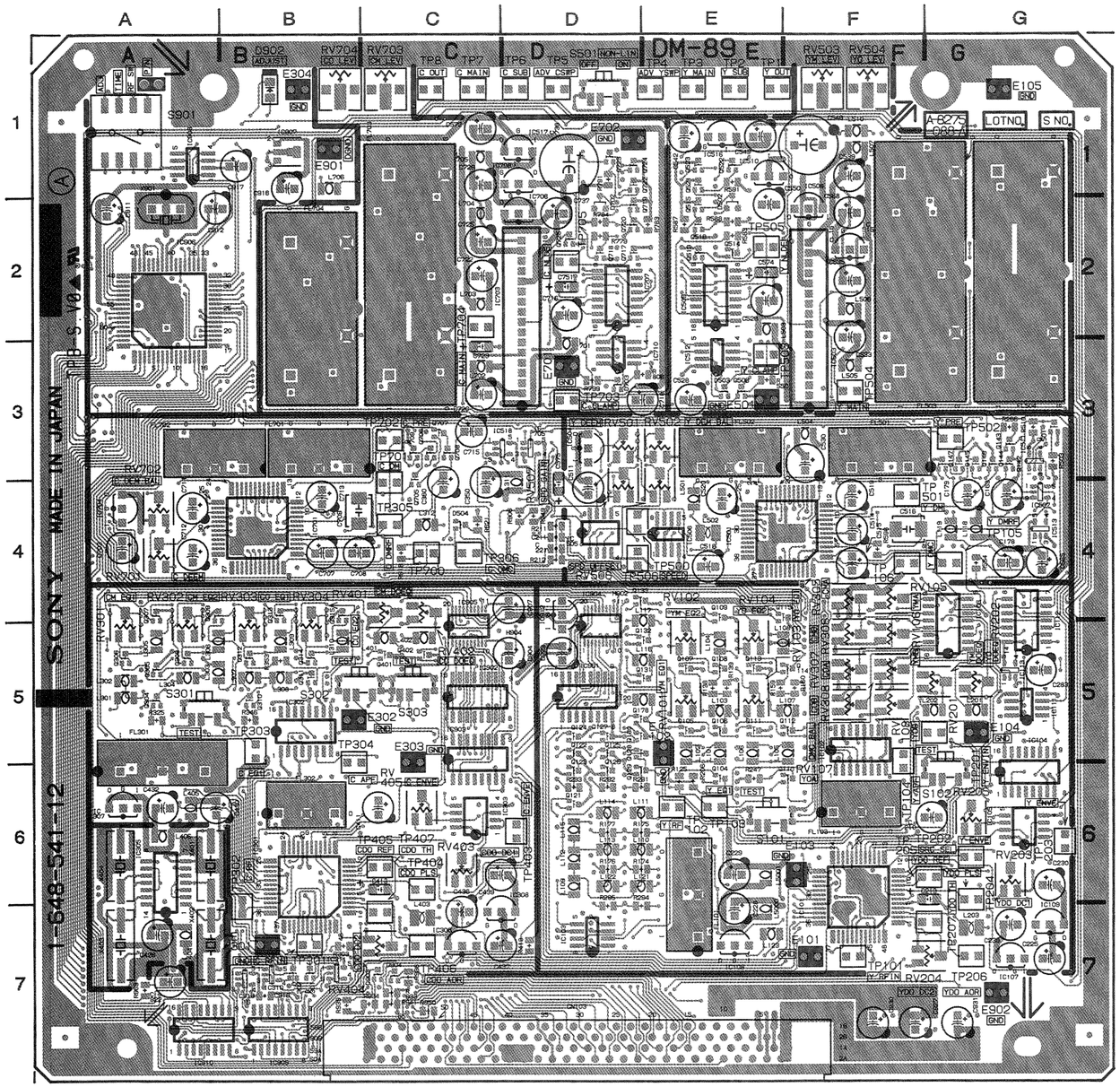
DUS-710 BOARD -A SIDE-

1-650-294-11



DUS-727 BOARD -A SIDE-

1-650-914-11



DM-89 BOARD -A SIDE-

1-648-541-12 (LOT No. 305 - 402)

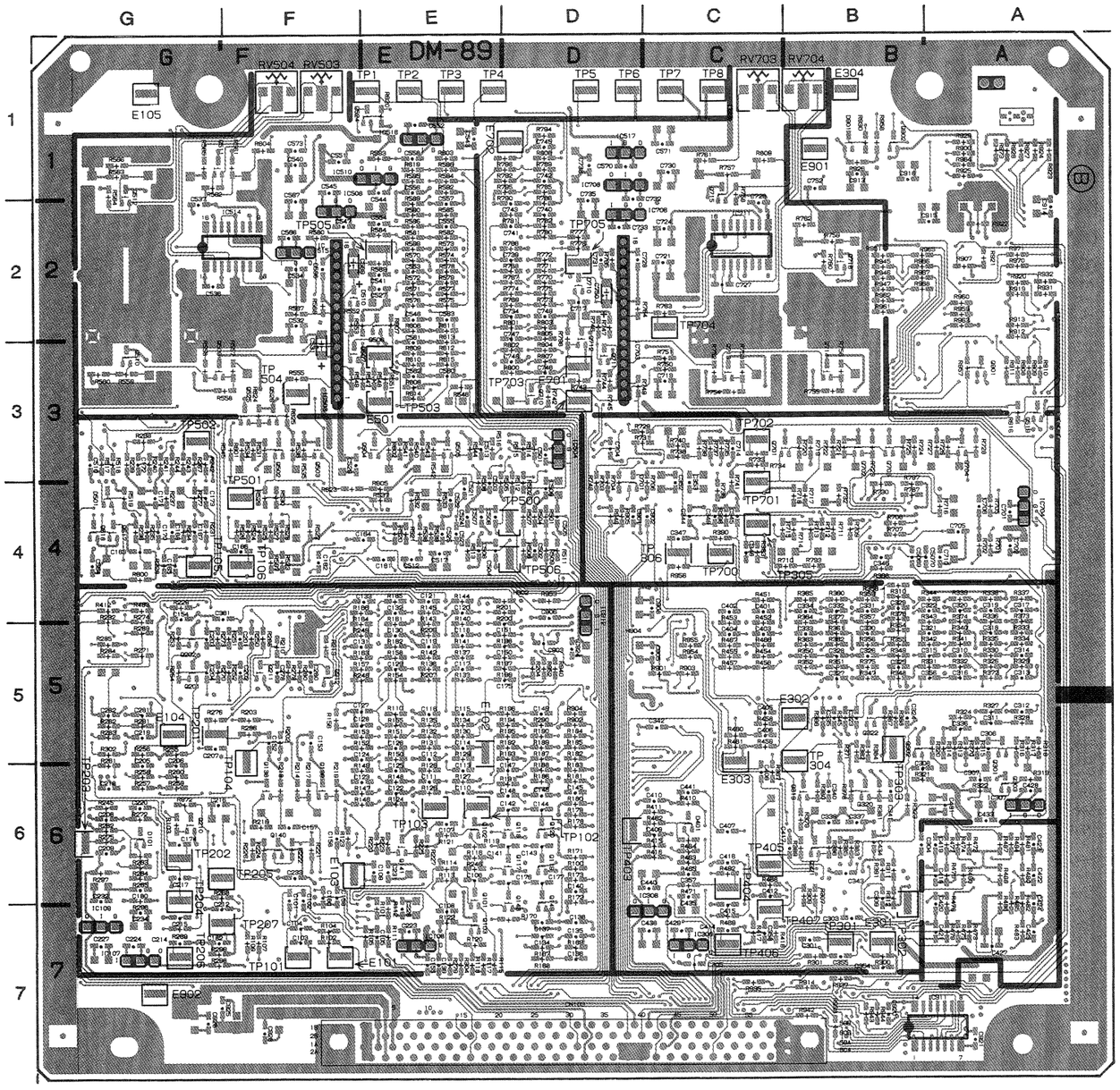
DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

DM-89(1-648-541-12)

CN103	D-7	IC509	E-2	✱Q149	D-6	Q725	D-2	TP403	D-6
		IC510	E-1	Q178	D-5	✱Q901	A-3	TP404	C-6
✱D101	G-6	IC511	G-3	✱Q201	G-5	✱Q902	B-1	TP405	C-6
D301	B-7	IC512	E-3	✱Q202	G-5			TP406	C-7
D302	B-7	IC513	G-4	✱Q210	G-6	RV101	E-5	TP407	C-7
✱D401	C-6	✱IC514	G-2	✱Q211	F-5	RV102	E-5	TP500	D-4
✱D501	G-4	IC515	F-2	✱Q212	F-5	RV103	E-5	TP501	F-4
D502	E-2	IC516	E-1	✱Q301	A-5	RV104	E-5	TP502	G-3
D503	E-3	IC517	D-1	✱Q302	B-5	RV105	F-4	TP503	E-3
D504	C-4	IC518	C-3	✱Q303	A-6	RV106	F-5	TP504	F-3
✱D510	F-2	IC701	B-4	Q304	A-5	RV107	F-5	TP505	E-2
✱D701	D-4	IC703	D-3	Q305	A-5	RV108	F-5	TP506	D-4
D702	D-2	IC704	A-4	Q306	A-5	RV201	G-5	TP700	C-4
D703	D-3	IC705	D-3	Q307	A-4	RV202	G-5	TP701	C-4
✱D710	D-2	IC706	D-2	Q308	A-5	RV203	G-6	TP702	C-3
✱D901	B-1	IC707	D-2	Q309	A-4	RV204	G-7	TP703	D-3
D902	B-1	IC708	D-1	Q310	B-5	RV205	G-6	TP704	C-2
D903	C-7	IC710	D-3	Q311	B-5	RV301	A-5	TP705	D-2
D904	C-7	✱IC711	C-2	Q312	B-5	RV302	A-5		
		IC901	D-5	Q313	B-4	RV303	B-5	X401	A-6
E101	F-7	IC902	C-5	Q314	B-5	RV304	B-5	X402	A-7
E102	E-5	IC903	C-6	Q315	B-4	RV305	F-4	X403	A-7
E103	F-6	IC904	D-5	✱Q319	B-6	RV306	F-5	X404	A-6
E104	G-5	IC905	C-5	✱Q320	B-6	RV307	F-5	X901	A-2
E105	G-1	IC906	A-2	✱Q321	B-6	RV308	F-5		
E301	B-7	IC907	B-1	✱Q322	B-5	RV401	C-4		
E302	B-5	IC908	A-1	Q401	C-5	RV402	C-4		
E303	C-5	IC909	B-7	Q402	C-5	RV403	C-6		
E304	B-1	IC910	A-7	Q501	G-3	RV404	C-7		
E501	E-3	✱IC911	B-7	✱Q502	F-3	RV405	C-6		
E701	D-3	IC912	D-4	✱Q503	F-3	RV501	D-3		
E702	D-1	IC913	B-7	✱Q504	E-3	RV502	E-3		
E901	B-1			✱Q505	E-3	RV503	F-1		
E902	G-7	✱Q101	E-6	Q506	E-3	RV504	F-1		
		✱Q102	E-6	✱Q507	F-3	RV506	E-4		
FL101	E-7	✱Q103	E-7	✱Q508	E-2	RV507	D-4		
FL103	F-6	Q104	E-6	✱Q509	G-3	RV701	A-4		
FL301	A-6	Q105	E-5	✱Q510	G-3	RV702	A-4		
FL302	B-6	Q106	E-5	✱Q511	G-1	RV703	C-1		
FL501	F-3	Q107	E-5	✱Q512	G-1	RV704	B-1		
FL502	E-3	Q108	E-5	Q513	E-2				
FL503	F-3	Q109	E-4	Q514	E-2	S101	E-6		
FL504	G-3	Q110	F-6	Q515	E-2	S102	G-6		
FL701	B-3	Q111	E-5	Q516	E-2	S301	A-5		
FL702	A-3	Q112	F-5	✱Q517	G-4	S302	B-5		
FL703	C-1	Q113	E-5	✱Q518	G-4	S303	C-5		
FL704	B-2	Q114	F-5	✱Q519	A-3	S501	D-1		
		Q115	E-4	Q521	E-1	S901	A-1		
IC101	F-6	✱Q117	D-6	Q522	E-1				
IC102	F-6	✱Q118	D-6	Q523	E-1	TP1	E-1		
IC103	D-7	✱Q119	D-6	✱Q524	E-1	TP2	E-1		
IC104	G-6	✱Q120	D-6	✱Q525	F-3	TP3	E-1		
IC105	G-6	Q121	D-6	✱Q526	F-3	TP4	E-1		
IC106	G-4	Q122	D-5	✱Q701	B-3	TP5	D-1		
IC107	G-7	Q123	D-6	✱Q702	B-3	TP6	D-1		
IC108	E-7	Q124	D-5	✱Q703	B-3	TP7	C-1		
IC109	G-7	Q125	D-5	✱Q704	A-3	TP8	C-1		
IC111	G-5	Q126	D-6	Q705	C-3	TP101	F-7		
IC112	G-5	Q127	D-5	Q706	C-3	TP102	E-6		
IC113	G-5	Q128	D-5	Q707	C-3	TP103	E-6		
IC301	B-6	Q129	D-6	Q708	C-3	TP104	F-5		
IC302	B-5	Q130	D-5	Q709	C-3	TP105	G-4		
IC303	C-6	Q131	D-5	✱Q710	D-3	TP106	F-4		
IC305	A-6	Q132	D-5	✱Q711	D-3	TP201	G-5		
IC306	C-7	Q133	D-4	✱Q712	D-2	TP202	G-6		
IC307	A-6	✱Q138	F-6	✱Q713	C-3	TP203	G-6		
IC308	C-7	✱Q139	F-6	✱Q714	B-3	TP204	G-6		
IC310	B-7	✱Q140	F-6	✱Q715	C-1	TP205	G-6		
IC311	B-7	✱Q141	E-6	✱Q716	B-2	TP206	G-7		
IC501	F-4	Q142	G-3	Q717	D-2	TP207	G-7		
IC503	F-3	Q143	G-3	Q718	D-2	TP301	B-7		
IC504	D-3	Q144	G-3	Q719	D-2	TP302	B-7		
IC505	D-4	Q145	G-3	Q720	D-2	TP303	B-5		
IC506	E-4	Q146	G-3	Q722	D-1	TP304	B-5		
IC507	G-4	Q147	G-3	Q723	D-1	TP305	C-4		
IC508	F-2	✱Q148	D-6	Q724	D-1	TP306	C-4		

✱ : B SIDE

LOT NO. G-1



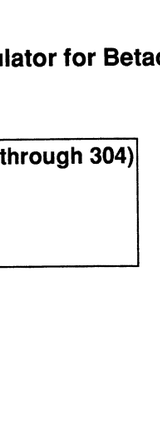
DM-89 BOARD -B SIDE-

1-648-541-12 (LOT No. 305 - 402)

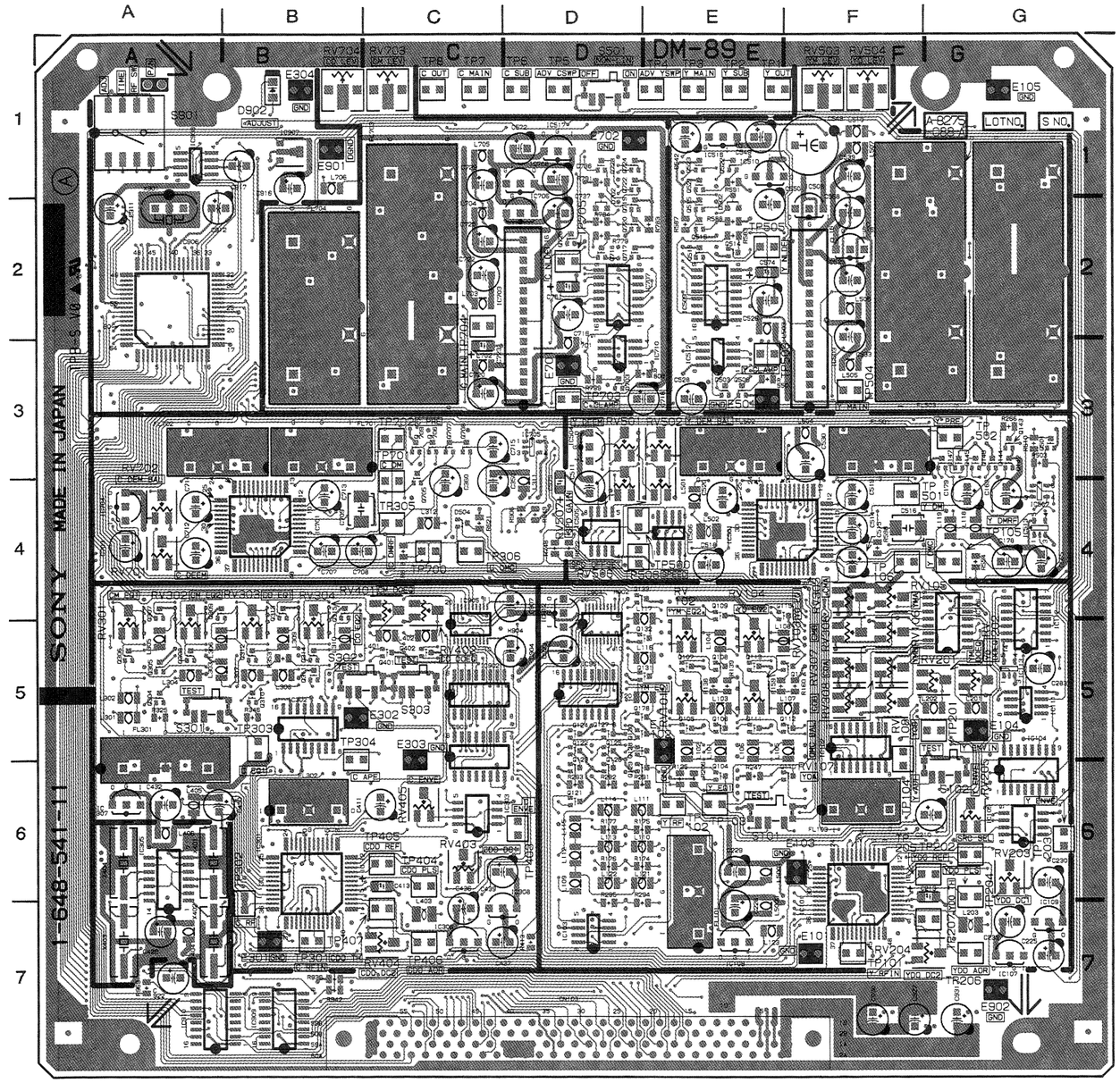
DVW-A500(J)	; DM-89	MCB
DVW-A500(UC)	; DM-89	MCB
DVW-A500P(EK)	; DM-89P	MCB
DVW-A510(J)	; DM-89	MCB
DVW-A510(UC)	; DM-89	MCB
DVW-A510P(EK)	; DM-89P	MCB
DVW-CA510(UC)	; DM-89	MCB
DVW-CA510P(EK)	; DM-89P	MCB

DM-89 ; RF demodulator for Betacam PB
DUS-710

(Board's Lot No. 302 through 304)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)



DUS-710 BOARD -A SIDE-
1-650-294-11



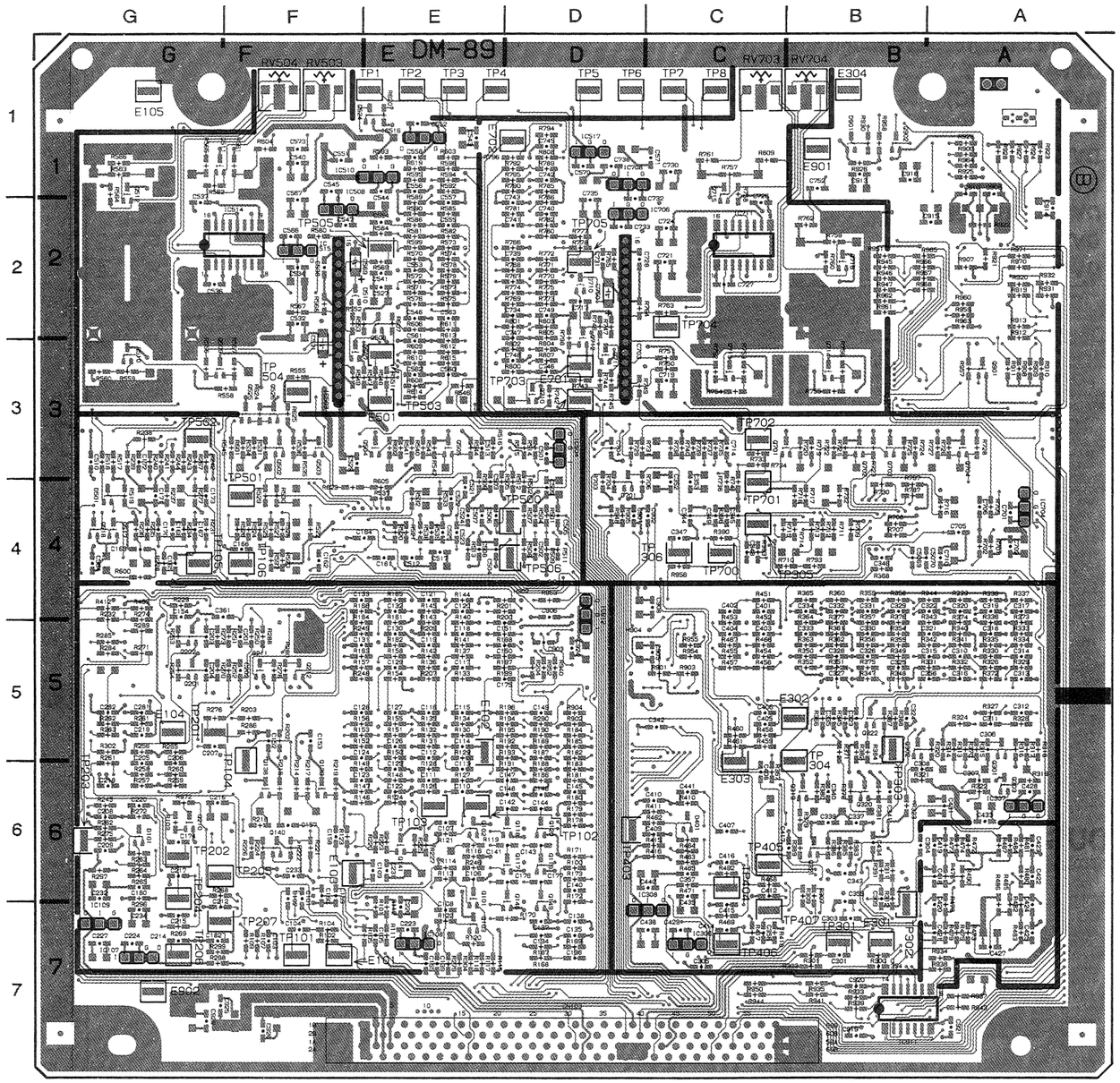
DM-89 BOARD -A SIDE-
1-648-541-11 (LOT No. 302 - 304)
DVW-A500(J) ; DM-89 MCB
DVW-A500(UC) ; DM-89 MCB
DVW-A500P(EK) ; DM-89P MCB

DM-89(1-648-541-11)

CN103	D-7	IC516	E-1	✱Q303	A-6	RV107	F-5	TP505	E-2
		IC517	D-1	Q304	A-5	RV108	F-5	TP506	D-4
✱D101	G-6	IC701	B-4	Q305	A-5	RV201	G-5	TP700	C-4
✱D401	C-6	IC703	D-3	Q306	A-5	RV202	G-5	TP701	C-4
✱D501	G-4	IC704	A-4	Q307	A-4	RV203	G-6	TP702	C-3
D502	E-2	IC705	D-3	Q308	A-5	RV204	G-7	TP703	D-3
D503	E-3	IC706	D-2	Q309	A-4	RV205	G-6	TP704	C-2
D504	C-4	IC707	D-2	Q310	B-5	RV301	A-5	TP705	D-2
✱D510	F-2	IC708	D-1	Q311	B-5	RV302	A-5		
✱D701	D-4	IC710	D-3	Q312	B-5	RV303	B-5	X401	A-6
D702	D-2	✱IC711	C-2	Q313	B-4	RV304	B-5	X402	A-7
D703	D-3	IC901	D-5	Q314	B-5	RV305	F-4	X403	A-7
✱D710	D-2	IC902	C-5	Q315	B-4	RV306	F-5	X404	A-6
✱D901	B-1	IC903	C-6	✱Q319	B-6	RV307	F-5	X901	A-2
D902	B-1	IC904	D-5	✱Q320	B-6	RV308	F-5		
		IC905	C-5	✱Q321	B-6	RV401	C-4		
E101	F-7	IC906	A-2	✱Q322	B-5	RV402	C-4		
E102	E-5	IC907	B-1	Q401	C-5	RV403	C-6		
E103	F-6	IC908	A-1	Q402	C-5	RV404	C-7		
E104	G-5	IC909	B-7	Q501	G-3	RV405	C-6		
E105	G-1	IC910	A-7	✱Q502	F-3	RV501	D-3		
E301	B-7	✱IC911	B-7	✱Q503	F-3	RV502	E-3		
E302	B-5	IC912	D-4	✱Q504	E-3	RV503	F-1		
E303	C-5			✱Q505	E-3	RV504	F-1		
E304	B-1	✱Q101	E-6	Q506	E-3	RV506	E-4		
E501	E-3	✱Q102	E-6	✱Q507	F-3	RV507	D-4		
E701	D-3	✱Q103	E-7	✱Q508	E-2	RV701	A-4		
E702	D-1	Q104	E-6	✱Q509	G-3	RV702	A-4		
E901	B-1	Q105	E-5	✱Q510	G-3	RV703	C-1		
E902	G-7	Q106	E-5	✱Q511	G-1	RV704	B-1		
		Q107	E-5	✱Q512	G-1				
FL101	E-7	Q108	E-5	Q513	E-2	S101	E-6		
FL103	F-6	Q109	E-4	Q514	E-2	S102	G-6		
FL301	A-6	Q110	F-6	Q515	E-2	S301	A-5		
FL302	B-6	Q111	E-5	Q516	E-2	S302	B-5		
FL501	F-3	Q112	F-5	✱Q517	G-4	S303	C-5		
FL502	E-3	Q113	E-5	✱Q518	G-4	S501	D-1		
FL503	F-3	Q114	F-5	Q521	E-1	S901	A-1		
FL504	G-3	Q115	E-4	Q522	E-1				
FL701	B-3	✱Q117	D-6	Q523	E-1	TP1	E-1		
FL702	A-3	✱Q118	D-6	✱Q524	E-1	TP2	E-1		
FL703	C-1	✱Q119	D-6	✱Q525	F-3	TP3	E-1		
FL704	B-2	✱Q120	D-6	✱Q526	F-3	TP4	E-1		
		Q121	D-6	✱Q701	B-3	TP5	D-1		
IC101	F-6	Q122	D-5	✱Q702	B-3	TP6	D-1		
IC102	F-6	Q123	D-6	✱Q703	B-3	TP7	C-1		
IC103	D-7	Q124	D-5	✱Q704	A-3	TP8	C-1		
IC104	G-6	Q125	D-5	Q705	C-3	TP101	F-7		
IC105	G-6	Q126	D-6	Q706	C-3	TP102	E-6		
IC106	G-5	Q127	D-5	Q707	C-3	TP103	E-6		
IC107	G-7	Q128	D-5	Q708	C-3	TP104	F-5		
IC108	E-7	Q129	D-6	Q709	C-3	TP105	G-4		
IC109	G-7	Q130	D-5	✱Q710	D-3	TP106	F-4		
IC111	G-5	Q131	D-5	✱Q711	D-3	TP201	G-5		
IC112	G-5	Q132	D-5	✱Q712	D-2	TP202	G-6		
IC113	G-5	Q133	D-4	✱Q713	C-3	TP203	G-6		
IC301	B-6	✱Q138	F-6	✱Q714	B-3	TP204	G-6		
IC302	B-5	✱Q139	F-6	✱Q715	C-1	TP205	G-6		
IC303	C-6	✱Q140	F-6	✱Q716	B-2	TP206	G-7		
IC305	A-6	✱Q141	E-6	Q717	D-2	TP207	G-7		
IC306	C-7	Q142	G-3	Q718	D-2	TP301	B-7		
IC307	A-6	Q143	G-3	Q719	D-2	TP302	B-7		
IC308	C-7	Q144	G-3	Q720	D-2	TP303	B-5		
IC501	F-4	Q145	G-3	Q722	D-1	TP304	B-5		
IC503	F-3	Q146	G-3	Q723	D-1	TP305	C-4		
IC504	D-3	Q147	G-3	Q724	D-1	TP306	C-4		
IC505	D-4	✱Q148	D-6	Q725	D-2	TP403	D-6		
IC506	E-4	✱Q149	D-6	✱Q901	A-3	TP404	C-6		
IC507	G-4	Q178	D-5	✱Q902	B-1	TP405	C-6		
IC508	F-2	✱Q201	G-5			TP406	C-7		
IC509	E-2	✱Q202	G-5	RV101	E-5	TP407	C-7		
IC510	E-1	✱Q210	G-6	RV102	E-5	TP500	D-4		
IC512	E-3	✱Q211	F-5	RV103	E-5	TP501	F-4		
IC513	G-4	✱Q212	F-5	RV104	E-5	TP502	G-3		
✱IC514	G-2	✱Q301	A-5	RV105	F-4	TP503	E-3		
IC515	F-2	✱Q302	B-5	RV106	F-5	TP504	F-3		

✱ : B SIDE

LOT NO. G-1



DM-89 BOARD -B SIDE-

1-648-541-11 (LOT No. 302 - 304)

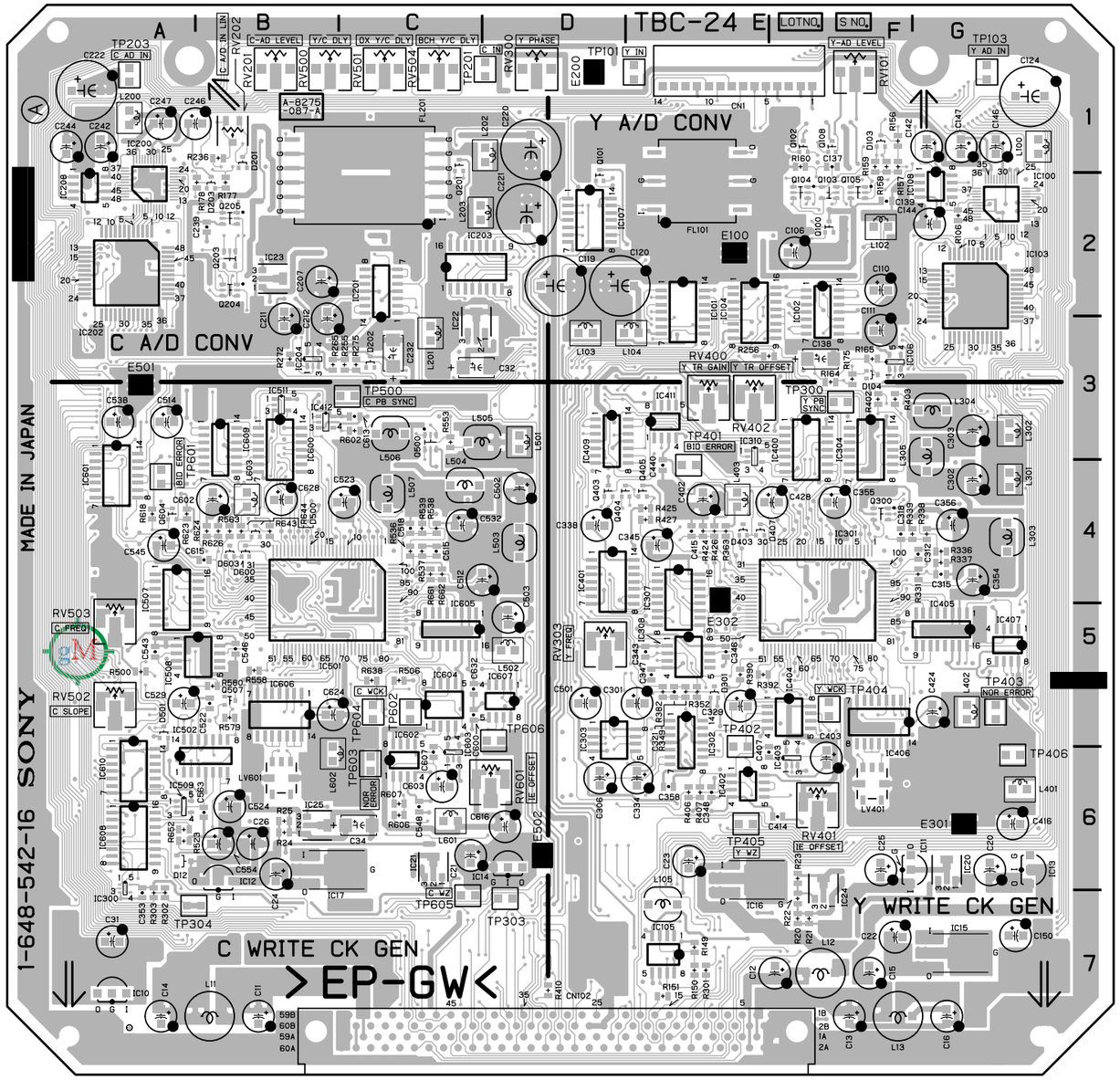
DVW-A500(J) ; DM-89 MCB

DVW-A500(UC) ; DM-89 MCB

DVW-A500P(EK) ; DM-89P MCB

TBC-24 ; TBC (A/D conversion & Write clock generate blocks)

(Board's Lot No. 803 and higher)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



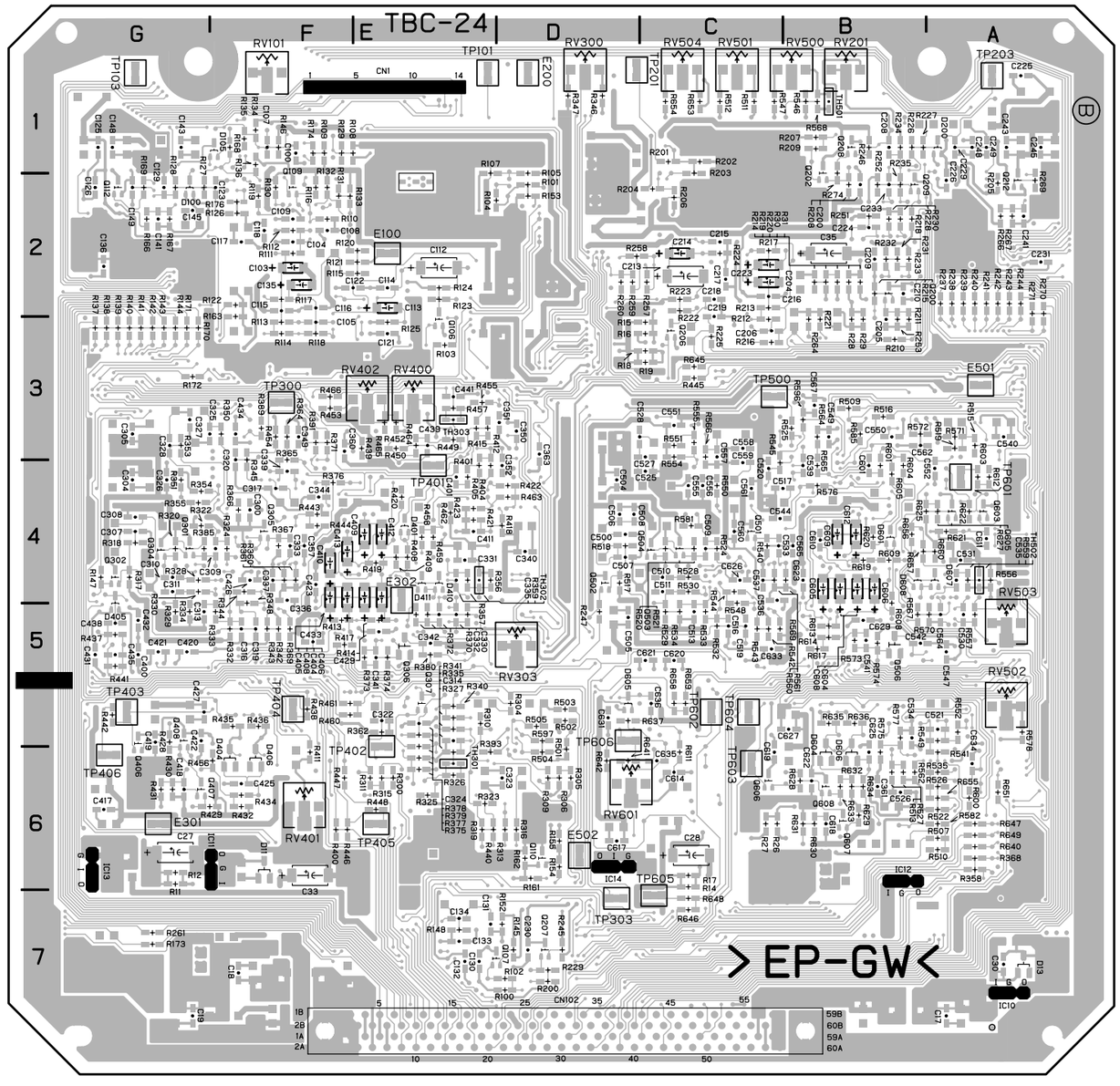
TBC-24 BOARD -A SIDE-

1-648-542-16 (LOT No. 803 -)

DVW-A500(J)	; TBC-24 MCB
DVW-A500(UC)	; TBC-24 MCB
DVW-A500P(EK)	; TBC-24P MCB
DVW-A500P(UC)	; TBC-24P MCB
DVW-A510(J)	; TBC-24 MCB
DVW-A510(UC)	; TBC-24 MCB
DVW-A510P(EK)	; TBC-24P MCB
DVW-CA510(J)	; TBC-24 MCB
DVW-CA510(UC)	; TBC-24 MCB
DVW-CA510P(EK)	; TBC-24P MCB

TBC-24 (1-648-542-16)

CN1	E1	IC501	B4	TP101	E1
CN102	D7	IC502	A6	TP103	G1
		IC507	A4	TP201	D1
D11	*F6	IC508	A5	TP203	A1
D12	A6	IC509	A6	TP300	F3
D13	*A7	IC511	B3	TP303	D7
D100	*G2	IC600	B3	TP304	A7
D103	F1	IC601	A3	TP401	E4
D104	F3	IC602	C6	TP402	E5
D105	*F1	IC603	C6	TP403	G5
D200	*A1	IC604	C5	TP404	F5
D201	B1	IC605	C5	TP405	E6
D202	C3	IC606	B5	TP406	G6
D203	B2	IC607	D5	TP500	C3
D301	E5	IC608	A6	TP601	A4
D401	*E4	IC609	B3	TP602	C5
D403	E4	IC610	A6	TP603	C6
D404	*F6			TP604	C5
D405	*G4	LV401	F6	TP605	C7
D406	*F6	LV601	B6	TP606	D5
D407	E4				
D410	*E4	Q100	F2	*:B SIDE	
D411	*E4	Q101	D2		
D500	B4	Q102	F1		
D501	A5	Q103	F2		
D600	B4	Q104	F2		
D601	*B4	Q105	F2		
D603	B4	Q106	*E3		
D604	*B6	Q107	*D7		
D605	*D5	Q108	F1		
D606	*B6	Q109	*F2		
D607	*A4	Q110	*D6		
D608	*B4	Q112	*G2		
		Q200	*B2		
E100	E2	Q201	C1		
E200	D1	Q202	*B1		
E301	G6	Q203	B2		
E302	E4	Q204	B2		
E501	A3	Q205	B2		
E502	D6	Q206	*C3		
		Q207	*D7		
FL101	E2	Q208	*B1		
FL201	C2	Q209	*B2		
		Q212	*A2		
IC10	A7	Q300	F4		
IC11	F6	Q301	*G4		
IC12	B6	Q302	*G4		
IC13	G6	Q304	*G4		
IC14	D6	Q305	*F4		
IC15	G7	Q306	*E5		
IC16	E6	Q307	*E5		
IC17	C6	Q403	D4		
IC20	G6	Q404	D4		
IC21	C6	Q405	E4		
IC22	C3	Q406	*G5		
IC23	B2	Q407	*G6		
IC24	F6	Q408	*G5		
IC25	B6	Q500	C3		
IC100	G2	Q501	*C4		
IC101	E2	Q502	*D4		
IC102	F2	Q503	*C4		
IC103	G2	Q504	*C4		
IC104	E2	Q506	*B5		
IC105	E7	Q507	B5		
IC106	F3	Q603	*A4		
IC107	D2	Q604	A4		
IC108	G2	Q605	*A4		
IC200	A2	Q606	*C6		
IC201	C2	Q607	*B6		
IC202	A2	Q608	*B6		
IC203	C2				
IC204	B3	RV101	F1		
IC208	A2	RV201	B1		
IC300	A6	RV202	B1		
IC301	F4	RV300	D1		
IC302	E5	RV303	D5		
IC303	D5	RV400	E3		
IC304	F3	RV401	F6		
IC307	E4	RV402	E3		
IC308	E5	RV500	B1		
IC310	E3	RV501	C1		
IC400	F3	RV502	A5		
IC401	D4	RV503	A5		
IC402	E6	RV504	C1		
IC403	F6	RV601	D6		
IC404	E5				
IC405	G5	TH301	*E6		
IC406	F5	TH302	*E4		
IC407	G5	TH303	*E3		
IC409	D3	TH501	*B1		
IC411	E3	TH502	*A4		
IC412	B3				



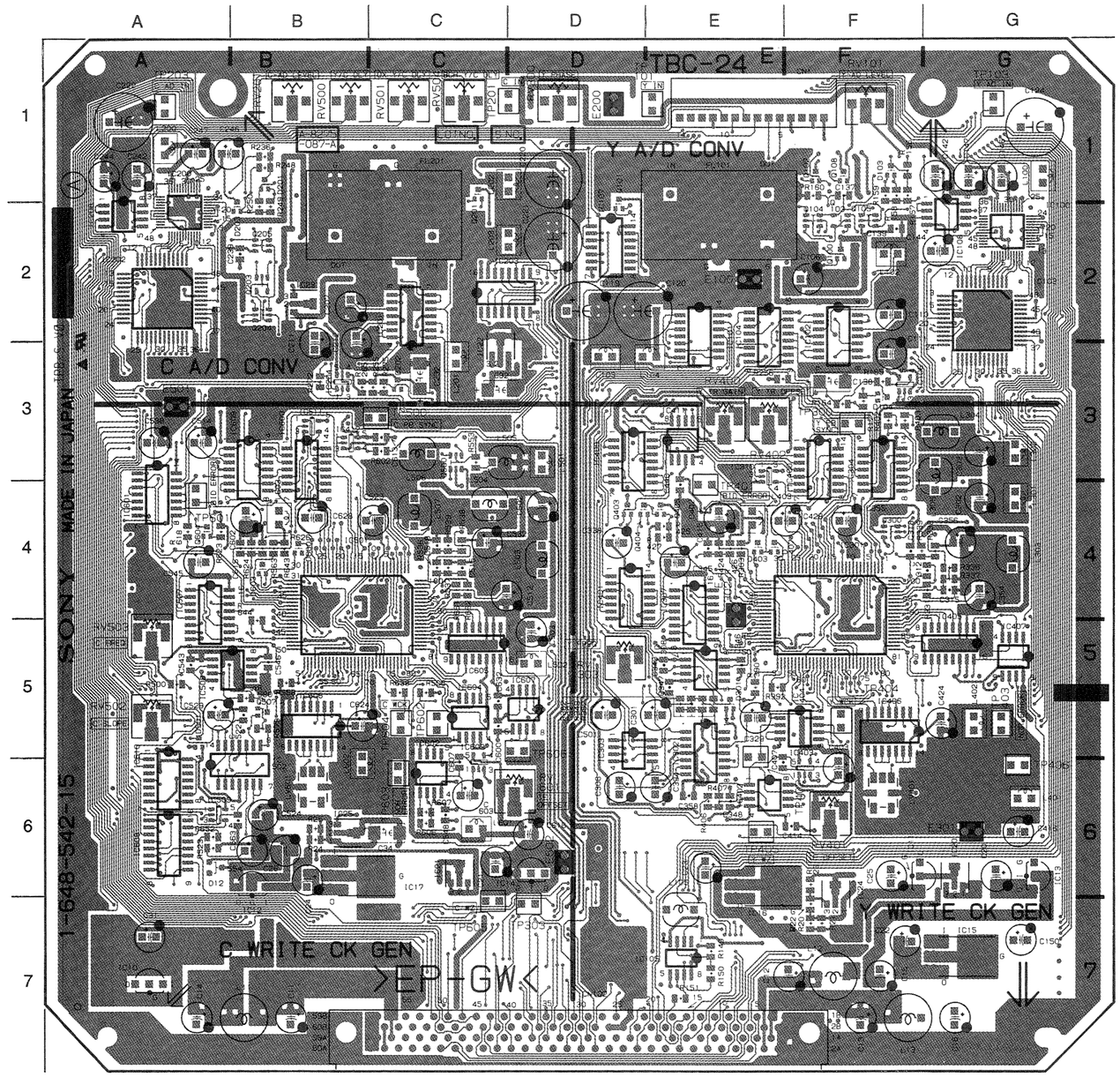
TBC-24 BOARD -B SIDE-

1-648-542-16 (LOT No. 803 -)

DVW-A500(J)	; TBC-24 MCB
DVW-A500(UC)	; TBC-24 MCB
DVW-A500P(EK)	; TBC-24P MCB
DVW-A500P(UC)	; TBC-24P MCB
DVW-A510(J)	; TBC-24 MCB
DVW-A510(UC)	; TBC-24 MCB
DVW-A510P(EK)	; TBC-24P MCB
DVW-CA510(J)	; TBC-24 MCB
DVW-CA510(UC)	; TBC-24 MCB
DVW-CA510P(EK)	; TBC-24P MCB

TBC-24 ; TBC (A/D conversion & Write clock generate blocks)

(Board's Lot No. 605 through 802
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



TBC-24 BOARD -A SIDE-

1-648-542-15 (LOT No. 605 - 802)

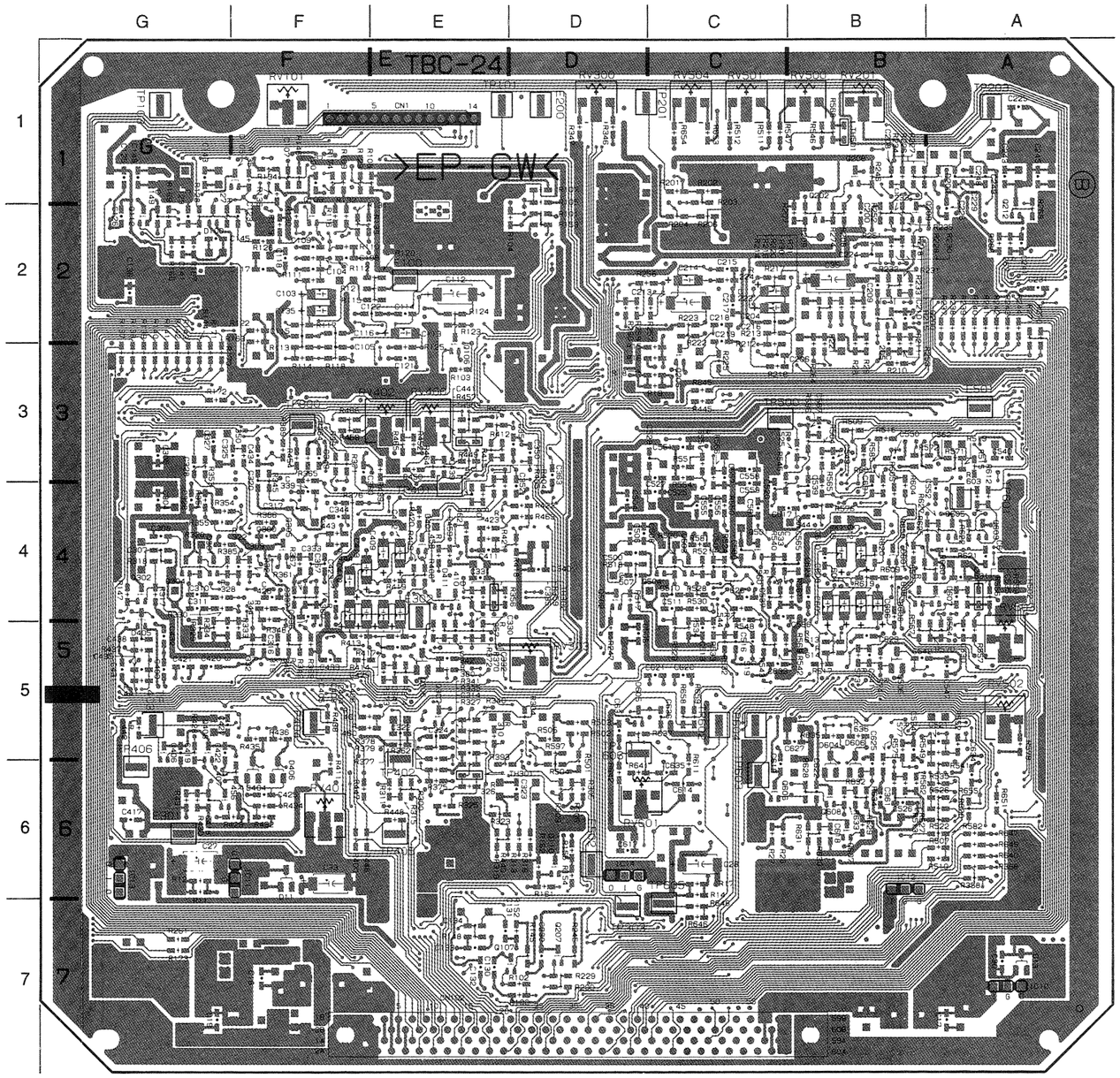
DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(J)	; TBC-24	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24(1-648-542-15)

CN1	E-1	IC405	G-5	*Q208	B-1
CN102	D-7	IC406	F-5	*Q209	B-2
		IC407	G-5	*Q212	A-2
*D11	F-6	IC409	D-3	Q300	F-4
D12	A-6	IC411	E-3	*Q301	G-4
*D13	A-7	IC412	B-3	*Q302	G-4
*D100	G-2	IC501	B-4	*Q304	G-4
D103	F-1	IC502	A-6	*Q305	F-4
D104	F-3	IC507	A-4	*Q306	E-5
*D105	F-1	IC508	A-5	*Q307	E-5
*D200	A-1	IC509	A-6	Q403	D-4
D201	B-1	IC511	B-3	Q405	E-4
D202	C-3	IC600	B-3	*Q406	G-5
D301	E-5	IC601	A-3	*Q407	G-6
*D401	E-4	IC602	C-6	*Q408	G-5
D403	E-4	IC603	C-6	Q500	C-3
*D404	F-6	IC604	C-5	*Q501	C-4
*D405	G-4	IC605	C-5	*Q502	D-4
*D406	F-6	IC606	B-5	*Q503	C-4
D407	E-4	IC607	D-5	*Q504	C-4
D501	A-5	IC608	A-6	*Q506	B-5
*D601	B-4	IC609	B-3	Q507	B-5
*D604	B-6	IC610	A-6	*Q603	A-4
*D605	D-5			Q604	A-4
*D606	B-6	LV401	F-6	*Q605	A-4
		LV601	B-6	*Q606	C-6
E100	E-2			*Q607	B-6
E200	D-1	L11	B-7	*Q608	B-6
E301	G-6	L12	F-7		
E302	E-4	L13	F-7	RV101	F-1
E501	A-3	L100	G-1	RV201	B-1
E502	D-6	L102	F-2	RV300	D-1
		L103	D-3	RV303	D-5
FL101	E-2	L104	E-3	RV401	F-6
FL201	C-2	L105	E-7	RV500	B-1
		L200	A-1	RV501	C-1
IC10	A-7	L201	C-3	RV502	A-5
IC11	F-6	L202	D-1	RV503	A-5
IC12	B-6	L203	D-2	RV504	C-1
IC13	G-6	L301	G-4	RV601	D-6
IC14	D-6	L302	G-3		
IC15	G-7	L303	G-4	TP101	E-1
IC16	E-6	L304	G-3	TP103	G-1
IC17	C-6	L305	G-3	TP201	D-1
IC20	G-6	L401	G-6	TP203	A-1
IC21	C-6	L402	G-5	TP300	F-3
IC22	C-3	L403	E-4	TP303	D-7
IC23	B-2	L501	D-3	TP401	E-4
IC24	F-6	L502	D-5	TP402	E-5
IC25	B-6	L503	D-4	TP403	G-5
IC100	G-2	L504	C-4	TP404	F-5
IC101	E-2	L505	D-3	TP405	E-6
IC102	F-2	L506	C-3	TP406	G-6
IC103	G-2	L507	C-4	TP500	C-3
IC104	E-2	L601	C-6	TP601	A-4
IC105	E-7	L602	B-6	TP602	C-5
IC106	F-3	L603	B-4	TP603	C-6
IC107	D-2			TP604	C-5
IC108	G-2	Q100	F-2	TP605	C-7
IC200	A-2	Q101	D-2	TP606	D-5
IC201	C-2	Q102	F-1		
IC202	A-2	Q103	F-2		
IC203	C-2	Q104	F-2		
IC204	B-3	Q105	F-2		
IC208	A-2	*Q106	E-3		
IC301	F-4	*Q107	E-7		
IC302	E-5	Q108	F-1		
IC303	D-5	*Q109	F-2		
IC304	F-3	*Q110	D-6		
IC307	E-4	*Q112	G-2		
IC308	E-5	*Q200	B-2		
IC310	E-3	Q201	C-1		
IC400	F-3	*Q202	B-2		
IC401	D-4	Q203	B-2		
IC402	E-6	Q204	B-2		
IC403	F-6	Q205	B-2		
IC404	E-5	*Q207	D-7		

*: B SIDE

LOT NO. C-1



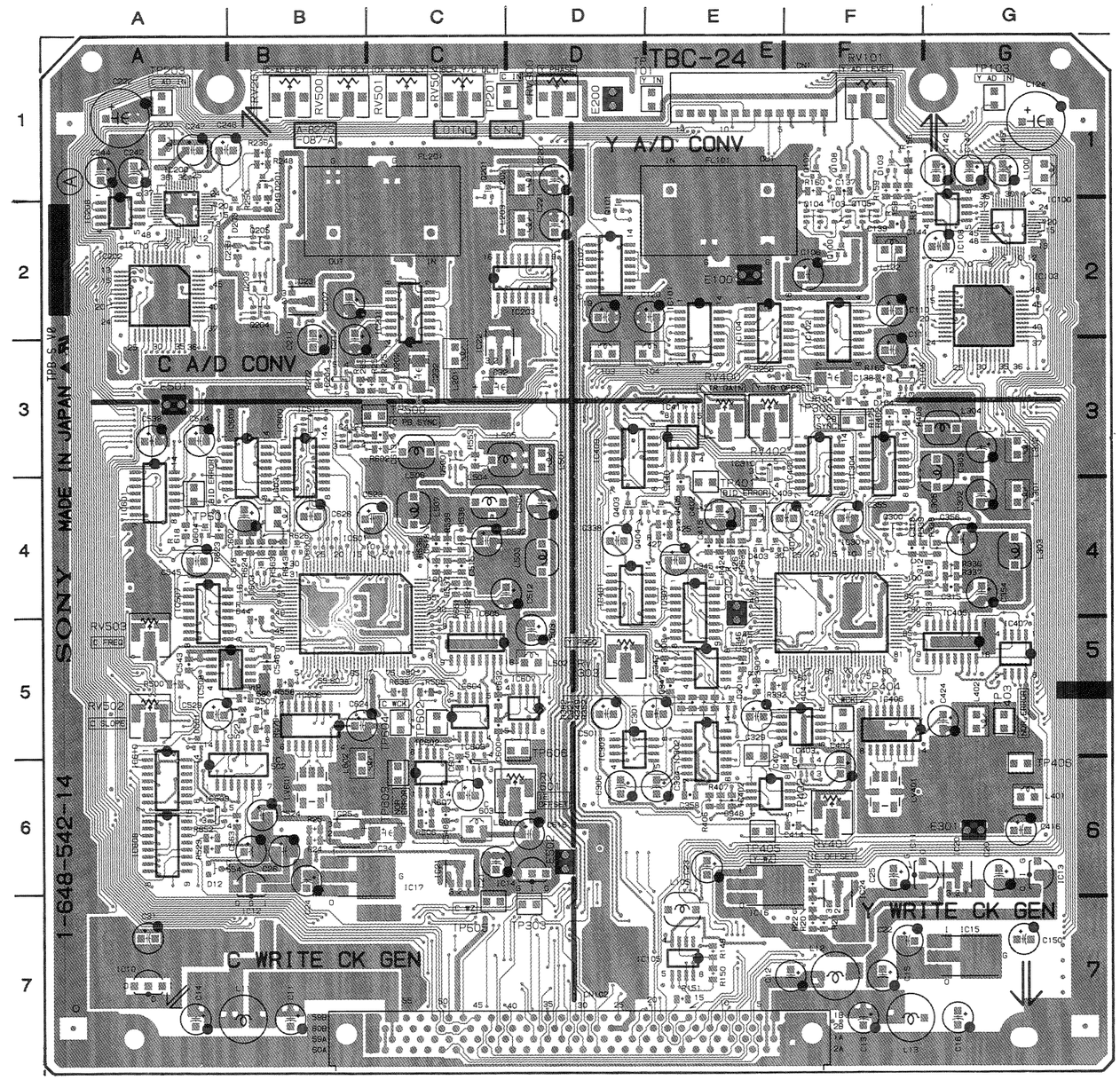
TBC-24 BOARD -B SIDE-

1-648-542-15 (LOT No. 605 - 802)

DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(J)	; TBC-24	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24 ; TBC (A/D conversion & Write clock generate blocks)

(Board's Lot No. 503 through 603)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)



TBC-24 BOARD -A SIDE-

1-648-542-14 (LOT No. 503 - 603)

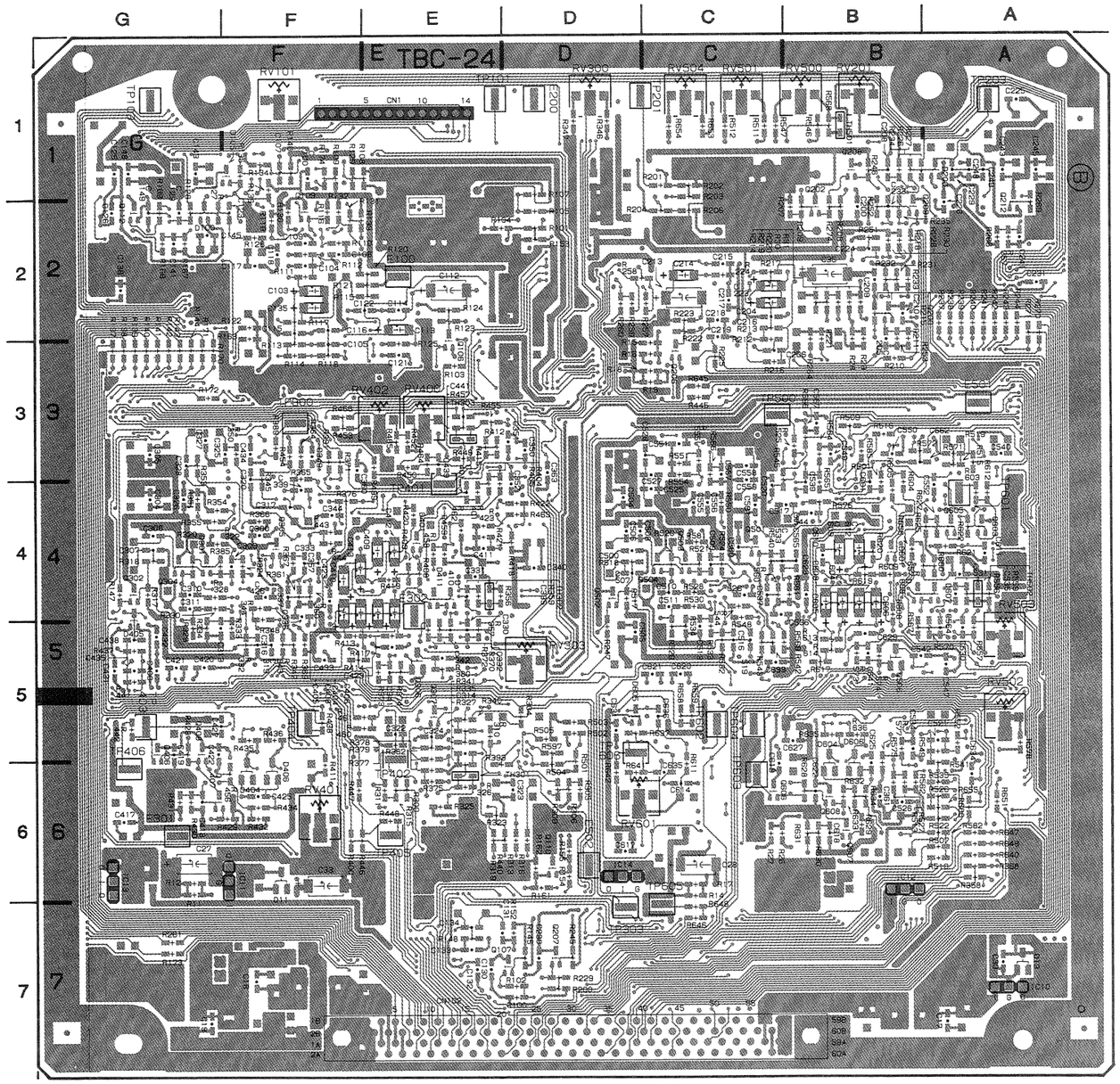
DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(J)	; TBC-24	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24(1-648-542-14)

CN1	F-1	IC307	E-4	✱Q506	B-5
CN102	D-7	IC308	E-5	Q507	B-5
		IC310	E-3	✱Q603	A-4
✱D11	F-6	IC400	F-3	Q604	A-4
D12	A-6	IC401	D-4	✱Q605	A-4
✱D13	A-7	IC402	E-6	✱Q606	C-6
✱D100	G-2	IC403	F-6	✱Q607	B-6
D103	F-1	IC404	E-5	✱Q608	B-6
D104	F-3	IC405	G-5		
✱D105	F-1	IC406	F-5	RV101	F-1
✱D200	A-1	IC407	G-5	RV201	B-1
D201	B-1	IC409	D-3	RV300	D-1
D202	C-3	IC411	E-3	RV303	D-5
D203	B-2	IC412	B-3	RV400	E-3
D301	E-5	IC501	B-4	RV401	F-6
✱D401	E-4	IC502	A-6	RV402	E-3
D403	E-4	IC507	A-4	RV500	B-1
✱D404	F-6	IC508	A-5	RV501	C-1
✱D405	G-4	IC509	A-6	RV502	A-5
✱D406	F-6	IC511	B-3	RV503	A-5
D407	E-4	IC600	B-3	RV504	C-1
✱D410	E-4	IC601	A-3	RV601	D-6
✱D411	E-4	IC602	C-6		
D501	A-5	IC603	C-6	✱TH301	E-6
D600	B-4	IC604	C-5	✱TH302	E-4
✱D601	B-4	IC605	C-5	✱TH303	E-3
D603	B-4	IC606	B-5	✱TH501	B-1
✱D604	B-6	IC607	D-5	✱TH502	A-4
✱D605	D-5	IC608	A-6		
✱D606	B-6	IC609	B-3	TP101	E-1
✱D607	A-4	IC610	A-6	TP103	G-1
✱D608	B-4			TP201	C-1
		LV401	F-6	TP203	A-1
E100	E-2	LV601	B-6	TP300	F-3
E200	D-1			TP303	D-7
E301	G-6	Q100	F-2	TP401	E-4
E302	E-4	Q101	D-2	TP402	E-5
E501	A-3	Q102	F-1	TP403	G-5
E502	D-6	Q103	F-2	TP404	F-5
		Q104	F-2	TP405	E-6
FL101	E-1	Q105	F-2	TP406	G-6
FL201	C-1	✱Q106	E-3	TP500	C-3
		✱Q107	E-7	TP601	A-4
IC10	A-7	Q108	F-1	TP602	C-5
IC11	F-6	✱Q109	F-2	TP603	C-6
IC12	B-6	✱Q110	D-6	TP604	C-5
IC13	G-6	✱Q112	G-2	TP605	C-7
IC14	D-6	✱Q200	B-2	TP606	D-5
IC15	G-7	Q201	C-1		
IC16	E-6	✱Q202	B-2		
IC17	C-6	Q203	B-2		
IC20	G-6	Q204	B-2		
IC21	C-6	Q205	B-2		
IC22	C-3	✱Q206	C-3		
IC23	B-2	✱Q207	D-7		
IC24	F-6	✱Q208	B-1		
IC25	B-6	✱Q209	B-2		
IC100	G-2	✱Q212	A-1		
IC101	E-2	Q300	F-4		
IC102	F-2	✱Q301	G-4		
IC103	G-2	✱Q302	G-4		
IC104	E-2	✱Q304	G-4		
IC105	E-7	✱Q305	F-4		
IC106	F-3	✱Q306	E-5		
IC107	D-2	✱Q307	E-5		
IC108	G-2	Q403	D-4		
IC200	A-2	Q404	E-4		
IC201	C-2	Q405	E-4		
IC202	A-2	✱Q406	G-5		
IC203	C-2	✱Q407	G-6		
IC204	B-3	✱Q408	G-5		
IC208	A-2	Q500	C-3		
IC301	F-4	✱Q501	C-4		
IC302	E-5	✱Q502	D-4		
IC303	D-5	✱Q503	C-4		
IC304	F-3	✱Q504	C-4		

✱ : B SIDE

LOT NO. C-1



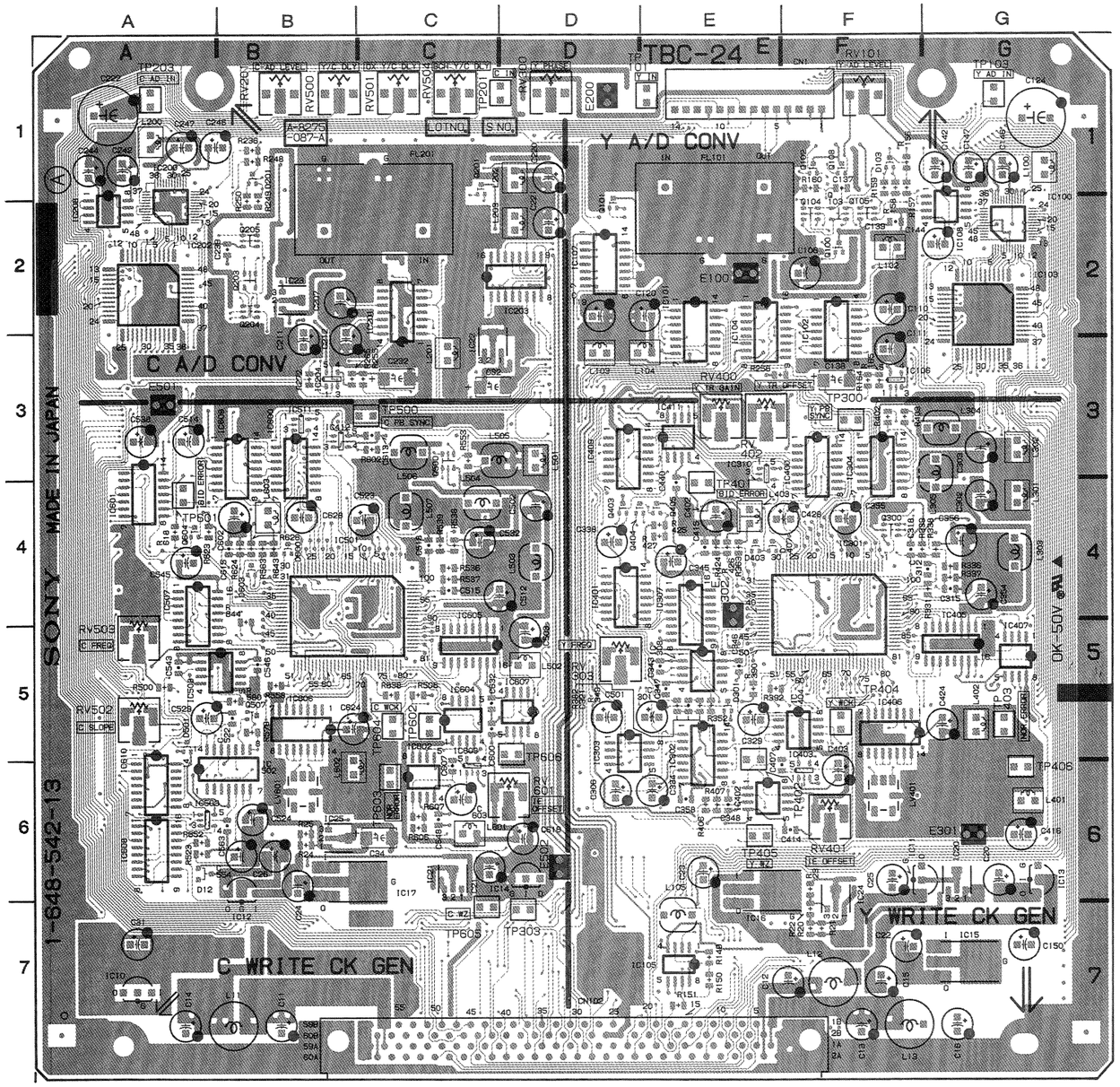
TBC-24 BOARD -B SIDE-

1-648-542-14 (LOT No. 503 - 603)

DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(J)	; TBC-24	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24 ; TBC (A/D conversion & Write clock generate blocks)

(Board's Lot No. 403 through 502)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



TBC-24 BOARD -A SIDE-

1-648-542-13 (LOT No. 403 - 502)

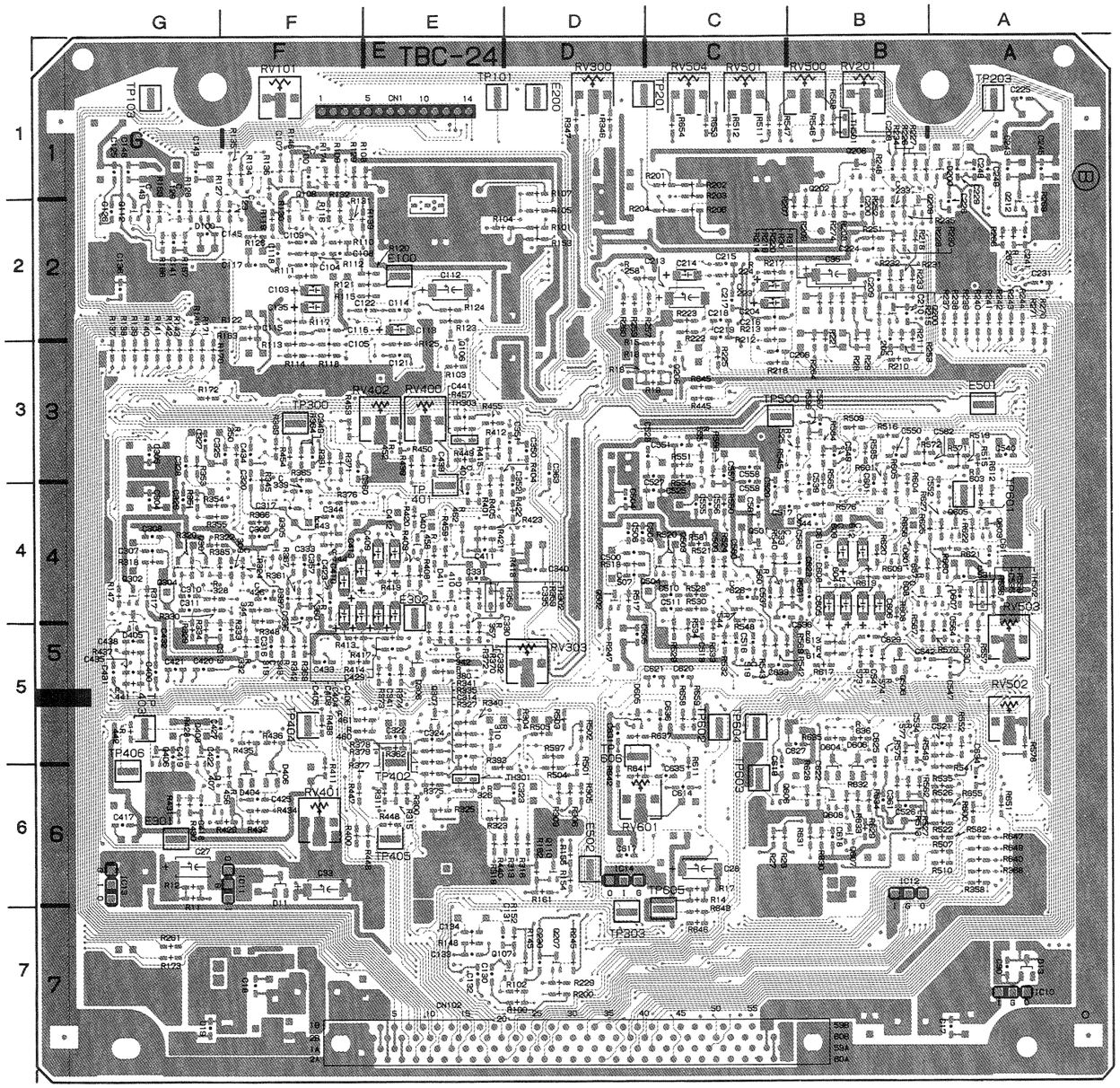
DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24(1-648-542-13)

CN1	F-1	IC401	D-4	✱Q605	A-4
CN102	D-7	IC402	E-6	✱Q606	C-6
		IC403	F-6	✱Q607	B-6
✱D11	F-6	IC404	E-5	✱Q608	B-6
D12	A-6	IC405	G-5		
✱D13	A-7	IC406	F-5	RV101	F-1
✱D100	G-2	IC407	G-5	RV201	B-1
D103	F-1	IC409	D-3	RV300	D-1
✱D200	A-1	IC411	E-3	RV303	D-5
D201	B-1	IC412	B-3	RV400	E-3
D301	E-5	IC501	B-4	RV401	F-6
✱D401	E-4	IC502	A-6	RV402	E-3
D403	E-4	IC507	A-4	RV500	B-1
✱D404	F-6	IC508	A-5	RV501	C-1
✱D405	G-4	IC509	A-6	RV502	A-5
✱D406	F-6	IC511	B-3	RV503	A-5
D407	E-4	IC600	B-3	RV504	C-1
✱D410	E-4	IC601	A-3	RV601	D-6
✱D411	E-4	IC602	C-6		
D501	A-5	IC603	C-6	✱TH301	E-6
D600	B-4	IC604	C-5	✱TH302	E-4
✱D601	B-4	IC605	C-5	✱TH303	E-3
D603	B-4	IC606	B-5	✱TH501	B-1
✱D604	B-6	IC607	D-5	✱TH502	A-4
✱D605	D-5	IC608	A-6		
✱D606	B-6	IC609	B-3	TP101	E-1
✱D607	A-4	IC610	A-6	TP103	G-1
✱D608	B-4			TP201	C-1
		LV401	F-6	TP203	A-1
E100	E-2	LV601	B-6	TP300	F-3
E200	D-1			TP303	D-7
E301	G-6	Q100	F-2	TP401	E-4
E302	E-4	Q101	D-2	TP402	E-5
E501	A-3	Q102	F-1	TP403	G-5
E502	D-6	Q103	F-2	TP404	F-5
		Q104	F-2	TP405	E-6
FL101	E-1	Q105	F-2	TP406	G-6
FL201	C-1	✱Q106	E-3	TP500	C-3
		✱Q107	E-7	TP601	A-4
IC10	A-7	Q108	F-1	TP602	C-5
IC11	F-6	✱Q109	F-2	TP603	C-6
IC12	B-6	✱Q110	D-6	TP604	C-5
IC13	G-6	✱Q112	G-2	TP605	C-7
IC14	D-6	✱Q200	B-2	TP606	D-5
IC15	G-7	Q201	C-1		
IC16	E-6	✱Q202	B-2		
IC17	C-6	Q203	B-2		
IC20	G-6	Q204	B-2		
IC21	C-6	Q205	B-2		
IC22	C-3	✱Q206	C-3		
IC23	B-2	✱Q207	D-7		
IC24	F-6	✱Q208	B-1		
IC25	B-6	✱Q209	B-2		
IC100	G-2	✱Q212	A-1		
IC101	E-2	Q300	F-4		
IC102	F-2	✱Q301	G-4		
IC103	G-2	✱Q302	G-4		
IC104	E-2	✱Q304	G-4		
IC105	E-7	✱Q305	F-4		
IC106	F-3	✱Q306	E-5		
IC107	D-2	✱Q307	E-5		
IC108	G-2	Q403	D-4		
IC200	A-2	Q404	E-4		
IC201	C-2	Q405	E-4		
IC202	A-2	✱Q406	G-5		
IC203	C-2	✱Q407	G-6		
IC204	B-3	✱Q408	G-5		
IC208	A-2	Q500	C-3		
IC301	F-4	✱Q501	C-4		
IC302	E-5	✱Q502	D-4		
IC303	D-5	✱Q503	C-4		
IC304	F-3	✱Q504	C-4		
IC307	E-4	✱Q506	B-5		
IC308	E-5	Q507	B-5		
IC310	E-3	✱Q603	A-4		
IC400	F-3	Q604	A-4		

✱ : B SIDE

LOT NO. C-1



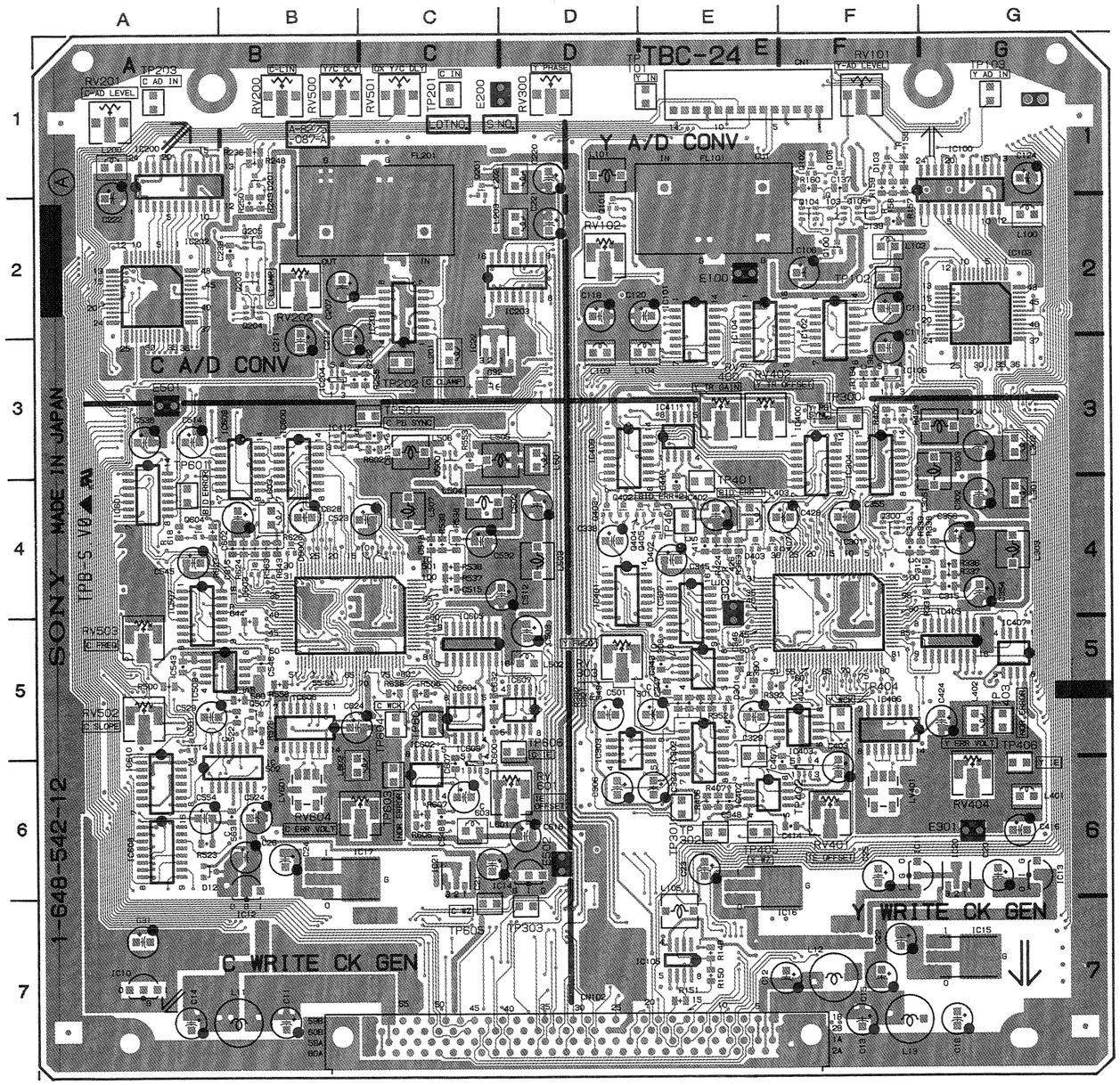
TBC-24 BOARD -B SIDE-

1-648-542-13 (LOT No. 403 - 502)

DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24 ; TBC (A/D conversion & Write clock generate blocks)

(Board's Lot No. 305 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



TBC-24 BOARD -A SIDE-

1-648-542-12 (LOT No. 305 - 402)

DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24(1-648-542-12)

CN1	F-1	IC406	F-5	RV102	D-2
CN102	D-7	IC407	G-5	RV200	B-1
		!C409	D-3	RV201	A-1
✱D11	F-6	IC411	E-3	RV202	B-2
D12	A-6	IC412	B-3	RV300	D-1
✱D13	A-7	IC501	B-4	RV303	D-5
✱D100	G-2	IC502	A-6	RV400	E-3
D103	F-1	IC507	A-4	RV401	F-6
✱D200	A-1	IC508	A-5	RV402	E-3
D201	B-1	IC600	B-3	RV404	G-6
D301	E-5	IC601	A-3	RV500	B-1
✱D401	E-4	IC602	C-6	RV501	C-1
D402	E-4	IC603	C-6	RV502	A-5
D403	E-4	IC604	C-5	RV503	A-5
✱D404	F-6	IC605	C-5	RV601	D-6
✱D405	G-4	IC606	B-5	RV604	B-6
✱D406	F-6	IC607	D-5		
D407	E-4	IC608	A-6	✱TH301	E-6
✱D410	E-4	IC609	B-3	✱TH302	E-4
✱D411	E-4	IC610	A-6	✱TH501	B-1
D501	A-5			✱TH502	A-4
D600	B-4	LV401	F-6		
✱D601	B-4	LV601	B-6	TP101	E-1
✱D602	A-4			TP102	F-2
D603	B-4	Q100	F-2	TP103	G-1
✱D604	B-6	Q101	D-2	TP201	C-1
✱D605	D-5	Q102	F-1	TP202	C-3
✱D606	B-6	Q103	F-2	TP203	A-1
✱D607	A-4	Q104	F-2	TP300	F-3
✱D608	B-4	Q105	F-2	TP301	E-6
		✱Q106	E-3	TP302	E-6
E100	E-2	✱Q107	E-7	TP303	D-7
E200	D-1	Q108	F-1	TP400	E-4
E301	G-6	✱Q109	F-2	TP401	E-4
E302	E-4	✱Q110	D-6	TP402	E-5
E501	A-3	✱Q200	B-2	TP403	G-5
E502	D-6	Q201	C-1	TP404	F-5
		✱Q202	B-2	TP405	E-6
FL101	E-1	Q203	B-2	TP406	G-6
FL201	C-1	Q204	B-2	TP500	C-3
		Q205	B-2	TP601	A-4
IC10	A-7	✱Q206	C-3	TP602	C-5
IC11	F-6	✱Q207	D-7	TP603	C-6
IC12	B-6	✱Q208	B-1	TP604	C-5
IC13	G-6	✱Q209	B-2	TP605	C-7
IC14	D-6	Q300	F-4	TP606	D-5
IC15	G-7	✱Q301	G-4		
IC16	E-6	✱Q302	G-4		
IC17	B-6	✱Q303	E-6		
IC20	G-6	✱Q304	G-4		
IC21	C-6	✱Q305	F-4		
IC22	C-3	✱Q306	E-5		
IC100	G-2	✱Q307	E-5		
IC101	E-2	Q402	D-4		
IC102	F-2	Q403	D-4		
IC103	G-2	Q404	E-4		
IC104	E-2	Q405	E-4		
IC105	E-7	✱Q406	G-5		
IC106	F-3	✱Q407	G-6		
IC200	A-2	✱Q408	G-5		
IC201	C-2	Q500	C-3		
IC202	A-2	✱Q501	C-4		
IC203	C-2	✱Q502	D-4		
IC204	B-3	✱Q503	C-4		
IC301	F-4	✱Q504	C-4		
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IC303	D-5	Q507	B-5		
IC304	F-3	✱Q602	A-4		
IC307	E-4	✱Q603	A-4		
IC308	E-5	Q604	A-4		
IC400	F-3	✱Q605	A-4		
IC401	D-4	✱Q606	C-6		
IC402	E-6	✱Q607	B-6		
IC403	F-6	✱Q608	B-6		
IC404	E-5				
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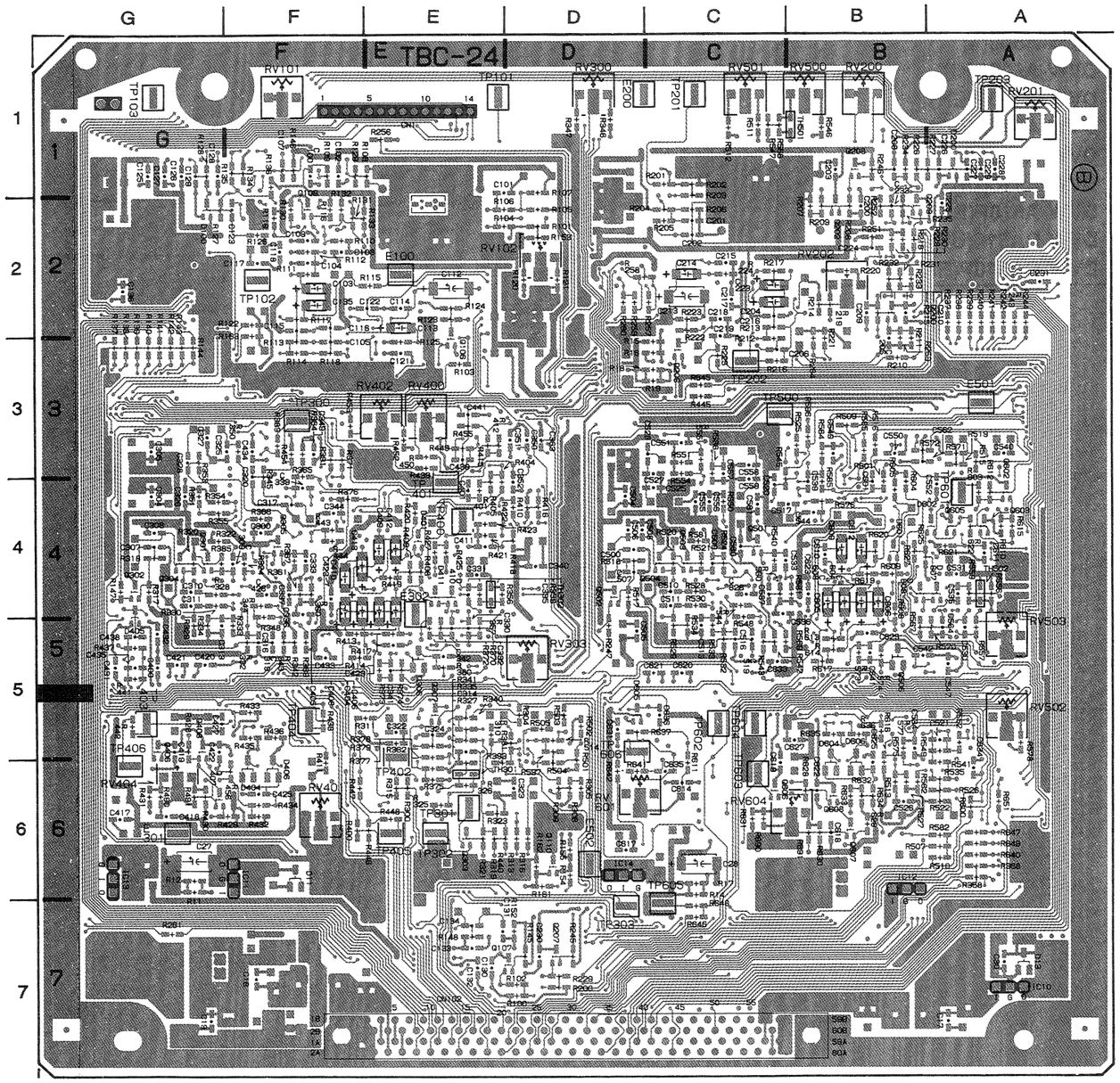
✱ : B SIDE

LOT NO. C-1



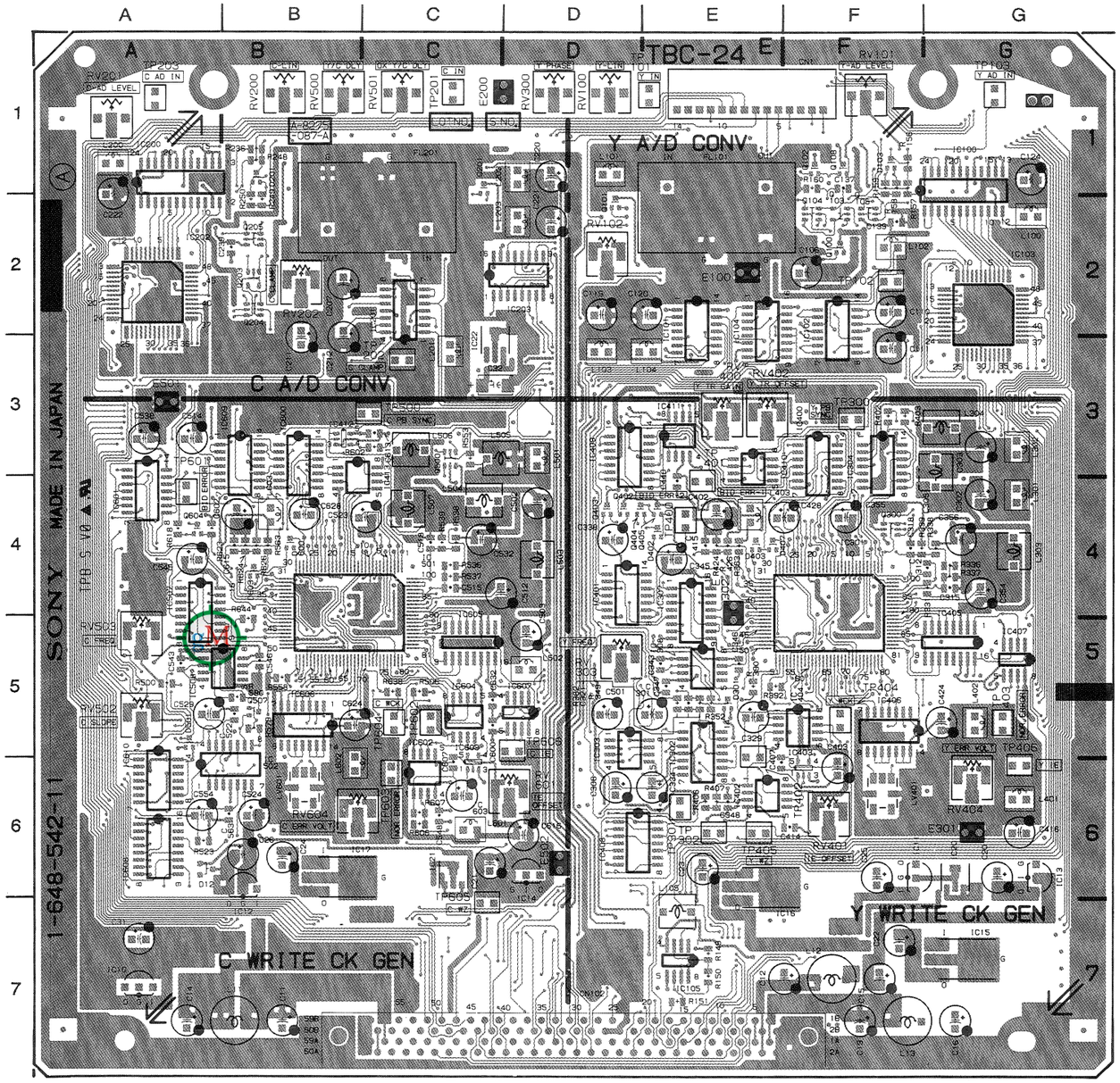
TBC-24 BOARD -B SIDE-

1-648-542-12 (LOT No. 305 - 402)

DVW-A500(J)	; TBC-24	MCB
DVW-A500(UC)	; TBC-24	MCB
DVW-A500P(EK)	; TBC-24P	MCB
DVW-A500P(UC)	; TBC-24P	MCB
DVW-A510(J)	; TBC-24	MCB
DVW-A510(UC)	; TBC-24	MCB
DVW-A510P(EK)	; TBC-24P	MCB
DVW-CA510(UC)	; TBC-24	MCB
DVW-CA510P(EK)	; TBC-24P	MCB

TBC-24 ; TBC (A/D conversion & Write clock generate blocks)

(Board's Lot No. 302 through 304)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)



TBC-24 BOARD -A SIDE-
1-648-542-11 (LOT No. 302 - 304)
DVW-A500(J) ; TBC-24 MCB
DVW-A500(UC) ; TBC-24 MCB
DVW-A500P(EK) ; TBC-24P MCB

TBC-24(1-648-542-11)

CN1	E-1	IC408	D-6	RV101	F-1
CN102	D-7	IC409	D-3	RV102	D-2
		IC410	E-3	RV200	B-1
✱D11	F-6	IC411	E-3	RV201	A-1
D12	A-6	IC412	B-3	RV202	B-2
✱D13	A-7	IC413	B-3	RV300	D-1
✱D100	G-2	IC501	B-4	RV303	D-5
✱D101	G-3	IC502	A-6	RV400	E-3
D103	F-1	IC507	A-4	RV401	F-6
✱D200	A-1	IC508	A-5	RV402	E-3
D201	B-1	IC600	B-3	RV404	G-6
✱D202	A-2	IC601	A-3	RV500	B-1
D301	E-5	IC602	C-6	RV501	C-1
✱D400	D-6	IC603	C-6	RV502	A-5
✱D401	E-4	IC604	C-5	RV503	A-5
D402	E-4	IC605	C-5	RV601	D-6
D403	E-4	IC606	B-5	RV604	B-6
✱D404	F-6	IC607	D-5		
✱D405	G-4	IC608	A-6	✱TH301	E-6
✱D406	F-6	IC609	B-3	✱TH302	E-5
D407	E-4	IC610	A-6	✱TH502	B-5
✱D408	E-3				
D501	A-5	LV401	F-6	TP101	E-1
D600	B-4	LV601	B-6	TP102	F-2
✱D601	B-4			TP103	G-1
✱D602	A-4	Q100	F-2	TP201	C-1
D603	B-4	Q101	D-2	TP202	C-3
✱D604	B-6	Q102	F-1	TP203	A-1
✱D605	D-5	Q103	F-2	TP300	F-3
✱D606	B-6	Q104	F-2	TP301	E-6
		Q105	F-2	TP302	E-6
E100	E-2	✱Q106	E-3	TP400	E-4
E200	D-1	✱Q107	E-7	TP401	E-4
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FL201	C-2	Q204	B-2	TP601	A-4
		Q205	B-2	TP602	C-5
IC10	A-7	✱Q206	C-3	TP603	C-6
IC11	F-6	✱Q207	D-7	TP604	C-5
IC12	B-6	✱Q208	B-1	TP605	C-7
IC13	G-6	✱Q209	B-2	TP606	D-5
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IC15	G-7	✱Q301	G-4		
IC16	E-6	✱Q302	G-4		
IC17	B-6	✱Q303	E-6		
IC20	G-6	✱Q304	G-4		
IC21	C-6	✱Q305	F-4		
IC22	C-3	✱Q306	E-5		
IC100	G-2	✱Q307	E-5		
IC101	E-2	Q402	D-4		
IC102	F-2	Q403	D-4		
IC103	G-2	Q404	E-4		
IC104	E-2	Q405	E-4		
IC105	E-7	✱Q406	G-5		
IC200	A-2	✱Q407	G-6		
IC201	C-2	✱Q408	G-5		
IC202	A-2	Q500	C-3		
IC203	C-2	✱Q501	C-4		
IC301	F-4	✱Q502	D-4		
IC302	E-5	✱Q503	C-4		
IC303	D-5	✱Q504	C-4		
IC304	F-3	✱Q506	B-5		
IC307	E-4	Q507	B-5		
IC308	E-5	✱Q602	A-4		
IC400	F-3	✱Q603	A-4		
IC401	D-4	Q604	A-4		
IC402	E-6	✱Q605	A-4		
IC403	F-6	✱Q606	C-6		
IC404	E-5	✱Q607	B-6		
IC405	G-5	✱Q608	B-6		
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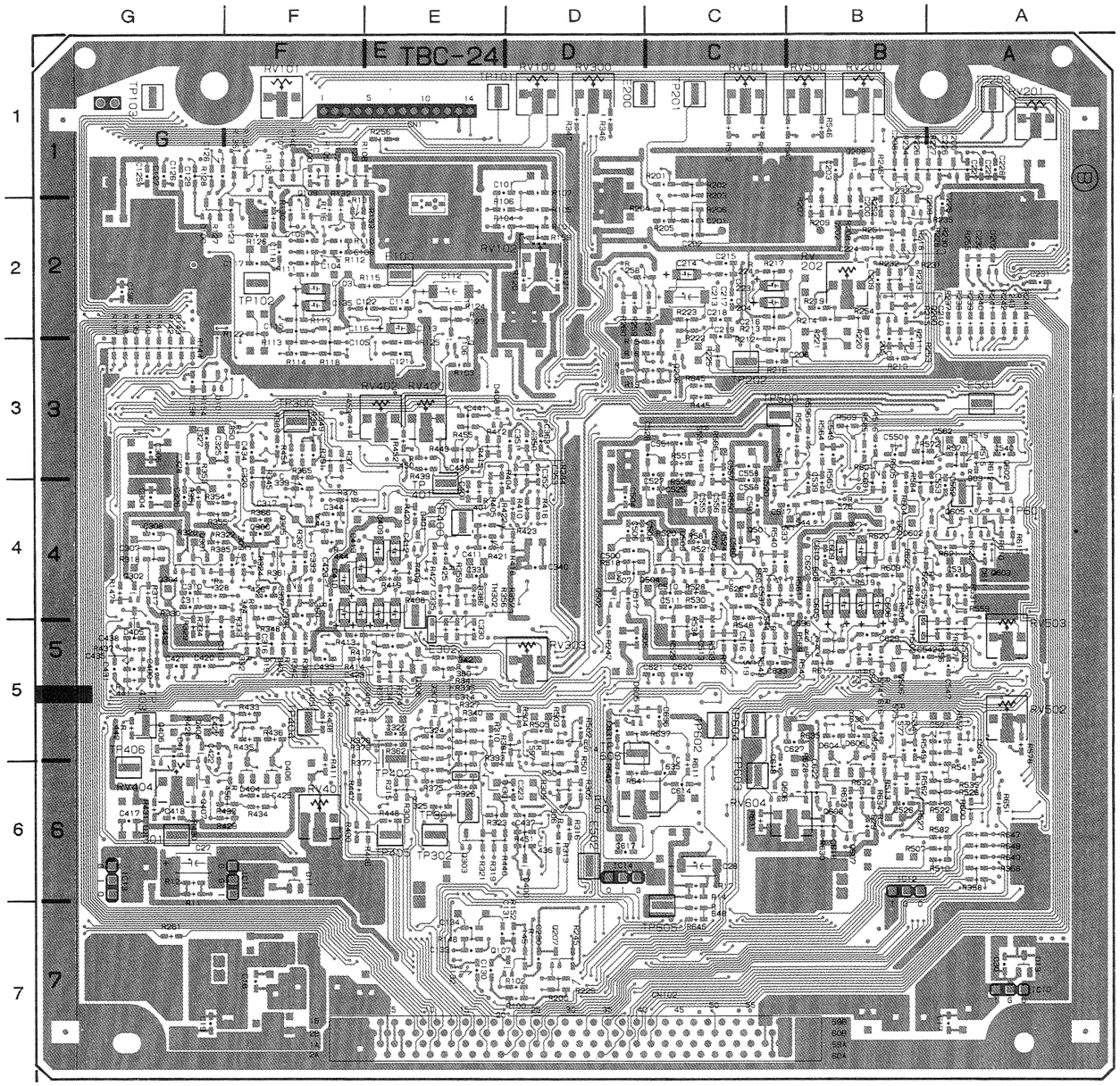
✱ : B SIDE

LOT NO. C-1



TBC-24 BOARD -B SIDE-

1-648-542-11 (LOT No. 302 - 304)
DVW-A500(J) ; TBC-24 MCB
DVW-A500(UC) ; TBC-24 MCB
DVW-A500P(EK) ; TBC-24P MCB

DVW-A510P (EK)
DVW-510P (EK)
DVW-CA510P (EK) E
9-967-529-04 (1)

Sony Corporation
Communication System Solutions Network Company

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SONY

DIGITAL VIDEOCASSETTE RECORDER

DVW-A500, 500
DVW-A500/1, 500/1
DVW-A500P, 500P
DVW-A500P/1, 500P/1

DIGITAL VIDEOCASSETTE PLAYER

DVW-A510, 510
DVW-A510P, 510P
DVW-CA510, CA510P

ANALOG COMPOSITE DECODER BOARD
BKDW-505, 506

AUDIO PROGRAM PLAY BOARD
BKDW-507

PARALLEL (50P) INTERFACE KIT
BKDW-509

CONTROL PANEL EXTENSION KIT
BKDW-510

CONTROL PANEL CASE
BKDW-511

CONTROL PANEL
BKDW-514, 515

Digital BETACAM™

MAINTENANCE MANUAL

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理など行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠ AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres. Pour toute réparation faire appel à une personne compétente uniquement.

DVW-A500 (J)	Serial No. 10001 and Higher
DVW-A500 (UC)	Serial No. 10001 and Higher
DVW-A500P (EK)	Serial No. 10001 and Higher
DVW-500 (J)	Serial No. 10001 and Higher
DVW-500 (UC)	Serial No. 10001 and Higher
DVW-500P (EK)	Serial No. 10001 and Higher
DVW-A510 (J)	Serial No. 10001 and Higher
DVW-A510 (UC)	Serial No. 10001 and Higher
DVW-A510P (EK)	Serial No. 10001 and Higher
DVW-510 (J)	Serial No. 10001 and Higher
DVW-510 (UC)	Serial No. 10001 and Higher
DVW-510P (EK)	Serial No. 10001 and Higher
DVW-CA510 (J)	Serial No. 10001 and Higher
DVW-CA510 (UC)	Serial No. 10001 and Higher
DVW-CA510P (EK)	Serial No. 10001 and Higher
BKDW-505	Serial No. 10001 and Higher
BKDW-506	Serial No. 10001 and Higher
BKDW-507	Serial No. 10001 and Higher
BKDW-509	Serial No. 10001 and Higher
BKDW-510	
BKDW-511	
BKDW-514	Serial No. 10001 and Higher
BKDW-515	Serial No. 10001 and Higher

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3. Semiconductor Pin Assignments

Manual Structure

Purpose of this manual

This manual is maintenance manual of the following products.

Product	
VTR:	DVW-A500, DVW-500, DVW-A510, DVW-510, DVW-CA510, DVW-A500P, DVW-500P, DVW-A510P, DVW-510P, DVW-CA510P
Optional equipments:	BKDW-505, BKDW-506, BKDW-507, BKDW-509, BKDW-510, BKDW-511, BKDW-514, BKDW-515

This manual describes the information items (adjustment, board layouts, schematic diagrams, detailed parts list, etc.) that premise the service based on the component parts.

Contents

The following is a summary of all the sections for understanding the contents of this manual.

Maintenance Manual Part 2, Volume 3

Section 1 Board Layouts
Describes the board layouts of the VTR and optional boards.

Section 2 Schematic Diagrams – Frame Wiring –
Describes the frame wiring of the VTR.

Section 3 Semiconductor Pin Assignments
Describes the pin assignments of semiconductors used in the VTR and optional boards.

(continue)

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	Section 2	**Replacement of Mechanical Parts**
	Section 3	**Tape Path Alignment**
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Maintenance Manual Part 2, Volume 2	**Section 1**	**Parts Information**
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Maintenance Manual Part 2, Volume 4	**Section 1**	**Schematic Diagrams for Recorder**
	Section 2	**Schematic Diagram for Optional Boards**
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	Section 2	**Schematic Diagram for Optional Boards**
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	Section 2	**Recording Format, Head Configuration, and Signal Processing**
	Section 3	**Block Diagrams and Circuit Descriptions**
	Section 4	**Error Messages and Troubleshooting**
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	Section 7	**Periodic Maintenance and Inspection**
	Section 8	**Replacement of Periodic Maintenance Parts**
	Section 9	**Spare Parts**

*1: There are two types manual for Maintenance Manual Part 1: Recorder (DVW-A500/500 or DVW-A500P/500P) and player (DVW-A510/510/CA510 or DVW-A510P/510P/CA510P).

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Recorder models ; DVW-A500/500 (NTSC)
DVW-A500P/500P (PAL)
Player models ; DVW-A510/510/CA510 (NTSC)
DVW-A510P/510P/CA510P (PAL)

DVW-A5XX/5XX type ;
DVW-A500/500/A510/510 (NTSC)
DVW-A500P/500P/A510P/510P (PAL)
DVW-CA5XX type (for Batacart) ;
DVW-CA510 (NTSC)
DVW-CA510P (PAL)
DVW-A5XX/CA5XX type (with Batacam PB function) ;
DVW-A500/A510/CA510 (NTSC)
DVW-A500P/A510P/CA510P (PAL)

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(EQ-45A; 1-648-536-11, 12) ..... 1-42(a)(b)
DUS-710 (DM-89; 1-648-541-11, 12) ..... 1-58(a)(b)
(VPR-1; 1-648-532-13) ..... 1-5(c)
(VPR-1B; 1-648-532-22) ..... 1-9(b)
DUS-711 (EQ-45; 1-648-536-22) ..... 1-40(a)
(EQ-45A; 1-648-536-11, 12) ..... 1-42(a)(b)
DUS-712 (DPR-36; 1-648-533-11) ..... 1-33(a)
DUS-719 (DEC-65; 1-648-545-11) ..... 1-124(a)
DUS-722 (DEC-65; 1-648-545-11) ..... 1-124(a)
DUS-723 (CUE-1A; 1-648-537-21) ..... 1-50(a)
(CUE-1AP; 1-648-537-11) ..... 1-52(a)
DUS-724 (VPR-1; 1-648-532-11
for PAL models) ..... 1-5(a)
DUS-727 (DM-89; 1-648-541-12) ..... 1-58(b)
DUS-728 (FP-58; 1-648-551-11) ..... 1-98(a)
DUS-741 (DR-200; 1-648-559-12) ..... 1-85(b)
DUS-744 (VPR-1B; 1-648-532-21) ..... 1-9(a)
DUS-769 (VPR-1; 1-648-532-12) ..... 1-5(b)
(VPR-1B; 1-648-532-21) ..... 1-9(a)
DUS-840 (VPR-1; 1-648-532-14) ..... 1-5(d)

Circuit Function

Circuit Function of Printed Circuit Board

System configuration	Board name	Circuit Function
Digital process	VPR-1	Video signal processor, A/D, D/A, Reference clock generator, Composite encoder (DVW-A500/A500P/500/500P)
	VPR-1B	Video signal processor, D/A, Reference clock generator, Composite encoder (DVW-A510/A510P/510/510P/CA510/CA510P)
	APR-1	Audio signal processor, A/D, D/A, AES/EBU interface (DVW-A500/A500P/500/500P)
	APR-1BA	Audio signal processor (with LAU interface), D/A, AES/EBU interface (DVW-A510/CA510/A510P/CA510P)
	APR-1B	Audio signal processor (without LAU interface), D/A, AES/EBU interface (DVW-510/510P)
	DIF-16	4:2:2 component serial digital I/O interface with Embedded audio (DVW-A500/A500P/500/500P)
	DIF-16B	4:2:2 component serial digital output interface with Embedded audio (DVW-A510/A510P/510/510P/CA510/CA510P)
	DPR-36	Digital data processor (Encode/Decode, Error correction) (DVW-A500/A500P/500/500P)
	DPR-36H	Digital data processor (Decode, Error correction) (DVW-A510/A510P/510/510P/CA510/CA510P)
RF, Analog process	EQ-45A	RF equalizer (REC current control, PB EQ), Betacam PB buffer (DVW-A500/A500P)
	EQ-45	RF equalizer (REC current control, PB EQ) (DVW-500/500P)
	EQ-45BA	PB RF equalizer, Betacam PB buffer (DVW-A510/CA510/A510P/CA510P)
	EQ-45B	PB RF equalizer (DVW-510/510P)
	CUE-1A/1AP	CUE REC/PB, LTC REC/PB, and LAU PB circuits, CUE/LTC/FULL erase OSC (DVW-A500/A500P)
	CUE-1	CUE REC/PB and LTC REC/PB circuits, CUE/LTC/FULL erase OSC (DVW-500/500P)
	CUE-1BA	CUE/LTC/LAU PB circuits (DVW-A510/A510P/CA510/CA510P)
	CUE-1B	CUE/LTC PB circuits (DVW-510/510P)
Betacam playback (DVW-A500/A500P, DVW-A510/A510P, DVW-CA510/CA510P)	DM-89	RF demodulator
	TBC-24	TBC (A/D conversion & Write clock generate blocks)
	TBC-23	TBC (Sequence & Reference blocks)
	AP-28	AFM demodulator & LAU noise reduction
System/servo control	SS-52A	System, Servo, Analog/Digital DT control (DVW-A500/A500P)
	SS-52	System, Servo, Digital DT control (DVW-500/500P)
	SS-52B	System, Servo, Analog/Digital DT control for Player (DVW-A510/A510P/510/510P/CA510/CA510P)
	DT-34/34B	DT driver
	DR-307/200	Motors driver (Drum, Capstan, T/S reels, Threading, Reel shift, Cassette up/down), Solenoids driver (Pinch, T/S brake, Cleaning), Degaussing head driver
Mech.deck driver/sensor	CCM-15	Threading motor/Reel-shift motor
	PD-35	Pinch solenoid connection
	PTC-54	Threading FG
	PTC-59	Cassette's tabs sensor
	PTC-71	Reel position sensor
	RM-82	T/S reel motor
	RM-141	T reel motor (DVW-A500/A500P/A510/A510P/CA510/CA510P)
	SE-228	T/S reel FG
	TR-78	S tension sensor
	TR-79	T tension sensor, Thread/Unthread end sensor
Cassette compartment (except DVW-CA510/CA510P)	CL-29	Cassette up/down motor, Cassette down sensor
	LP-81	Lamp of cassette compartment
	PC-70	Cassette-in sensor, Cassette size sensor
Cassette compartment, Ejector (DVW-CA510/CA510P)	CL-28	Cassette compartment
	DU-91 or SE-237	Cassette OUT sensor/Cassette sensor/Ejector arm sensor
	IF-36	Betacart interface
	LED-200	ON AIR lamp
	SE-225	Cassette down sensor (1) or Cassette IN sensor
	SE-226	Cassette down sensor (2)
Front panel function	FP-58/58B	Sub control panel and Upper panel function (SWs, LEDs) control, CAV control level conversion
	VR-152	Audio REC and Phone level RVs, Phone connector (DVW-A500/A500P/500/500P)
	VR-152B	Phone level RV, Phone connector (DVW-A510/A510P/510/510P/CA510/CA510P)
	VR-153/153B	Audio PB level RVs
	SWC-17/17B	Upper panel function (SWs, LEDs)
	SWC-18/18B	Sub control panel function
	SWC-19/19B	System set-up panel function control
	KY-231/231B	Lower panel function control
	DP-176/176B	Time counter display
	PTC-69	Search dial sensor, Dial solenoid connection
Rear panel function	CP-218/218B	Rear connector board (Analog video) with input/output driver
	CP-220/220B	Rear connector board (Analog/Digital audio, TC)
	MB-441	Remote control connectors (CONTROL PANEL, REMOTE 1 IN/OUT, RS232C, VIDEO CONTROL)
Power	AC-139/139B	AC connector board with breaker for PAL models (DVW-A500P/500P/A510P/510P/CA510P)
	AC-155/155B	AC connector board with breaker for NTSC models (DVW-A500/500/A510/510/CA510)
SOPS-1042 or SOPS-1042 (A)	SOPS-1019C	Switching regulator
	SOPS-1042A	Switching regulator (inc. SOPS-1019C/1042S boards)
	SOPS-1042B or SOPS-1042D	Switching regulator (AC-DC)
	SOPS-1042S	Switching regulator

1-2

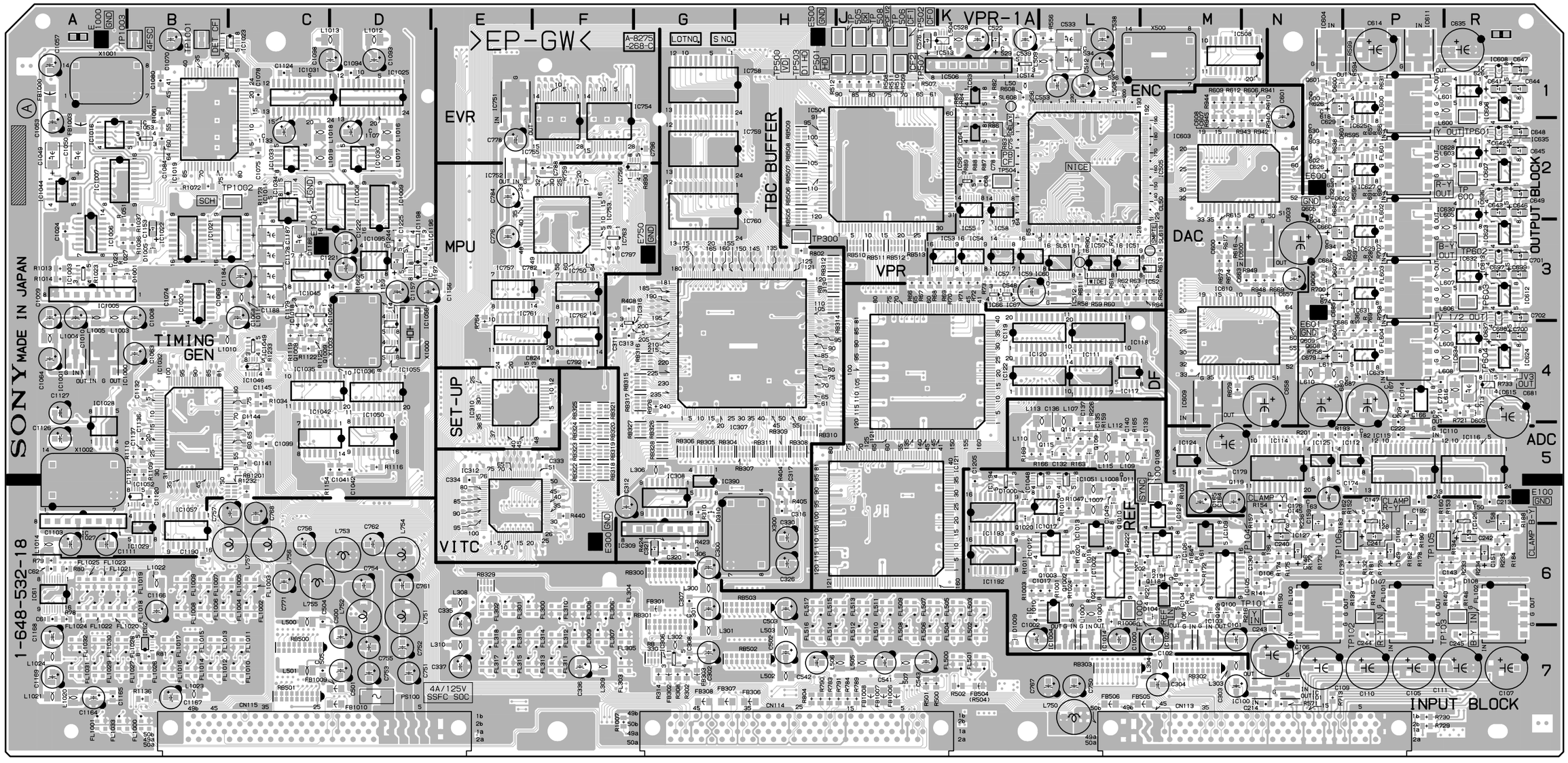
System configuration		Board name	Circuit Function
Other		MB-441	Mother board
		HN-181	Connection board with REC inhibit sensor (Drum/Capstan/Reel-shift motors, CTL head, DT-34/34B/HN-184/HN-185/PTC-59/PTC-71 boards) (REC inhibit sensor is for DVW-A500/A500P/500/500P.)
		HN-184	Connection board (Threading motor, Tape end sensor, PD-35/PTC-54/TR-78 boards)
		HN-185	Connection board with dew sensor (Tape top sensor, Cassette compartment, TR-79 board, Slip ring)
Option	BKDW-505 BKDW-506	DEC-65	Analog composite video decoder (Composite-component conversion, A/D conversion)
	BKDW-507	PP-45	Audio program play
	BKDW-509	RM-130	Parallel (50P) interface
	BKDW-514	KY-231	Lower panel function control
		DP-176	Time counter display
		PTC-69	Search dial sensor, Dial solenoid connection
	BKDW-515	KY-330	Editing operation/tape transport control switches, Memory card connector
		CP-266	Panel control CPU, EL control, PIO, Memory card I/F
		SW-749	Function control swithes
		PTC-69	Search dial sensor, Dial solenoid connection

VPR-1A ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder

(Board's Lot No. 909 and higher)
All DVWs

VPR-1A (1-648-532-18)

CL50	M2	FL305	F7	IC103	M7	IC637	R3	L302	G7	Q604	N2	TP508	J1
CL51	*L2	FL306	F6	IC104	M6	IC750	F3	L303	M7	Q605	N2	TP600	R2
CL52	*L2	FL307	F7	IC105	M6	IC751	E1	L304	M7	Q606	N3	TP601	R1
CL53	*L2	FL308	F6	IC106	M6	IC752	E2	L306	G5	Q607	N3	TP602	R3
CL54	*L2	FL309	F7	IC107	*R6	IC753	F3	L308	E6	Q608	N4	TP603	R3
CL55	*L2	FL310	F6	IC108	*N6	IC754	F1	L309	F7	Q609	N4	TP604	R4
CL56	*L2	FL311	F7	IC109	M6	IC755	F1	L310	E7	Q620	*N4	TP1000	L6
		FL312	F7	IC110	P5	IC756	F2	L500	C6	Q750	*H4	TP1001	B1
CN113	N7	FL313	E7	IC111	L4	IC757	E3	L501	C7	Q1000	L6	TP1002	C2
CN114	H7	FL314	E7	IC112	P5	IC758	G1	L502	H7	Q1001	*L6	TP1003	B1
CN115	C7	FL315	E7	IC113	*J5	IC759	G2	L503	H7	Q1002	L6		
		FL316	E7	IC114	N5	IC760	G2	L504	K1	Q1003	L6	X300	H6
D104	M6	FL317	E7	IC115	P5	IC761	F3	L505	J7	Q1004	*B3	X500	M1
D105	*N7	FL318	E7	IC116	R5	IC762	F4	L506	J7	Q1005	*B3	X1000	D4
D106	N6	FL500	K7	IC117	L4	IC763	F3	L507	J7	Q1006	*B4	X1001	A1
D107	P6	FL501	K7	IC118	L4	IC1000	A4	L508	L1	Q1007	*B2	X1002	A5
D108	R6	FL502	K7	IC119	K4	IC1001	A4	L509	L1	Q1008	C4	X1003	D4
D310	G5	FL503	K6	IC120	K4	IC1002	L6	L600	R1	Q1009	C4		
D500	*J1	FL504	K7	IC121	J5	IC1003	A3	L601	R1	Q1010	L5	*:B SIDE	
D600	N1	FL505	K6	IC122	J4	IC1004	L7	L603	R2	Q1011	L5		
D601	N2	FL506	J7	IC123	M5	IC1005	B3	L605	R3	Q1012	*B1		
D602	N2	FL507	J6	IC124	M5	IC1006	A2	L606	R3	Q1020	K5		
D603	N3	FL508	J7	IC125	N5	IC1007	A2	L607	R3				
D604	N4	FL509	J6	IC126	*P6	IC1008	D3	L608	R4	RB50	*L3		
D605	R4	FL510	J7	IC127	N5	IC1009	D3	L609	R4	RB51	*K3		
D606	*N3	FL511	J6	IC128	P5	IC1010	L6	L610	N4	RB300	G6		
D607	*N4	FL512	J7	IC129	R5	IC1011	C2	L611	N4	RB301	G6		
D750	*H4	FL513	J6	IC300	*G6	IC1012	K6	L616	R4	RB302	M7		
D751	*F4	FL514	J7	IC301	*G6	IC1013	L6	L750	L7	RB303	L7		
D752	*F2	FL515	J6	IC302	*G7	IC1014	L7	L751	D6	RB304	G5		
D753	*F2	FL516	H7	IC303	*M7	IC1015	*A1	L752	D6	RB305	G5		
D754	*F2	FL517	H6	IC304	*L7	IC1016	A2	L753	D6	RB306	G5		
D755	*F2	FL600	P1	IC305	*H5	IC1017	K5	L754	D6	RB307	H5		
D756	*F2	FL601	P2	IC306	G7	IC1018	C3	L755	C6	RB308	H5		
D757	*F2	FL602	P3	IC307	H4	IC1019	B2	L756	C6	RB309	H5		
D1000	K5	FL603	P3	IC308	G5	IC1020	B3	L757	C6	RB310	H5		
D1001	A3	FL604	P4	IC309	G6	IC1021	C3	L1000	L6	RB311	H5		
D1002	*A4	FL1000	B7	IC310	E4	IC1022	B3	L1003	A3	RB312	H3		
D1003	*C3	FL1001	A7	IC311	*H6	IC1023	C1	L1004	A4	RB313	H3		
D1004	*B3	FL1002	C6	IC312	E5	IC1024	*B4	L1005	A3	RB314	H3		
D1005	B3	FL1003	C6	IC313	*E6	IC1025	D1	L1007	L5	RB315	G4		
D1006	*C3	FL1004	B6	IC314	*F6	IC1026	*C5	L1008	L5	RB316	G4		
D1007	*K5	FL1005	B6	IC315	*E7	IC1027	A5	L1010	B4	RB317	G4		
D1008	*D3	FL1006	B6	IC316	F4	IC1028	A5	L1011	C3	RB318	F5		
D1009	K7	FL1007	B6	IC390	G5	IC1029	B5	L1012	D1	RB319	F5		
D1010	*A4	FL1008	B6	IC500	*C7	IC1030	D2	L1013	C1	RB320	F5		
		FL1009	B6	IC501	*C7	IC1031	C1	L1014	A6	RB321	F4		
E100	R5	FL1010	C7	IC502	*H7	IC1032	B5	L1016	D2	RB322	F5		
E300	F6	FL1011	C7	IC503	*H6	IC1033	C2	L1017	D2	RB323	F5		
E500	H1	FL1012	B7	IC504	J2	IC1034	C2	L1018	C2	RB324	F5		
E600	N2	FL1013	B7	IC505	L2	IC1035	D4	L1019	C2	RB325	F4		
E601	N3	FL1014	B7	IC506	K1	IC1036	D4	L1020	A7	RB326	G5		
E750	G3	FL1015	B7	IC507	*L1	IC1037	*A7	L1021	A7	RB327	G5		
E1000	A1	FL1016	B7	IC508	N1	IC1038	*B6	L1022	B6	RB328	G5		
E1001	C3	FL1017	B7	IC509	*J6	IC1039	*B7	L1023	B7	RB329	E6		
		FL1018	B6	IC510	*H6	IC1040	*A6	L1024	A7	RB330	G7		
FB300	*H6	FL1019	B6	IC511	*K7	IC1041	*A7			RB500	C7		
FB301	G6	FL1020	A6	IC512	L3	IC1042	D5	PS100	D7	RB501	C7		
FB302	G7	FL1021	A6	IC513	K1	IC1043	*C4			RB502	H7		
FB303	G7	FL1022	A6	IC514	K1	IC1044	A2	Q100	M6	RB503	H6		
FB304	*M7	FL1023	A6	IC600	N3	IC1045	C3	Q101	*N6	RB504	*J1		
FB305	*H6	FL1024	A6	IC601	*N4	IC1046	C4	Q102	*P7	RB505	H2		
FB306	H7	FL1025	A6	IC602	*N2	IC1047	*C4	Q103	*R7	RB506	H2		
FB307	G7	FL1026	B7	IC603	M2	IC1048	L5	Q104	*M6	RB507	H2		
FB308	G7	FL1027	A7	IC604	N1	IC1049	C4	Q105	*N7	RB508	H2		
FB500	*L1	FL1028	A7	IC605	*M4	IC1050	D4	Q106	*P6	RB509	H2		
FB501	*M1	FL1029	A7	IC606	R1	IC1051	L5	Q107	*R6	RB510	J3		
FB502	*C7	FL1030	A7	IC607	R2	IC1052	B5	Q108	M5	RB511	J3		
FB503	*H7	FL1031	A7	IC608	R1	IC1053	B2	Q109	L5	RB512	J3		
FB504	K7	FL1032	A7	IC609	M4	IC1054	C3	Q111	*P5	RB513	J3		
FB505	M7	FL1033	A7	IC610	M4	IC1055	D4	Q112	*R5	RB1201	C5		
FB506	L7			IC611	P1	IC1056	D4	Q113	*N5				
FB1000	A1	IC50	L3	IC612	R3	IC1057	B5	Q114	L5	SL608	K1		
FB1001	*A5	IC51	L3	IC613	R3	IC1058	*B6	Q115	L5	SL611	L3		
FB1002	*D3	IC52	M3	IC614	P4	IC1095	D3	Q116	M6	SL613	M3		
FB1003	A2	IC53	J3	IC615	R4	IC1192	K6	Q117	*K5				
FB1004	*A5	IC54	K3	IC619	*N2	IC1193	K6	Q118	M6	TP100	M5		
FB1005	*D4	IC55	K3	IC621	*N3	IC1194	K5	Q119	M5	TP101	N6		
FB1006	J7	IC56	K2	IC623	R3	IC1196	D3	Q120	*P7	TP102	P6		
FB1007	J7	IC57	K3	IC624	R4	IC1197	D3	Q121	*R7	TP103	R6		
FB1008	J7	IC58	K3	IC625	P1	IC1198	D3	Q122	*N7	TP104	N6		
FB1009	D7	IC59	K3	IC626	R1			Q123	*N6	TP105	P6		
FB1010	D7	IC60	L3	IC627	P2	L50	K1	Q124	*N6	TP106	P6		
		IC61	A6	IC628	R2	L106	M6	Q125	*P6	TP300	H3		
FL100	N6	IC62	B7	IC629	P2	L107	L4	Q126	*P6	TP500	J1		
FL101	P6	IC63	K1	IC630	R2	L109	L5	Q127	*R6	TP501	J1		
FL102	R6	IC64	K2	IC631	P3	L110	K5	Q128	*R6	TP502	J1		
FL300	E6	IC66	K3	IC632	R3	L112	L5	Q129	M6	TP503	J1		
FL301	E6	IC67	K3	IC633	P4	L113	L4	Q600	N1	TP504	K2		
FL302	E6	IC100	N7	IC634	R4	L115	L5	Q601	N1	TP505	J1		
FL303	F7	IC101	N7	IC635	R2	L300	G6	Q602	N2	TP506	J1		
FL304	F6	IC102	M7	IC636	R2	L301	G7	Q603	N2	TP507	J1		



VPR-1A BOARD -A SIDE-

1-648-532-18 (LOT No. 909 -)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1APG	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1A	MCB
DVW-500(UC)	; VPR-1A	MCB
DVW-500P(EK)	; VPR-1APG	MCB
DVW-500P(UC)	; VPR-1APG	MCB
DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1BA	MCB
DVW-510(UC)	; VPR-1BA	MCB
DVW-510P(EK)	; VPR-1BAP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

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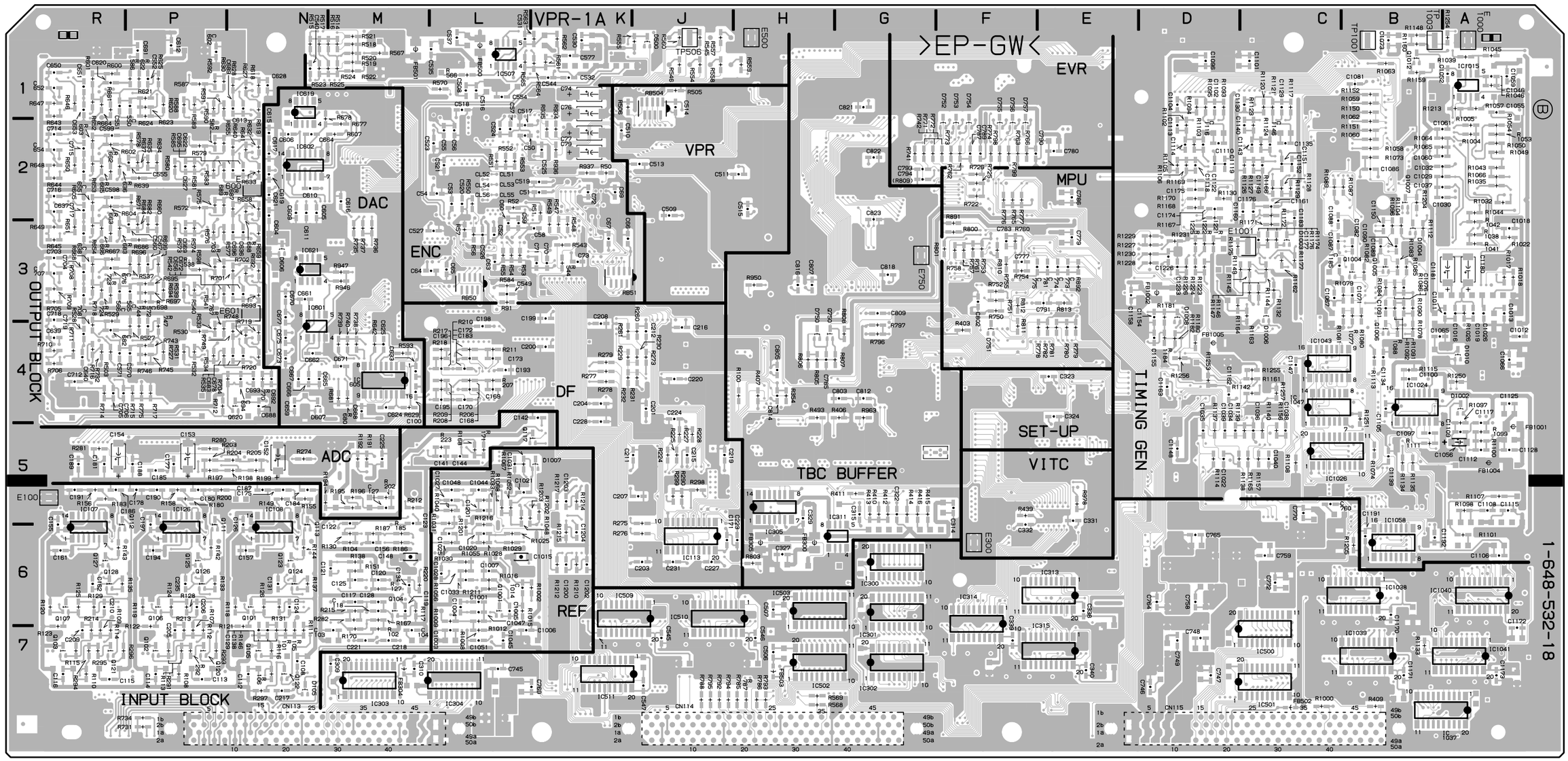


VPR-1A BOARD -B SIDE-

1-648-532-18 (LOT No. 909 -)

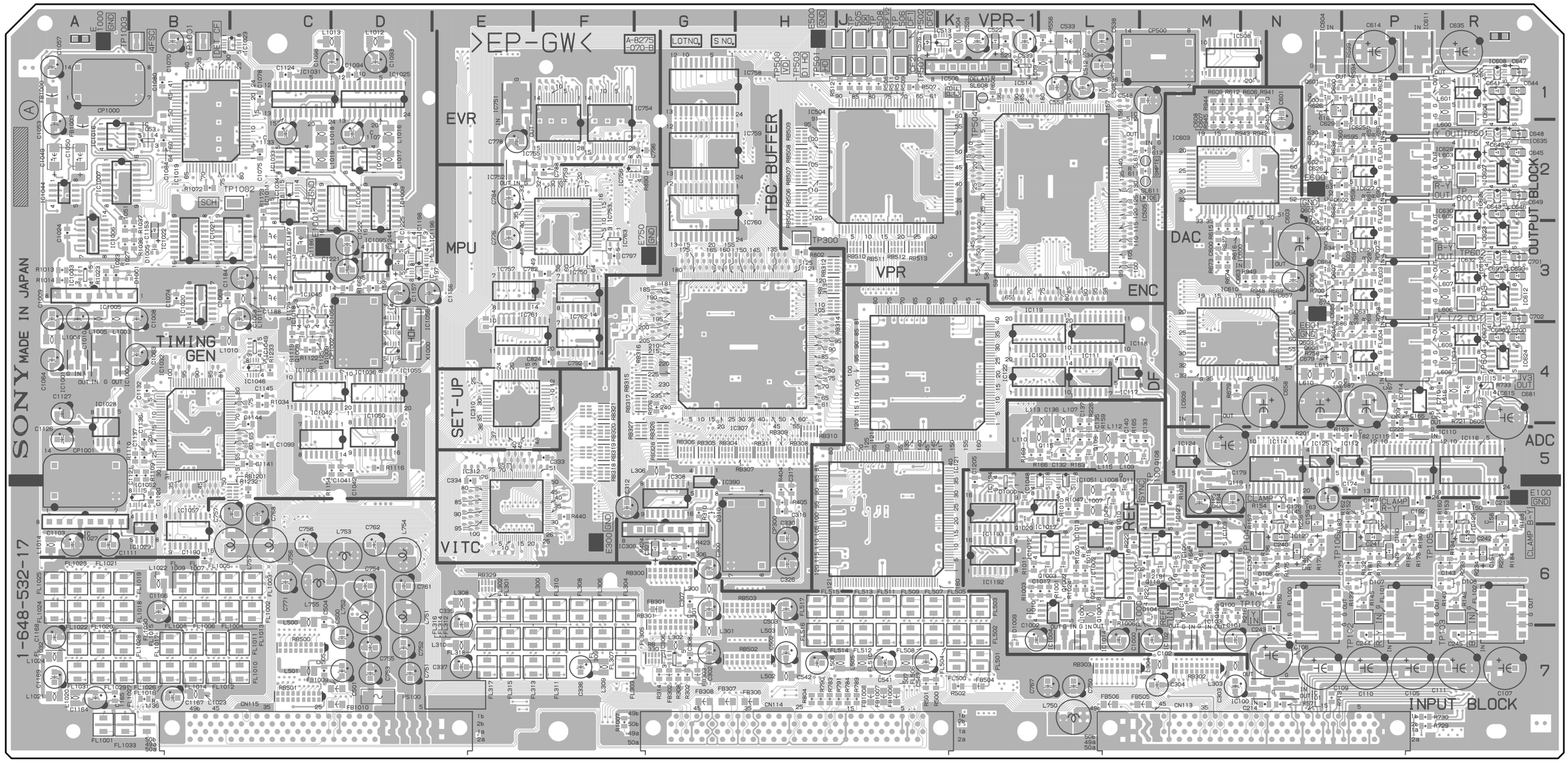
DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1APG	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1A	MCB
DVW-500(UC)	; VPR-1A	MCB
DVW-500P(EK)	; VPR-1APG	MCB
DVW-500P(UC)	; VPR-1APG	MCB
DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1BA	MCB
DVW-510(UC)	; VPR-1BA	MCB
DVW-510P(EK)	; VPR-1BAP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

VPR-1 ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder

(Board's Lot No. 803 through 908)
All recorder models

VPR-1 (1-648-532-17)

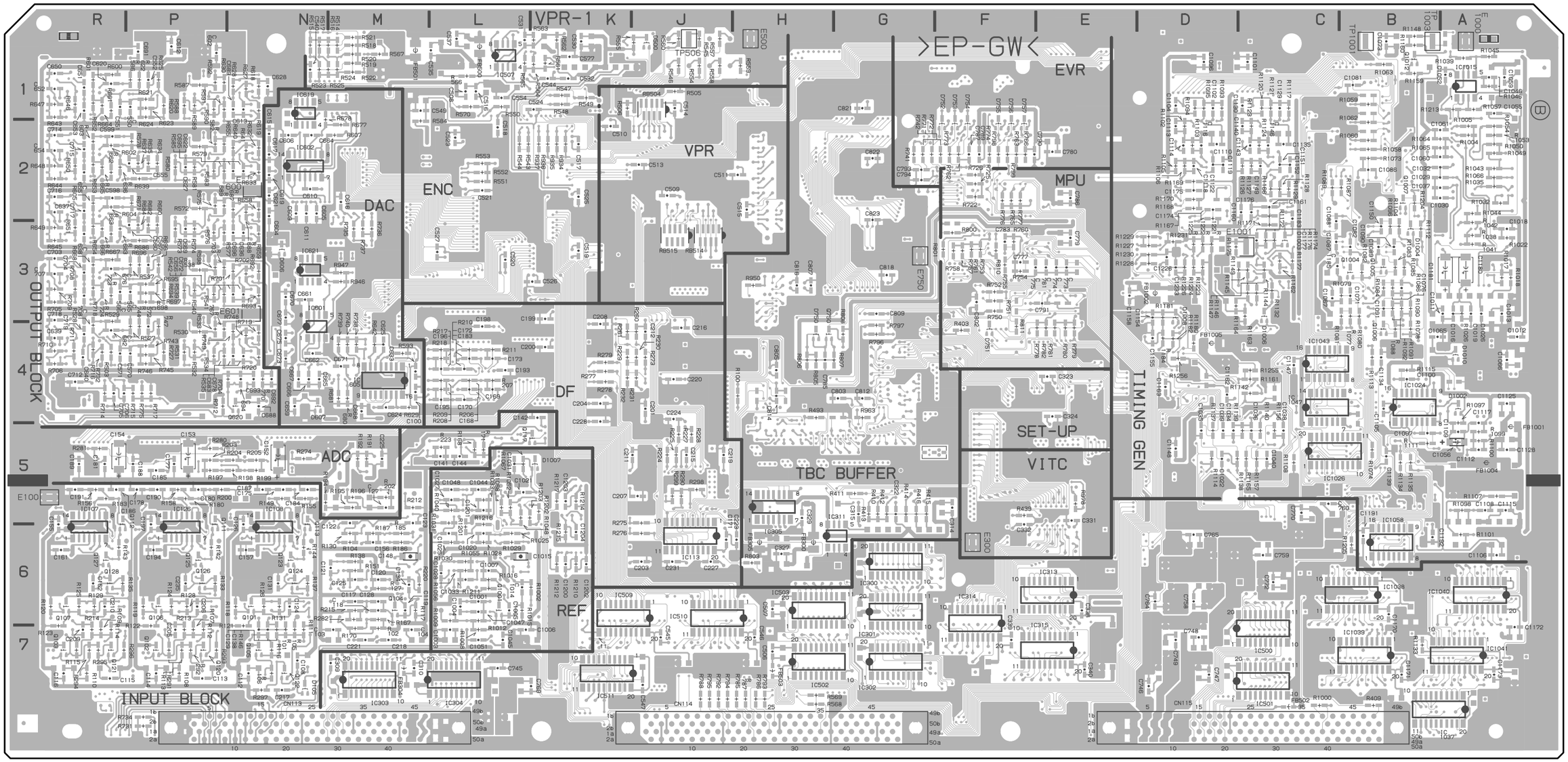
CN113	N7	FL317	E7	IC303	*M7	IC1021	C3	L1007	L5	RB321	F4
CN114	H7	FL318	E7	IC304	*L7	IC1022	B3	L1008	L5	RB326	G5
CN115	C7	FL500	K7	IC305	*H5	IC1023	C1	L1010	B4	RB327	G5
		FL501	K7	IC306	G7	IC1024	*B4	L1011	C3	RB328	G5
CP300	H6	FL502	K7	IC307	H4	IC1025	D1	L1012	D1	RB329	E6
CP500	M1	FL503	K6	IC308	G5	IC1026	*C5	L1013	C1	RB330	G7
CP1000	A1	FL504	K7	IC309	G6	IC1027	A5	L1014	A6	RB500	C7
CP1001	A5	FL505	K6	IC311	*H6	IC1028	A5	L1016	D2	RB501	C7
CP1002	D4	FL506	J7	IC312	E5	IC1029	B5	L1017	D2	RB502	H7
		FL507	J6	IC314	*F6	IC1030	D2	L1018	C2	RB503	H6
D104	M6	FL508	J7	IC315	*E7	IC1031	C1	L1019	C2	RB504	*J1
D105	*N7	FL509	J6	IC500	*C7	IC1032	B5	L1020	A7	RB505	H2
D106	N6	FL510	J7	IC501	*C7	IC1033	C2	L1021	A7	RB506	H2
D107	P6	FL511	J6	IC502	*H7	IC1034	C2	L1022	B6	RB507	H2
D108	R6	FL512	J7	IC503	*H6	IC1035	D4	L1023	B7	RB508	H2
D310	G5	FL513	J6	IC504	J2	IC1036	D4	L1024	A7	RB509	H2
D603	N3	FL514	J7	IC505	L2	IC1037	*A7			RB510	J3
D604	N4	FL515	J6	IC506	K1	IC1038	*B6	PS100	D7	RB511	J3
D605	R4	FL516	H7	IC507	*L1	IC1039	*B7			RB512	J3
D606	*N3	FL517	H6	IC508	N1	IC1040	*A6	Q100	M6	RB513	J3
D607	*N4	FL600	P1	IC509	*J6	IC1041	*A7	Q101	*N6		
D750	*H4	FL601	P2	IC510	*H6	IC1042	D5	Q102	*P7	TP100	M5
D751	*F4	FL602	P3	IC511	*K7	IC1043	*C4	Q103	*R7	TP101	N6
D752	*F2	FL603	P3	IC512	M2	IC1044	A2	Q104	*M6	TP102	P6
D753	*F2	FL604	P4	IC514	K1	IC1045	C3	Q105	*N7	TP103	R6
D754	*F2	FL1001	A7	IC600	N3	IC1046	C4	Q106	*P6	TP104	N6
D755	*F2	FL1002	C6	IC601	*N4	IC1047	*C4	Q107	*R6	TP105	P6
D756	*F2	FL1003	C6	IC602	*N2	IC1048	L5	Q108	M5	TP106	P6
D757	*F2	FL1004	B6	IC603	M2	IC1049	C4	Q109	L5	TP300	H3
D1000	K5	FL1005	B6	IC604	N1	IC1050	D4	Q111	*P5	TP500	J1
D1002	*A4	FL1006	B6	IC605	*M4	IC1051	L5	Q112	*R5	TP501	J1
D1003	*C3	FL1007	B6	IC606	R1	IC1052	B5	Q113	*N5	TP502	J1
D1004	*B3	FL1008	B6	IC607	R2	IC1053	B2	Q114	L5	TP503	J1
D1005	B3	FL1009	B6	IC608	R1	IC1054	C3	Q115	L5	TP504	K1
D1006	*C3	FL1010	C7	IC609	M4	IC1057	B5	Q116	M6	TP505	J1
D1007	*K5	FL1011	C7	IC610	M4	IC1058	*B6	Q117	*K5	TP506	J1
D1009	K7	FL1012	B7	IC611	P1	IC1095	D3	Q118	M6	TP507	J1
D1010	*A4	FL1013	B7	IC612	R3	IC1192	K6	Q119	M5	TP508	J1
		FL1014	B7	IC613	R3	IC1193	K6	Q123	*N6	TP600	R2
E100	R5	FL1015	B7	IC614	P4	IC1194	K5	Q124	*N6	TP601	R1
E1001	C3	FL1016	B7	IC615	R4	IC1196	D3	Q125	*P6	TP602	R3
E300	F6	FL1017	B7	IC619	*N2	IC1197	D3	Q126	*P6	TP603	R3
E500	H1	FL1018	A6	IC621	*N3	IC1198	D3	Q127	*R6	TP604	R4
E600	N2	FL1019	A6	IC623	R3			Q128	*R6	TP1000	L6
E601	N3	FL1020	A6	IC624	R4	L106	M6	Q129	M6	TP1001	B1
E750	G3	FL1021	A6	IC625	P1	L107	L4	Q600	N1	TP1002	C2
E1000	A1	FL1022	A6	IC626	R1	L109	L5	Q601	N1	TP1003	B1
		FL1023	A6	IC627	P2	L110	K5	Q602	N2		
FB300	*H6	FL1024	A6	IC628	R2	L112	L5	Q603	N2	*:B SIDE	
FB301	G6	FL1025	A6	IC629	P2	L113	L4	Q604	N2		
FB302	G7	FL1026	B7	IC630	R2	L115	L5	Q605	N2		
FB303	G7	FL1027	A7	IC631	P3	L300	G6	Q606	N3		
FB304	*M7	FL1028	A7	IC632	R3	L301	G7	Q607	N3		
FB305	*H6	FL1029	A7	IC633	P4	L302	G7	Q608	N4		
FB306	H7	FL1030	A7	IC634	R4	L303	M7	Q609	N4		
FB307	G7	FL1031	A7	IC635	R2	L304	M7	Q620	*N4		
FB308	G7	FL1032	A7	IC636	R2	L306	G5	Q750	*H4		
FB500	*L1	FL1033	A7	IC637	R3	L309	F7	Q1000	L6		
FB501	*M1			IC750	F3	L310	E7	Q1001	*L6		
FB502	*C7	IC100	N7	IC751	E1	L500	C6	Q1002	L6		
FB503	*H7	IC101	N7	IC752	E2	L501	C7	Q1003	L6		
FB504	K7	IC102	M7	IC753	F3	L502	H7	Q1004	*B3		
FB505	M7	IC103	M7	IC754	F1	L503	H7	Q1005	*B3		
FB506	L7	IC104	M6	IC755	F1	L504	K1	Q1006	*B4		
FB1000	A1	IC105	M6	IC756	F2	L505	J7	Q1007	*B2		
FB1001	*A5	IC106	M6	IC757	E3	L506	J7	Q1008	C4		
FB1002	*D3	IC107	*R6	IC758	G1	L507	J7	Q1009	C4		
FB1003	A2	IC108	*N6	IC759	G2	L508	L1	Q1010	L5		
FB1005	*D4	IC109	M6	IC760	G2	L509	L1	Q1011	L5		
FB1006	J7	IC110	P5	IC761	F3	L600	R1	Q1012	*B1		
FB1007	J7	IC111	L4	IC762	F4	L601	R1				
FB1008	J7	IC112	P5	IC763	F3	L603	R2	RB300	G6		
FB1009	D7	IC113	*J5	IC1000	A4	L605	R3	RB301	G6		
FB1010	D7	IC114	N5	IC1001	A4	L606	R3	RB302	M7		
		IC115	P5	IC1002	L6	L607	R3	RB303	L7		
FL100	N6	IC116	R5	IC1003	A3	L608	R4	RB304	G5		
FL101	P6	IC117	L4	IC1004	L7	L609	R4	RB305	G5		
FL102	R6	IC118	L4	IC1006	A2	L610	N4	RB306	G5		
FL303	F7	IC119	K4	IC1007	A2	L611	N4	RB307	H5		
FL304	F6	IC120	K4	IC1008	D3	L616	R4	RB308	H5		
FL305	F7	IC121	J5	IC1009	D3	L750	L7	RB309	H5		
FL306	F6	IC122	J4	IC1010	L6	L751	D6	RB310	H5		
FL307	F7	IC123	M5	IC1011	C2	L752	D6	RB311	H5		
FL308	F6	IC124	M5	IC1012	K6	L753	D6	RB312	H3		
FL309	F7	IC125	N5	IC1013	L6	L754	D6	RB313	H3		
FL310	F6	IC126	*P6	IC1014	L7	L755	C6	RB314	H3		
FL311	F7	IC127	N5	IC1015	*A1	L756	C6	RB315	G4		
FL312	F7	IC128	P5	IC1016	A2	L757	C6	RB316	G4		
FL313	E7	IC129	R5	IC1017	K5	L1000	L6	RB317	G4		
FL314	E7	IC300	*G6	IC1018	C3	L1003	A3	RB318	F5		
FL315	E7	IC301	*G6	IC1019	B2	L1004	A4	RB319	F5		
FL316	E7	IC302	*G7	IC1020	B3	L1005	A3	RB320	F5		



VPR-1 BOARD -A SIDE-

1-648-532-17 (LOT No. 803 - 908)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1APG	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1A	MCB
DVW-500(UC)	; VPR-1A	MCB
DVW-500P(EK)	; VPR-1APG	MCB
DVW-500P(UC)	; VPR-1APG	MCB



VPR-1 BOARD -B SIDE-

1-648-532-17 (LOT No. 803 - 908)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1APG	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1A	MCB
DVW-500(UC)	; VPR-1A	MCB
DVW-500P(EK)	; VPR-1APG	MCB
DVW-500P(UC)	; VPR-1APG	MCB

VPR-1 ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder

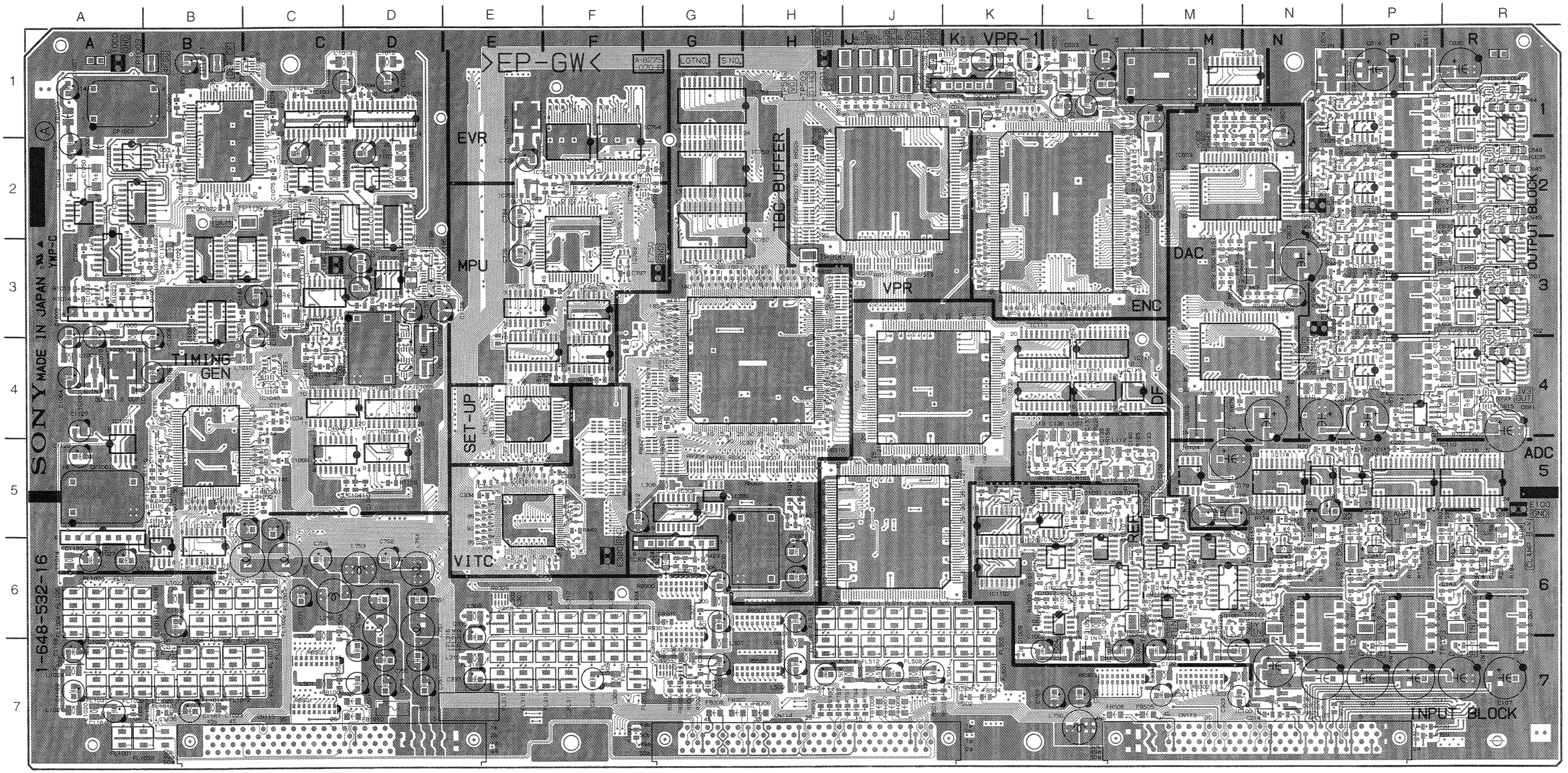
(Board's Lot No. 705 through 802)
All recorder models

VPR-1(1-648-532-16)

CN113	N-7	FL303	F-7	IC104	M-6	IC628	R-2	IC1054	C-3	Q100	M-6	RB329	E-6
CN114	H-7	FL304	F-6	IC105	M-6	IC629	P-2	IC1057	B-5	*Q101	N-6	RB330	G-7
CN115	C-7	FL305	F-7	IC106	M-6	IC630	R-2	*IC1058	B-6	*Q102	P-7	RB500	C-7
		FL306	F-6	*IC107	R-6	IC631	P-3	IC1095	D-3	*Q103	R-7	RB501	C-7
CP300	H-6	FL307	F-7	*IC108	N-6	IC632	R-3	IC1192	K-6	*Q104	M-6	RB502	H-7
CP500	M-1	FL308	F-6	IC109	M-6	IC633	P-4	IC1193	K-6	*Q105	N-7	RB503	H-6
CP1000	A-1	FL309	F-7	IC110	P-5	IC634	R-4	IC1194	K-5	*Q106	P-6	*RB504	J-1
CP1001	A-5	FL310	F-6	IC111	L-4	IC635	R-2	IC1196	D-3	*Q107	R-6	RB505	H-2
CP1002	D-4	FL311	F-7	IC112	P-5	IC636	R-2	IC1197	D-3	Q108	M-5	RB506	H-2
		FL312	F-7	*IC113	J-5	IC637	R-3	IC1198	D-3	Q109	L-5	RB507	H-2
D104	M-6	FL313	E-7	IC114	N-5	IC750	F-3			*Q111	P-5	RB508	H-2
*D105	N-7	FL314	E-7	IC115	P-5	IC751	E-1	L106	M-6	*Q112	R-5	RB509	H-2
D106	N-6	FL315	E-7	IC116	R-5	IC752	E-2	L107	L-4	*Q113	N-5	RB510	J-3
D107	P-6	FL316	E-7	IC117	L-4	IC753	F-3	L109	L-5	Q114	L-5	RB511	J-3
D108	R-6	FL317	E-7	IC118	L-4	IC754	F-1	L110	K-5	Q115	L-5	RB512	J-3
D603	N-3	FL318	E-7	IC119	K-4	IC755	F-1	L112	L-5	Q116	M-6	RB513	J-3
D604	N-4	FL500	K-7	IC120	K-4	IC756	F-2	L113	L-4	*Q117	K-5		
D605	R-4	FL501	K-7	IC121	J-5	IC757	E-3	L115	L-5	Q118	M-6	TP100	M-5
*D606	N-3	FL502	K-7	IC122	J-4	IC758	G-1	L300	G-6	Q119	M-5	TP101	N-6
*D607	N-4	FL503	K-6	IC123	M-5	IC759	G-2	L301	G-7	*Q123	N-6	TP102	P-6
*D750	H-4	FL504	K-7	IC124	M-5	IC760	G-2	L302	G-7	*Q124	N-6	TP103	R-6
*D751	F-4	FL505	K-6	IC125	N-5	IC761	F-3	L303	M-7	*Q125	P-6	TP104	N-6
*D752	F-2	FL506	J-7	*IC126	P-6	IC762	F-4	L304	M-7	*Q126	P-6	TP105	P-6
*D753	F-2	FL507	J-6	IC127	N-5	IC763	F-3	L306	G-5	*Q127	R-6	TP106	P-6
*D754	F-2	FL508	J-7	IC128	P-5	IC1000	A-4	L309	F-7	*Q128	R-6	TP300	H-3
*D755	F-2	FL509	J-6	IC129	R-5	IC1001	A-4	L310	E-7	Q129	M-6	TP500	J-1
*D756	F-2	FL510	J-7	*IC300	G-6	IC1002	L-6	L500	C-6	Q600	N-1	TP501	J-1
*D757	F-2	FL511	J-6	*IC301	G-6	IC1003	A-3	L501	C-7	Q601	N-1	TP502	J-1
D1000	K-5	FL512	J-7	*IC302	G-7	IC1004	L-7	L502	H-7	Q602	N-2	TP503	J-1
*D1002	A-4	FL513	J-6	*IC303	M-7	IC1006	A-2	L503	H-7	Q603	N-2	TP504	K-1
*D1003	C-3	FL514	J-7	*IC304	L-7	IC1007	A-2	L504	K-1	Q604	N-2	TP505	J-1
*D1004	B-3	FL515	J-6	*IC305	H-5	IC1008	D-3	L505	J-7	Q605	N-2	TP506	J-1
D1005	B-3	FL516	H-7	IC306	G-7	IC1009	D-3	L506	J-7	Q606	N-3	TP507	J-1
*D1006	C-3	FL517	H-6	IC307	H-4	IC1010	L-6	L507	J-7	Q607	N-3	TP508	J-1
*D1007	K-5	FL600	P-1	IC308	G-5	IC1011	C-2	L508	L-1	Q608	N-4	TP600	R-2
D1009	K-7	FL601	P-2	IC309	G-6	IC1012	K-6	L509	L-1	Q609	N-4	TP601	R-1
*D1010	A-4	FL602	P-3	*IC311	H-6	IC1013	L-6	L600	R-1	*Q620	N-4	TP602	R-3
		FL603	P-3	IC312	E-5	IC1014	L-7	L601	R-1	*Q750	H-4	TP603	R-3
E100	R-5	FL604	P-4	*IC314	F-6	*IC1015	A-1	L603	R-2	Q1000	L-6	TP604	R-4
E300	F-6	FL1001	A-7	*IC315	E-7	IC1016	A-2	L605	R-3	*Q1001	L-6	TP1000	L-6
E500	H-1	FL1002	C-6	*IC500	C-7	IC1017	K-5	L606	R-3	Q1002	L-6	TP1001	B-1
E600	N-2	FL1003	C-6	*IC501	C-7	IC1018	C-3	L607	R-3	Q1003	L-6	TP1002	C-2
E601	N-3	FL1004	B-6	*IC502	H-7	IC1019	B-2	L608	R-4	*Q1004	B-3	TP1003	B-1
E750	G-3	FL1005	B-6	*IC503	H-6	IC1020	B-3	L609	R-4	*Q1005	B-3		
E1000	A-1	FL1006	B-6	IC504	J-2	IC1021	C-3	L610	N-4	*Q1006	B-4		
E1001	C-3	FL1007	B-6	IC505	L-2	IC1022	B-3	L611	N-4	*Q1007	B-2		
		FL1008	B-6	IC506	K-1	IC1023	C-1	L616	R-4	Q1008	C-4		
*FB300	H-6	FL1009	B-6	*IC507	L-1	*IC1024	B-4	L750	L-7	Q1009	C-4		
FB301	G-6	FL1010	C-7	IC508	N-1	IC1025	D-1	L751	D-6	Q1010	L-5		
FB302	G-7	FL1011	C-7	*IC509	J-6	*IC1026	C-5	L752	D-6	Q1011	L-5		
FB303	G-7	FL1012	B-7	*IC510	H-6	IC1027	A-5	L753	D-6	*Q1012	B-1		
*FB304	M-7	FL1013	B-7	*IC511	K-7	IC1028	A-5	L754	D-6				
*FB305	H-6	FL1014	B-7	IC512	M-2	IC1029	B-5	L755	C-6	RB300	G-6		
FB306	H-7	FL1015	B-7	IC514	K-1	IC1030	D-2	L756	C-6	RB301	G-6		
FB307	G-7	FL1016	B-7	IC600	N-3	IC1031	C-1	L757	C-6	RB302	M-7		
FB308	G-7	FL1017	B-7	*IC601	N-4	IC1032	B-5	L1000	L-6	RB303	L-7		
*FB500	L-1	FL1018	A-6	*IC602	N-2	IC1033	C-2	L1003	A-3	RB304	G-5		
*FB501	M-1	FL1019	A-6	IC603	M-2	IC1034	C-2	L1004	A-4	RB305	G-5		
*FB502	C-7	FL1020	A-6	IC604	N-1	IC1035	D-4	L1005	A-3	RB306	G-5		
*FB503	H-7	FL1021	A-6	*IC605	M-4	IC1036	D-4	L1007	L-5	RB307	H-5		
FB504	K-7	FL1022	A-6	IC606	R-1	*IC1037	A-7	L1008	L-5	RB308	H-5		
FB505	M-7	FL1023	A-6	IC607	R-2	*IC1038	B-6	L1010	B-4	RB309	H-5		
FB506	L-7	FL1024	A-6	IC608	R-1	*IC1039	B-7	L1011	C-3	RB310	H-5		
FB1000	A-1	FL1025	A-6	IC609	M-4	*IC1040	A-6	L1012	D-1	RB311	H-5		
*FB1001	A-5	FL1026	B-7	IC610	M-4	*IC1041	A-7	L1013	C-1	RB312	H-3		
*FB1002	D-3	FL1027	A-7	IC611	P-1	IC1042	D-5	L1014	A-6	RB313	H-3		
FB1003	A-2	FL1028	A-7	IC612	R-3	*IC1043	C-4	L1016	D-2	RB314	H-3		
*FB1005	D-4	FL1029	A-7	IC613	R-3	IC1044	A-2	L1017	D-2	RB315	G-4		
FB1006	J-7	FL1030	A-7	IC614	P-4	IC1045	C-3	L1018	C-2	RB316	G-4		
FB1007	J-7	FL1031	A-7	IC615	R-4	IC1046	C-4	L1019	C-2	RB317	G-4		
FB1008	J-7	FL1032	A-7	*IC619	N-2	*IC1047	C-4	L1020	A-7	RB318	F-5		
FB1009	D-7	FL1033	A-7	*IC621	N-3	IC1048	L-5	L1021	A-7	RB319	F-5		
FB1010	D-7			IC623	R-3	IC1049	C-4	L1022	B-6	RB320	F-5		
		IC100	N-7	IC624	R-4	IC1050	D-4	L1023	B-7	RB321	F-4		
FL100	N-6	IC101	N-7	IC625	P-1	IC1051	L-5	L1024	A-7	RB326	G-5		
FL101	P-6	IC102	M-7	IC626	R-1	IC1052	B-5			RB327	G-5		
FL102	R-6	IC103	M-7	IC627	P-2	IC1053	B-2	PS100	D-7	RB328	G-5		

*: B SIDE

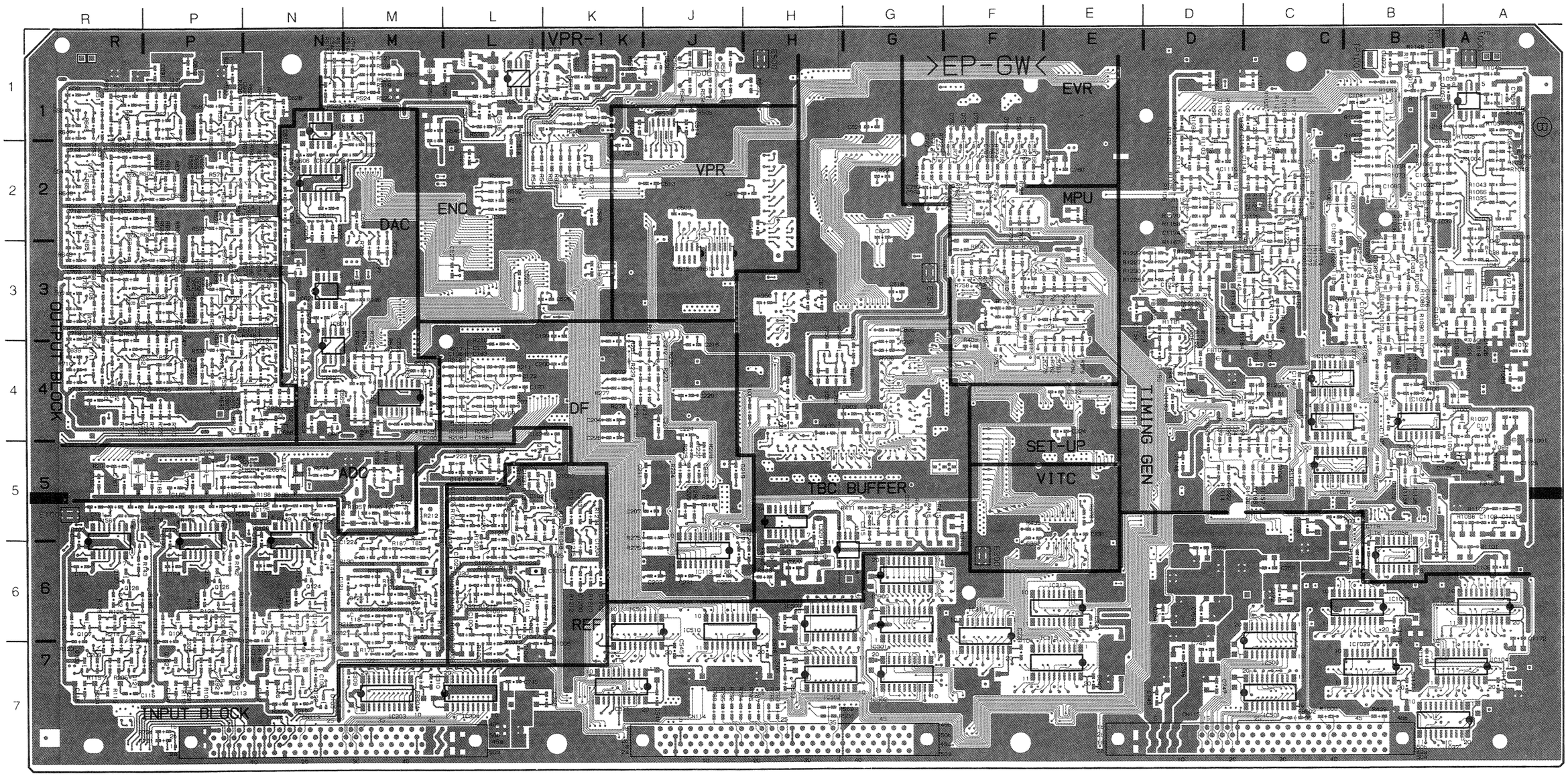
LOT NO. G-1



VPR-1 BOARD -A SIDE-

1-648-532-16 (LOT No. 705 - 802)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB



VPR-1 BOARD -B SIDE-

1-648-532-16 (LOT No. 705 - 802)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB

VPR-1 ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder

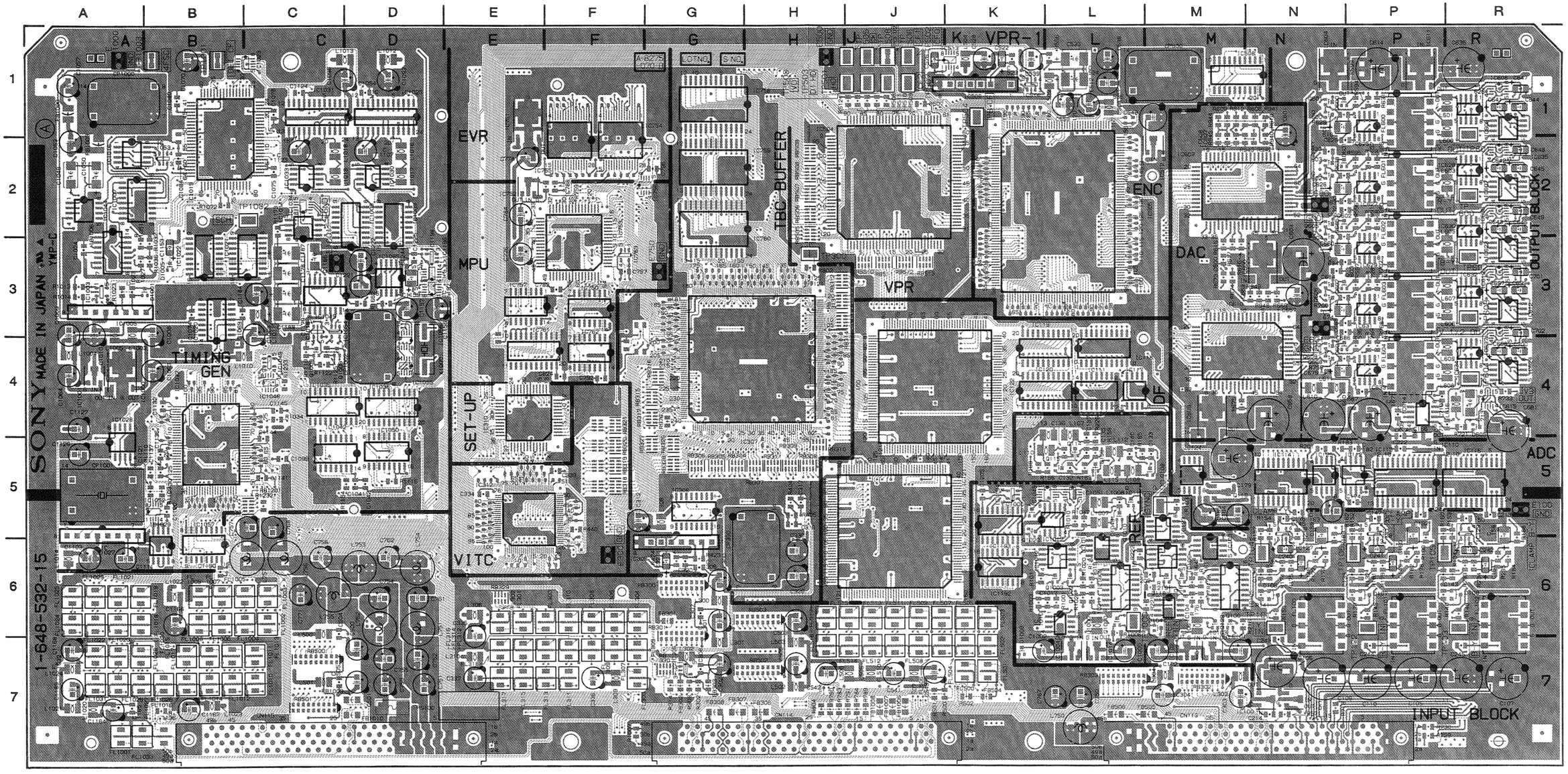
(Board's Lot No. 503 through 704)
All recorder models

VPR-1(1-648-532-15)

CN113	M-7	FB1006	J-7	FL1024	A-6	IC603	M-2	IC1031	C-1	Q608	N-4
CN114	H-7	FB1007	J-7	FL1025	A-6	IC604	N-1	IC1032	B-5	Q609	N-4
CN115	C-7	FB1008	J-7	FL1026	B-7	✱IC605	M-4	IC1033	C-2	✱Q620	N-4
		FB1009	D-7	FL1027	A-7	IC606	R-1	IC1034	C-2	✱Q750	H-4
CP300	H-6	FB1010	D-7	FL1028	A-7	IC607	R-2	IC1035	D-4	Q1000	L-6
CP500	M-1			FL1029	A-7	IC608	R-1	IC1036	D-4	✱Q1001	L-6
CP1000	A-1	FL100	N-6	FL1030	A-7	IC609	N-4	✱IC1037	A-7	Q1002	L-6
CP1001	A-5	FL101	P-6	FL1031	A-7	IC610	M-4	✱IC1038	B-6	Q1003	L-6
CP1002	D-3	FL102	R-6	FL1032	A-7	IC611	P-1	✱IC1039	B-7	✱Q1004	B-3
		FL300	E-6	FL1033	A-7	IC612	R-3	✱IC1040	A-6	✱Q1005	B-3
D104	M-6	FL301	E-6			IC613	R-3	✱IC1041	A-7	✱Q1006	B-4
✱D105	N-7	FL302	E-6	IC100	N-7	IC614	P-4	IC1042	D-5	✱Q1007	B-2
D106	N-6	FL303	F-7	IC101	N-7	IC615	R-4	✱IC1043	C-4	Q1008	C-3
D107	P-6	FL304	F-6	IC102	M-7	✱IC619	N-2	IC1044	A-2	Q1009	C-3
D108	R-6	FL305	F-7	IC103	M-7	✱IC621	N-3	IC1045	C-3	Q1010	L-5
✱D500	J-1	FL306	F-6	IC104	M-6	IC623	R-3	IC1046	C-4	Q1011	L-5
D600	N-1	FL307	F-7	IC105	M-6	IC624	R-4	✱IC1047	C-4	✱Q1012	B-1
D601	N-2	FL308	F-6	IC106	M-6	IC625	P-1	IC1048	K-5	Q1020	K-5
D602	N-2	FL309	F-7	✱IC107	R-6	IC626	R-1	IC1049	C-4		
D603	N-3	FL310	F-6	✱IC108	N-6	IC627	P-2	IC1050	D-5	TP100	M-5
D604	N-4	FL311	F-7	IC109	M-6	IC628	R-2	IC1051	L-5	TP101	N-6
D605	R-4	FL312	F-7	IC110	P-5	IC629	P-3	IC1052	B-5	TP102	P-6
✱D606	N-3	FL313	E-7	IC111	L-4	IC630	R-2	IC1053	B-2	TP103	R-6
✱D607	N-4	FL314	E-7	IC112	P-5	IC631	P-3	IC1054	C-3	TP104	N-5
✱D750	H-4	FL315	E-7	✱IC113	J-5	IC632	R-3	IC1055	D-4	TP105	P-5
✱D751	F-4	FL316	E-7	IC114	N-5	IC633	P-4	IC1056	D-4	TP106	P-5
✱D752	F-2	FL317	E-7	IC115	P-5	IC634	R-4	IC1057	B-5	TP300	H-3
✱D753	F-2	FL318	E-7	IC116	R-5	IC635	R-2	✱IC1058	B-6	TP500	J-1
✱D754	F-2	FL500	K-7	IC117	L-4	IC636	R-3	IC1095	D-3	TP501	J-1
✱D755	F-2	FL501	K-7	IC118	L-4	IC637	R-4	IC1192	K-6	TP502	J-1
✱D756	E-2	FL502	K-7	IC119	K-4	IC750	F-3	IC1193	K-6	TP503	J-1
✱D757	E-2	FL503	K-6	IC120	K-4	IC751	E-1	IC1194	K-5	TP504	K-1
D1000	K-5	FL504	K-7	IC121	J-5	IC752	E-2	IC1196	D-3	TP505	J-1
D1001	B-3	FL505	K-6	IC122	J-4	IC753	F-3	IC1197	D-3	TP506	J-1
✱D1002	A-4	FL506	J-7	IC123	M-5	IC754	F-1	IC1198	D-3	TP507	J-1
✱D1003	C-3	FL507	J-6	IC124	M-5	IC755	F-1			TP508	J-1
✱D1004	B-3	FL508	J-7	IC125	N-5	IC756	F-2	PS100	D-7	TP600	R-2
D1005	B-3	FL509	J-6	✱IC126	P-6	IC757	E-3			TP601	R-2
✱D1006	C-3	FL510	J-7	IC127	N-6	IC758	G-1	Q100	M-6	TP602	R-3
✱D1007	K-5	FL511	J-6	IC128	P-6	IC759	G-2	✱Q101	N-6	TP603	R-3
✱D1008	D-4	FL512	J-7	IC129	R-6	IC760	G-2	✱Q102	P-7	TP604	R-4
D1009	K-7	FL513	J-6	✱IC300	G-6	IC761	E-3	✱Q103	R-7	TP1000	L-6
✱D1010	A-4	FL514	J-7	✱IC301	G-7	IC762	F-3	✱Q104	M-6	TP1001	B-1
		FL515	J-6	✱IC302	G-7	IC763	F-3	✱Q105	N-7	TP1002	C-2
E100	R-5	FL516	H-7	✱IC303	M-7	IC1000	A-4	✱Q106	P-6	TP1003	B-1
E300	F-6	FL517	H-6	✱IC304	M-7	IC1001	A-4	✱Q107	R-6		
E500	H-1	FL600	P-1	✱IC305	J-5	IC1002	L-6	Q108	M-5	X1000	C-4
E600	N-2	FL601	P-2	IC306	G-7	IC1003	A-3	Q109	L-5		
E601	N-3	FL602	P-2	IC307	H-4	IC1004	L-7	✱Q111	P-6		
E750	F-3	FL603	P-3	IC308	H-5	IC1005	A-3	✱Q112	R-6		
E1000	A-1	FL604	P-4	IC309	H-6	IC1006	A-3	✱Q113	N-6		
E1001	C-3	FL1000	B-7	IC310	E-4	IC1007	A-2	Q114	L-5		
		FL1001	A-7	✱IC311	H-6	IC1008	D-3	Q115	L-5		
✱FB300	H-6	FL1002	C-6	IC312	E-5	IC1009	D-3	Q116	M-6		
FB301	G-6	FL1003	C-6	✱IC313	E-6	IC1010	L-6	✱Q117	K-5		
FB302	G-7	FL1004	B-6	✱IC314	F-6	IC1011	C-2	Q118	M-6		
FB303	G-7	FL1005	B-6	✱IC315	E-7	IC1012	L-6	Q119	M-5		
✱FB304	M-7	FL1006	B-6	✱IC500	C-7	IC1013	L-6	✱Q120	P-7		
✱FB305	J-6	FL1007	B-6	✱IC501	C-7	IC1014	L-7	✱Q121	R-7		
FB306	H-7	FL1008	B-6	✱IC502	H-7	✱IC1015	A-1	✱Q122	N-7		
FB307	G-7	FL1009	B-6	✱IC503	H-6	IC1016	A-2	✱Q123	N-6		
FB308	G-7	FL1010	C-7	IC504	J-2	IC1017	L-5	✱Q124	N-6		
✱FB500	L-1	FL1011	C-7	IC505	L-2	IC1018	C-3	✱Q125	P-6		
✱FB501	M-1	FL1012	B-7	IC506	K-1	IC1019	B-2	✱Q126	P-6		
✱FB502	C-7	FL1013	B-7	✱IC507	L-1	IC1020	B-3	✱Q127	R-6		
✱FB503	H-7	FL1014	B-7	IC508	N-1	IC1021	C-3	✱Q128	R-6		
FB504	K-7	FL1015	B-7	✱IC509	J-6	IC1022	B-3	Q129	M-6		
FB505	M-7	FL1016	B-7	✱IC510	H-6	IC1023	C-1	Q600	N-1		
FB506	L-7	FL1017	B-7	✱IC511	K-7	✱IC1024	B-4	Q601	N-1		
FB1000	A-1	FL1018	A-6	IC512	M-2	IC1025	D-1	Q602	N-2		
✱FB1001	A-5	FL1019	A-6	IC513	K-1	✱IC1026	C-5	Q603	N-2		
✱FB1002	C-3	FL1020	A-6	IC514	K-1	IC1027	A-5	Q604	N-3		
FB1003	A-2	FL1021	A-6	IC600	N-3	IC1028	A-4	Q605	N-2		
✱FB1004	A-5	FL1022	A-6	✱IC601	N-4	IC1029	B-5	Q606	N-3		
✱FB1005	D-4	FL1023	A-6	✱IC602	N-2	IC1030	D-2	Q607	N-3		

✱ : B SIDE

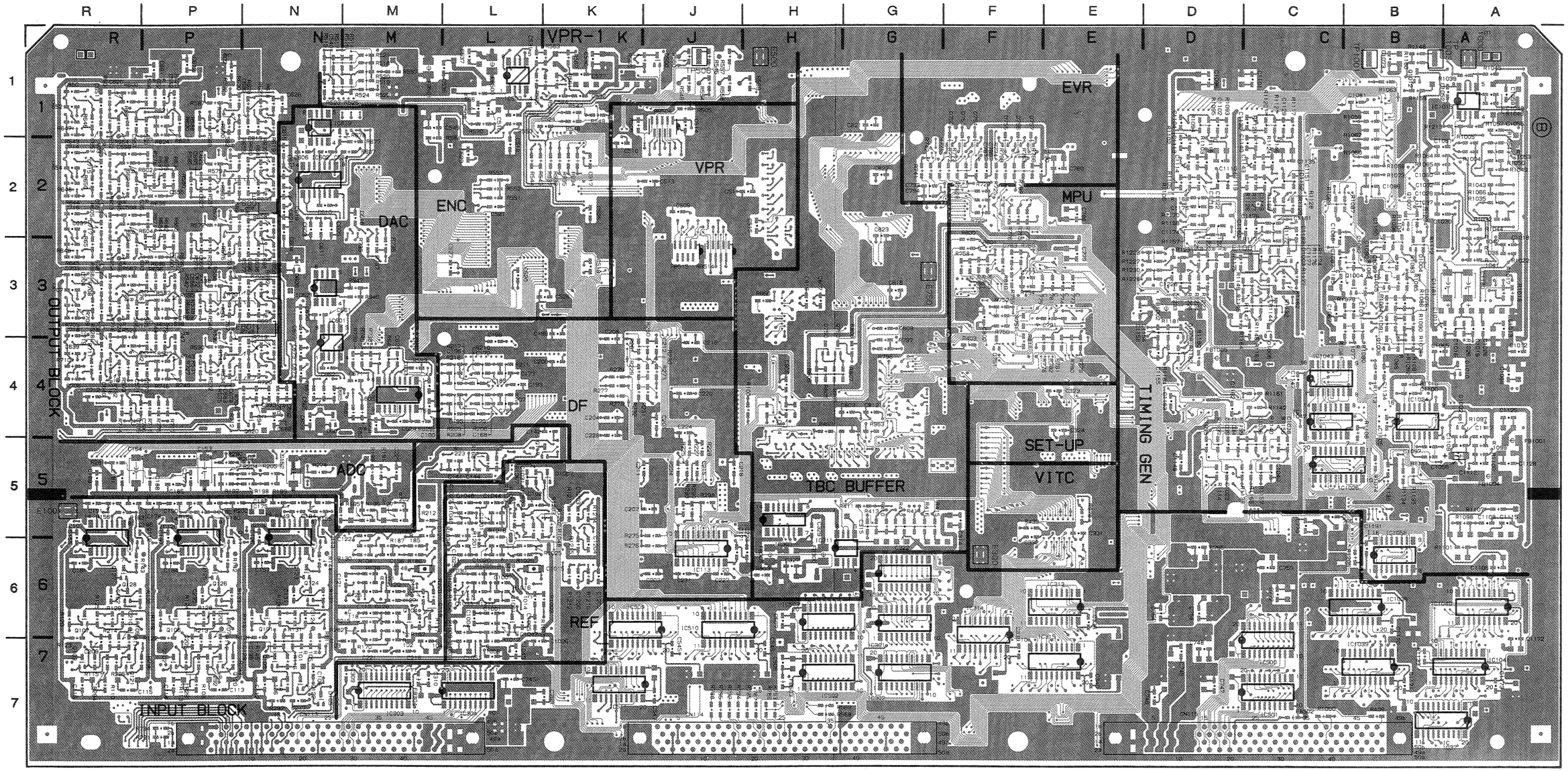
LOT NO. G-1



VPR-1 BOARD -A SIDE-

1-648-532-15 (LOT No. 503 - 704)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB



VPR-1 BOARD -B SIDE-

1-648-532-15 (LOT No. 503 - 704)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB

VPR-1, DUS-840

VPR-1 ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder
DUS-840

(Board's Lot No. 411 through 502)
All recorder models

DUS-840 BOARD -A SIDE-
1-657-167-11

DUS-840 BOARD -B SIDE-
1-657-167-11

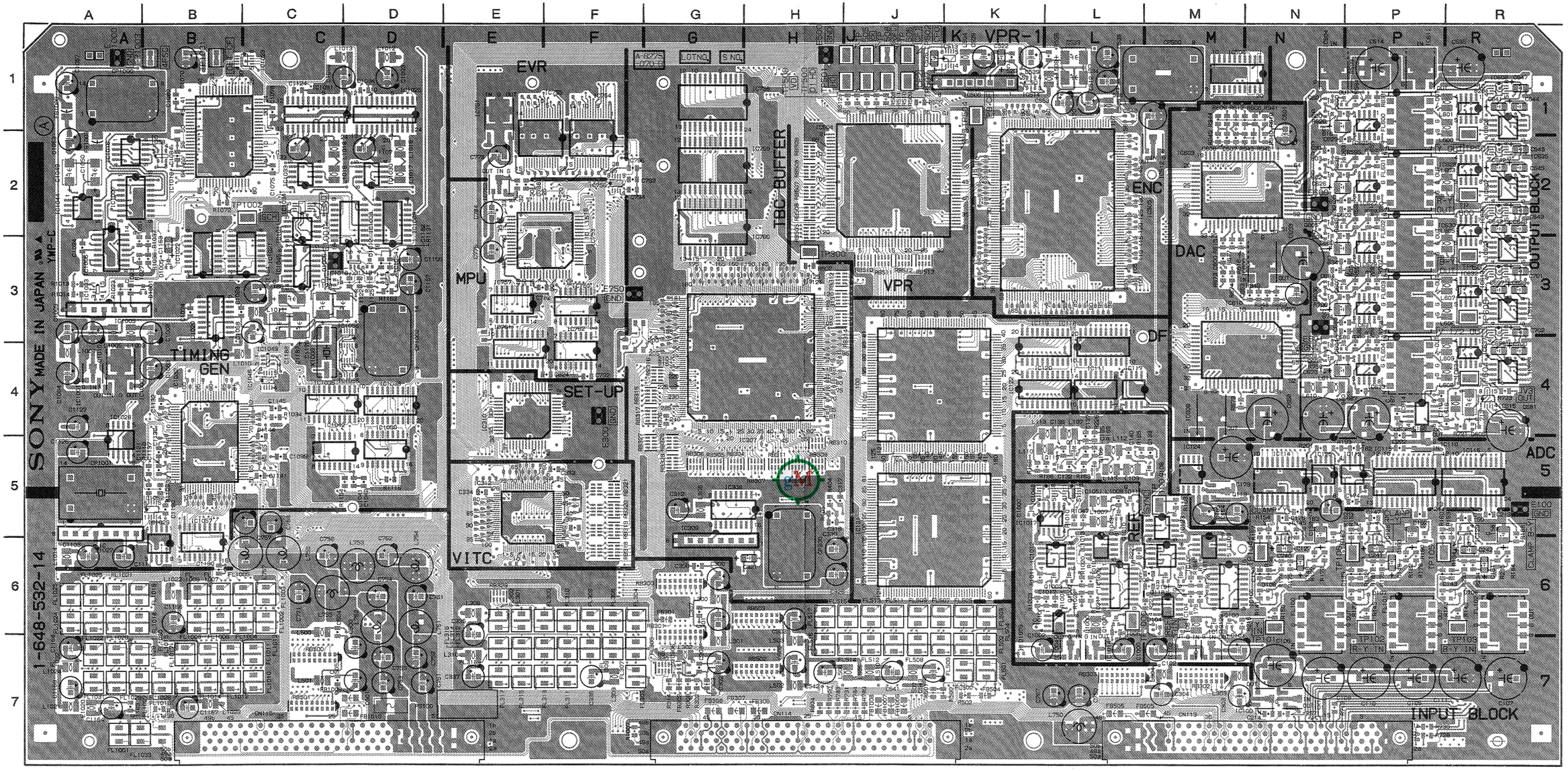
VPR-1(1-648-532-14)

CN113	M-7	✱FB1004	A-5	FL1022	A-6	✱IC601	N-4	IC1030	D-2	Q1002	L-6
CN114	H-7	✱FB1005	D-4	FL1023	A-6	✱IC602	N-2	IC1031	C-1	Q1003	L-6
CN115	C-7	FB1006	J-7	FL1024	A-6	IC603	M-2	IC1032	B-5	✱Q1004	B-3
		FB1007	J-7	FL1025	A-6	IC604	N-1	IC1033	C-2	✱Q1005	B-3
CP300	H-6	FB1008	J-7	FL1026	B-7	✱IC605	M-4	IC1034	C-2	✱Q1006	B-4
CP500	M-1	FB1009	D-7	FL1027	A-7	IC606	R-1	IC1035	D-4	✱Q1007	B-2
CP1000	A-1	FB1010	D-7	FL1028	A-7	IC607	R-2	IC1036	D-4	✱Q1008	D-3
CP1001	A-5			FL1029	A-7	IC608	R-1	✱IC1037	A-7	✱Q1009	D-3
CP1002	D-3	FL100	N-6	FL1030	A-7	IC609	N-4	✱IC1038	B-6	Q1010	L-5
		FL101	P-6	FL1031	A-7	IC610	M-4	✱IC1039	B-7	Q1011	L-5
D104	M-6	FL102	R-6	FL1032	A-7	IC611	P-1	✱IC1040	A-6	✱Q1012	B-1
✱D105	N-7	FL300	E-6	FL1033	A-7	IC612	R-3	✱IC1041	A-7	✱Q1013	D-3
D106	N-6	FL301	E-6			IC613	R-3	IC1042	D-5		
D107	P-6	FL302	E-6	IC100	N-7	IC614	P-4	✱IC1043	C-4	TP100	M-5
D108	R-6	FL303	F-7	IC101	N-7	IC615	R-4	IC1044	A-2	TP101	N-6
✱D500	J-1	FL304	F-6	IC102	M-7	✱IC619	N-2	IC1045	C-3	TP102	P-6
D600	N-1	FL305	F-7	IC103	M-7	✱IC621	N-3	IC1046	C-4	TP103	R-6
D601	N-2	FL306	F-6	IC104	M-6	IC623	R-3	✱IC1047	C-4	TP104	N-5
D602	N-2	FL307	F-7	IC105	M-6	IC624	R-4	IC1048	K-5	TP105	P-5
D603	N-3	FL308	F-6	IC106	M-6	IC625	P-1	IC1049	C-4	TP106	P-5
D604	N-4	FL309	F-7	✱IC107	R-6	IC626	R-1	IC1050	D-5	TP300	H-3
D605	R-4	FL310	F-6	✱IC108	N-6	IC627	P-2	IC1051	L-5	TP500	J-1
✱D606	N-3	FL311	F-7	IC109	M-6	IC628	R-2	IC1052	B-5	TP501	J-1
✱D607	N-4	FL312	F-7	IC110	P-5	IC629	P-3	IC1053	B-2	TP502	J-1
✱D750	H-4	FL313	E-7	IC111	L-4	IC630	R-2	IC1054	D-3	TP503	J-1
✱D751	F-4	FL314	E-7	IC112	P-5	IC631	P-3	IC1055	D-4	TP504	K-1
✱D752	F-2	FL315	E-7	✱IC113	J-5	IC632	R-3	IC1056	D-4	TP505	J-1
✱D753	F-2	FL316	E-7	IC114	N-5	IC633	P-4	IC1057	B-5	TP506	J-1
✱D754	F-2	FL317	E-7	IC115	P-5	IC634	R-4	✱IC1058	B-6	TP507	J-1
✱D755	F-2	FL318	E-7	IC116	R-5	IC635	R-2			TP508	J-1
✱D756	E-2	FL500	K-7	IC117	L-4	IC636	R-3	PS100	D-7	TP600	R-2
✱D757	E-2	FL501	K-7	IC118	L-4	IC637	R-4			TP601	R-2
D1000	K-5	FL502	K-7	IC119	K-4	IC750	F-3	Q100	M-6	TP602	R-3
D1001	B-3	FL503	K-6	IC120	K-4	IC751	E-1	✱Q101	N-6	TP603	R-3
✱D1002	A-4	FL504	K-7	IC121	J-5	IC752	E-2	✱Q102	P-7	TP604	R-4
✱D1003	C-3	FL505	K-6	IC122	J-4	IC753	F-3	✱Q103	R-7	TP1000	L-6
✱D1004	B-3	FL506	J-7	IC123	M-5	IC754	F-1	✱Q104	M-6	TP1001	B-1
D1005	B-3	FL507	J-6	IC124	M-5	IC755	F-1	✱Q105	N-7	TP1002	C-2
D1006	C-3	FL508	J-7	IC125	N-5	IC756	F-2	✱Q106	P-6	TP1003	B-1
✱D1007	K-5	FL509	J-6	✱IC126	P-6	IC757	E-3	✱Q107	R-6		
✱D1008	D-4	FL510	J-7	IC127	N-6	IC758	G-1	Q108	M-5	X1000	C-4
D1009	K-7	FL511	J-6	IC128	P-6	IC759	G-2	Q109	L-5		
✱D1010	A-4	FL512	J-7	IC129	R-6	IC760	G-2	✱Q111	P-6		
✱D1011	D-3	FL513	J-6	✱IC300	G-6	IC761	E-3	✱Q112	R-6		
D1012	D-3	FL514	J-7	✱IC301	G-7	IC762	F-3	✱Q113	N-6		
		FL515	J-6	✱IC302	G-7	IC1000	A-4	Q114	L-5		
E100	R-5	FL516	H-7	✱IC303	M-7	IC1001	A-4	Q115	L-5		
E300	F-4	FL517	H-6	✱IC304	M-7	IC1002	L-6	Q116	M-6		
E500	H-1	FL600	P-1	✱IC305	J-5	IC1003	A-3	✱Q117	K-5		
E600	N-2	FL601	P-2	IC306	G-7	IC1004	L-7	Q118	M-6		
E601	N-3	FL602	P-2	IC307	H-4	IC1005	A-3	Q119	M-5		
E750	F-3	FL603	P-3	IC308	H-5	IC1006	A-3	✱Q120	P-7		
E1000	A-1	FL604	P-4	IC309	H-6	IC1007	A-2	✱Q121	R-7		
E1001	C-3	FL1000	B-7	IC310	E-4	IC1008	D-3	✱Q122	N-7		
		FL1001	A-7	✱IC311	H-6	IC1009	D-3	✱Q123	N-6		
✱FB300	H-6	FL1002	C-6	IC312	E-5	IC1010	L-6	✱Q124	N-6		
FB301	G-6	FL1003	C-6	✱IC313	E-6	IC1011	C-2	✱Q125	P-6		
FB302	G-7	FL1004	B-6	✱IC314	F-6	IC1012	L-6	✱Q126	P-6		
FB303	G-7	FL1005	B-6	✱IC315	E-7	IC1013	L-6	✱Q127	R-6		
✱FB304	M-7	FL1006	B-6	✱IC500	C-7	IC1014	L-7	✱Q128	R-6		
✱FB305	J-6	FL1007	B-6	✱IC501	C-7	✱IC1015	A-1	Q129	M-6		
FB306	H-7	FL1008	B-6	✱IC502	H-7	IC1016	A-2	Q600	N-1		
FB307	G-7	FL1009	B-6	✱IC503	H-6	IC1017	L-5	Q601	N-1		
FB308	G-7	FL1010	C-7	IC504	J-2	IC1018	D-3	Q602	N-2		
✱FB500	L-1	FL1011	C-7	IC505	L-2	IC1019	B-2	Q603	N-2		
✱FB501	M-1	FL1012	B-7	IC506	K-1	IC1020	B-3	Q604	N-3		
✱FB502	C-7	FL1013	B-7	✱IC507	L-1	IC1021	C-3	Q605	N-2		
✱FB503	H-7	FL1014	B-7	IC508	N-1	IC1022	B-3	Q606	N-3		
FB504	K-7	FL1015	B-7	✱IC509	J-6	IC1023	C-1	Q607	N-3		
FB505	M-7	FL1016	B-7	✱IC510	H-6	✱IC1024	B-4	Q608	N-4		
FB506	L-7	FL1017	B-7	✱IC511	K-7	IC1025	D-1	Q609	N-4		
FB1000	A-1	FL1018	A-6	IC512	M-2	✱IC1026	C-5	✱Q620	N-4		
✱FB1001	A-5	FL1019	A-6	IC513	K-1	IC1027	A-5	✱Q750	H-4		
✱FB1002	C-3	FL1020	A-6	IC514	K-1	IC1028	A-4	Q1000	L-6		
FB1003	A-2	FL1021	A-6	IC600	N-3	IC1029	B-5	✱Q1001	L-6		

✱ : B SIDE

LOT NO. G-1

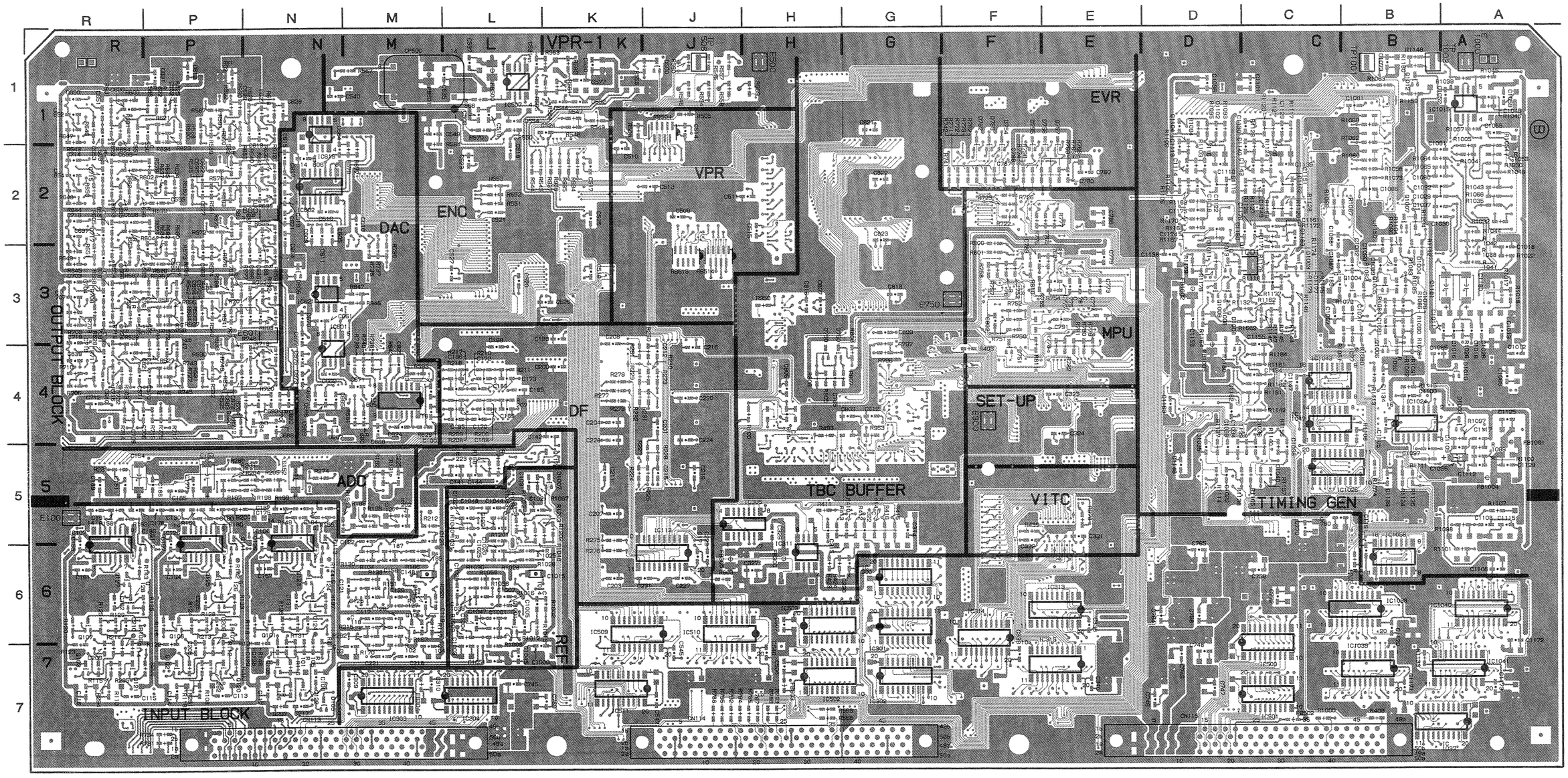
1-5 (d)



VPR-1 BOARD -A SIDE-

1-648-532-14 (LOT No. 411 - 502)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB



VPR-1 BOARD -B SIDE-

1-648-532-14 (LOT No. 411 - 502)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB

VPR-1, DUS-710

VPR-1 ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder
DUS-710

(Board's Lot No. 401 through 410)
All recorder models

DUS-710 BOARD -A SIDE-

1-650-294-11

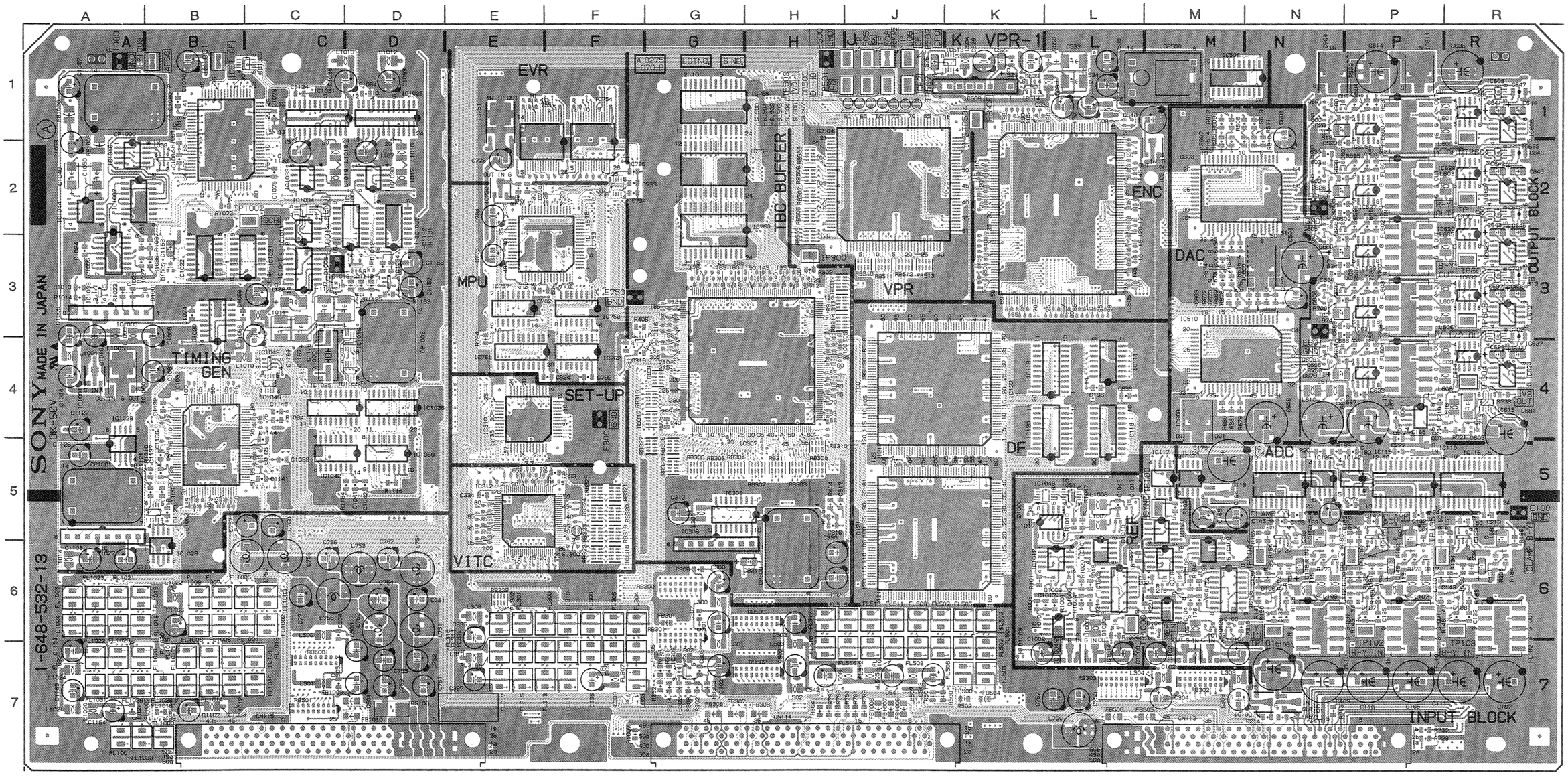
VPR-1(1-648-532-13)

CN113	M-7	✱FB1004	A-5	FL1022	A-6	IC600	N-3	IC1029	B-5	Q1003	L-6
CN114	H-7	✱FB1005	D-4	FL1023	A-6	✱IC601	N-4	IC1030	D-2	✱Q1004	B-3
CN115	C-7	FB1006	J-7	FL1024	A-6	✱IC602	N-2	IC1031	C-1	✱Q1005	B-3
		FB1007	J-7	FL1025	A-6	IC603	M-2	IC1032	B-5	✱Q1006	B-4
CP300	H-6	FB1008	J-7	FL1026	B-7	IC604	N-1	IC1033	C-2	✱Q1007	B-2
CP500	M-1	FB1009	D-7	FL1027	A-7	✱IC605	M-4	IC1034	C-2	✱Q1008	D-3
CP1000	A-1	FB1010	D-7	FL1028	A-7	IC606	R-1	IC1035	D-4	✱Q1009	D-3
CP1001	A-5			FL1029	A-7	IC607	R-2	IC1036	D-4	Q1010	L-5
CP1002	D-3	FL100	N-6	FL1030	A-7	IC608	R-1	✱IC1037	A-7	Q1011	L-5
		FL101	P-6	FL1031	A-7	IC609	N-4	✱IC1038	B-6	✱Q1012	B-1
D104	M-6	FL102	R-6	FL1032	A-7	IC610	M-4	✱IC1039	B-7	✱Q1013	D-3
✱D105	N-7	FL300	E-6	FL1033	A-7	IC611	P-1	✱IC1040	A-6		
D106	N-6	FL301	E-6			IC612	R-3	✱IC1041	A-7	SL300	F-5
D107	P-6	FL302	E-6	IC100	N-7	IC613	R-3	IC1042	D-5	SL500	H-1
D108	R-6	FL303	F-7	IC101	N-7	IC614	P-4	✱IC1043	C-4	SL501	H-1
✱D500	J-1	FL304	F-6	IC102	M-7	IC615	R-4	IC1044	A-2	SL502	H-1
D600	N-1	FL305	F-7	IC103	M-7	✱IC619	N-2	IC1045	C-3	SL503	H-1
D601	N-2	FL306	F-6	IC104	M-6	✱IC621	N-3	IC1046	C-4	SL504	H-1
D602	N-2	FL307	F-7	IC105	M-6	IC623	R-3	✱IC1047	C-4	SL506	H-1
D603	N-3	FL308	F-6	IC106	M-6	IC624	R-4	IC1048	K-5	SL507	H-1
D604	N-4	FL309	F-7	✱IC107	R-6	IC625	P-1	IC1049	C-4		
D605	R-4	FL310	F-6	✱IC108	N-6	IC626	R-1	IC1050	D-5	TP100	M-5
✱D606	N-3	FL311	F-7	IC109	M-6	IC627	P-2	IC1051	L-5	TP101	N-6
✱D607	N-4	FL312	F-7	IC110	P-5	IC628	R-2	IC1052	B-5	TP102	P-6
✱D750	H-4	FL313	E-7	IC111	L-4	IC629	P-3	IC1053	B-2	TP103	R-6
✱D751	F-4	FL314	E-7	IC112	P-5	IC630	R-2	IC1054	D-3	TP104	N-5
✱D752	F-2	FL315	E-7	✱IC113	J-5	IC631	P-3	IC1055	D-4	TP105	P-5
✱D753	F-2	FL316	E-7	IC114	N-5	IC632	R-3	IC1056	D-4	TP106	P-5
✱D754	F-2	FL317	E-7	IC115	P-5	IC633	P-4			TP300	H-3
✱D755	F-2	FL318	E-7	IC116	R-5	IC634	R-4	PS100	D-7	TP500	J-1
✱D756	E-2	FL500	K-7	IC117	M-5	IC635	R-2			TP501	J-1
✱D757	E-2	FL501	K-7	IC118	L-5	IC636	R-3	Q100	M-6	TP502	J-1
D1000	K-5	FL502	K-7	IC119	L-4	IC637	R-4	✱Q101	N-6	TP503	J-1
D1001	B-3	FL503	K-6	IC120	L-5	IC750	F-3	✱Q102	P-7	TP504	K-1
✱D1002	A-4	FL504	K-7	IC121	J-5	IC751	E-1	✱Q103	R-7	TP505	J-1
✱D1003	C-3	FL505	K-6	IC122	J-4	IC752	E-2	✱Q104	M-6	TP506	J-1
✱D1004	B-3	FL506	J-7	IC123	M-5	IC753	F-3	✱Q105	N-7	TP507	J-1
D1005	B-3	FL507	J-6	IC124	M-5	IC754	F-1	✱Q106	P-6	TP508	J-1
D1006	C-3	FL508	J-7	IC125	N-5	IC755	F-1	✱Q107	R-6	TP600	R-2
✱D1007	K-5	FL509	J-6	✱IC126	P-6	IC756	F-2	✱Q108	N-6	TP601	R-2
✱D1008	D-4	FL510	J-7	IC127	N-6	IC757	E-3	Q109	N-6	TP602	R-3
D1009	K-7	FL511	J-6	IC128	P-6	IC758	G-1	✱Q111	P-6	TP603	R-3
✱D1010	A-4	FL512	J-7	IC129	R-6	IC759	G-2	✱Q112	R-6	TP604	R-4
✱D1011	D-3	FL513	J-6	✱IC300	G-6	IC760	G-2	✱Q113	N-6	TP1000	L-6
D1012	D-3	FL514	J-7	✱IC301	G-7	IC761	E-3	✱Q114	P-6	TP1001	B-1
		FL515	J-6	✱IC302	G-7	IC762	F-3	✱Q115	R-6	TP1002	C-2
E100	R-5	FL516	H-7	✱IC303	M-7	IC1000	A-4	Q116	M-6	TP1003	B-1
E300	F-4	FL517	H-6	✱IC304	M-7	IC1001	A-4	Q117	P-6		
E500	H-1	FL600	P-1	✱IC305	J-5	IC1002	L-6	Q118	M-6	X1000	C-4
E600	N-2	FL601	P-2	IC306	G-7	IC1003	A-3	Q119	M-5		
E601	N-3	FL602	P-2	IC307	H-4	IC1004	L-7	✱Q120	P-7		
E750	F-3	FL603	P-3	IC308	H-5	IC1005	A-3	✱Q121	R-7		
E1000	A-1	FL604	P-4	IC309	H-6	IC1006	A-3	✱Q122	N-7		
E1001	C-3	FL1000	B-7	IC310	E-4	IC1007	A-2	✱Q123	N-6		
		FL1001	A-7	✱IC311	H-6	IC1008	D-3	✱Q124	N-6		
✱FB300	H-6	FL1002	C-6	IC312	E-5	IC1009	D-3	✱Q125	P-6		
FB301	G-6	FL1003	C-6	✱IC313	E-6	IC1010	L-6	✱Q126	P-6		
FB302	G-7	FL1004	B-6	✱IC314	F-6	IC1011	C-2	✱Q127	R-6		
FB303	G-7	FL1005	B-6	✱IC315	E-7	IC1012	L-6	✱Q128	R-6		
✱FB304	M-7	FL1006	B-6	IC316	F-4	IC1013	L-6	Q129	M-6		
✱FB305	J-6	FL1007	B-6	✱IC500	C-7	IC1014	L-7	Q600	N-1		
FB306	H-7	FL1008	B-6	✱IC501	C-7	✱IC1015	A-1	Q601	N-1		
FB307	G-7	FL1009	B-6	✱IC502	H-7	IC1016	A-2	Q602	N-2		
FB308	G-7	FL1010	C-7	✱IC503	H-6	IC1017	L-5	Q603	N-2		
✱FB500	L-1	FL1011	C-7	IC504	J-2	IC1018	D-3	Q604	N-3		
✱FB501	M-1	FL1012	B-7	IC505	L-2	IC1019	B-2	Q605	N-2		
✱FB502	C-7	FL1013	B-7	IC506	K-1	IC1020	B-3	Q606	N-3		
✱FB503	H-7	FL1014	B-7	✱IC507	L-1	IC1021	C-3	Q607	N-3		
FB504	K-7	FL1015	B-7	IC508	N-1	IC1022	B-3	Q608	N-4		
FB505	M-7	FL1016	B-7	✱IC509	J-6	IC1023	C-1	Q609	N-4		
FB506	L-7	FL1017	B-7	✱IC510	H-6	✱IC1024	B-4	✱Q620	N-4		
FB1000	A-1	FL1018	A-6	✱IC511	K-7	IC1025	D-1	✱Q750	H-4		
✱FB1001	A-5	FL1019	A-6	IC512	M-2	✱IC1026	C-5	Q1000	L-6		
✱FB1002	C-3	FL1020	A-6	IC513	K-1	IC1027	A-5	✱Q1001	L-6		
FB1003	A-2	FL1021	A-6	IC514	K-1	IC1028	A-4	Q1002	L-6		

✱ : B SIDE

LOT NO. G-1

1-5 (c)



VPR-1 BOARD -A SIDE-

1-648-532-13 (LOT No. 401 - 410)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB

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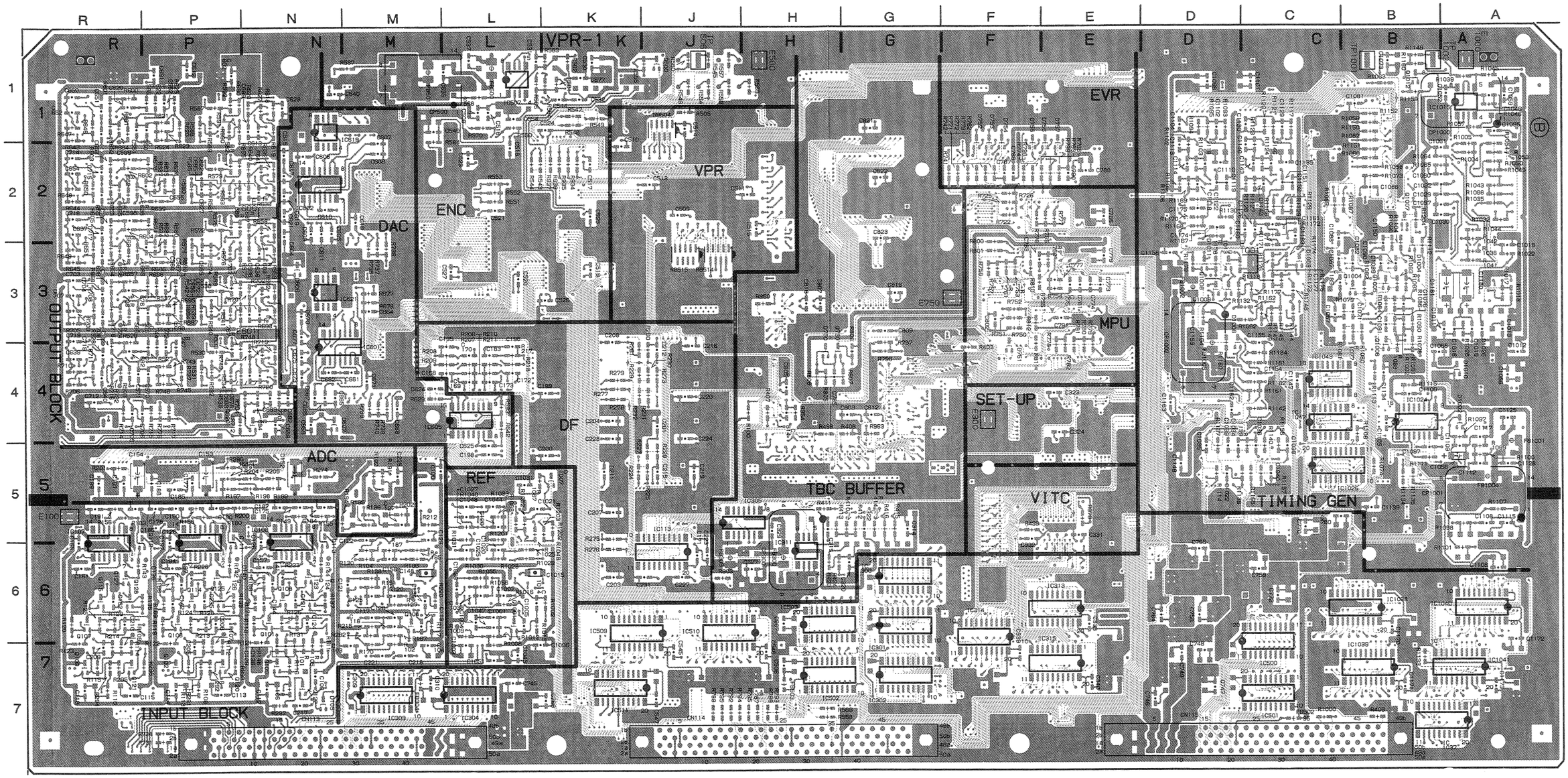


VPR-1 BOARD -B SIDE-

1-648-532-13 (LOT No. 401 - 410)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB
DVW-500P(UC)	; VPR-1PG	MCB

VPR-1, DUS-769

VPR-1 ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder
DUS-769

(Board's Lot No. 306 through 312)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

DUS-769 BOARD -A SIDE-

1-653-049-11
for VPR-1 (1-648-532-12) of LOT No. 311/312

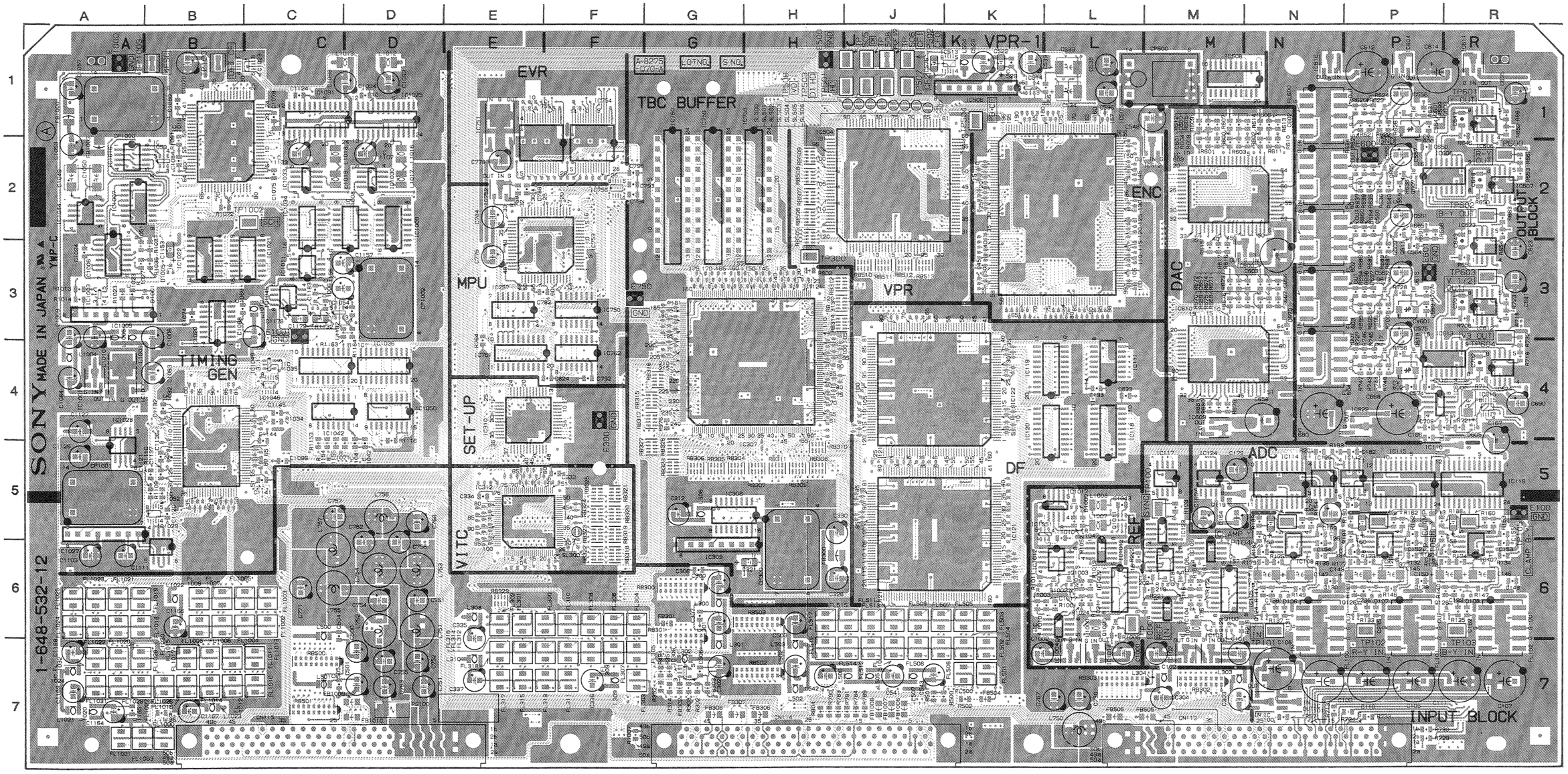
VPR-1(1-648-532-12)

CN113	M-7	FL100	N-6	FL1030	A-7	IC613	P-4	IC1052	B-5	SL506	H-1				
CN114	H-7	FL101	P-6	FL1031	A-7	IC614	P-4	IC1053	B-2	SL507	H-1				
CN115	C-7	FL102	R-6	FL1032	A-7	IC615	R-4	IC1054	C-3						
		FL300	E-6	FL1033	A-7	IC616	P-1			TP100	M-5				
CP300	H-6	FL301	E-6			✱IC617	M-2	PS100	D-7	TP101	N-6				
CP500	M-1	FL302	E-6	IC100	N-7	✱IC618	N-2			TP102	P-6				
CP1000	A-1	FL303	F-7	IC101	N-7	✱IC619	N-2	Q100	M-6	TP103	R-6				
CP1001	A-5	FL304	F-6	IC102	M-7	✱IC620	N-3	✱Q101	N-6	TP104	N-5				
CP1002	D-3	FL305	F-7	IC103	M-7	✱IC621	N-3	✱Q102	P-7	TP105	R-5				
		FL306	F-6	IC104	M-6	IC622	P-4	✱Q103	R-7	TP106	P-5				
CV600	P-1	FL307	F-7	IC105	M-6	IC623	R-3	✱Q104	M-6	TP300	H-3				
CV601	P-3	FL308	F-6	IC106	M-6	IC624	R-4	✱Q105	N-7	TP500	J-1				
CV602	P-4	FL309	F-7	IC107	R-6	IC750	F-3	✱Q106	P-6	TP501	J-1				
		FL310	F-6	IC108	N-6	IC751	E-1	✱Q107	R-6	TP502	J-1				
✱D105	N-7	FL311	F-7	IC109	M-6	IC752	E-2	✱Q108	N-6	TP503	J-1				
D106	N-6	FL312	F-7	IC110	R-5	IC753	F-3	✱Q109	N-5	TP504	K-1				
D107	P-6	FL313	E-7	IC111	L-4	IC754	F-1	✱Q111	P-5	TP505	J-1				
D108	R-6	FL314	E-7	IC112	P-5	IC755	F-1	✱Q112	R-5	TP506	J-1				
✱D500	J-1	FL315	E-7	✱IC113	J-5	IC756	F-2	✱Q113	N-5	TP507	J-1				
D605	R-4	FL316	E-7	IC114	N-5	IC757	E-3	✱Q114	P-6	TP508	J-1				
✱D606	N-1	FL317	E-7	IC115	P-5	IC758	G-1	✱Q115	R-6	TP600	R-2				
✱D607	P-4	FL318	E-7	IC116	R-5	IC759	G-1	Q116	M-6	TP601	R-1				
✱D750	H-4	FL500	K-7	IC117	M-5	IC760	G-1	✱Q117	P-5	TP602	R-2				
✱D751	F-4	FL501	K-7	IC118	L-5	IC761	E-3	Q118	M-6	TP603	R-3				
✱D752	F-2	FL502	K-7	IC119	L-4	IC762	F-3	Q119	M-5	TP604	R-3				
✱D753	F-2	FL503	K-6	IC120	L-5	IC1000	A-4	✱Q120	P-7	TP1000	L-6				
✱D754	F-2	FL504	K-7	IC121	J-5	IC1001	A-4	✱Q121	R-7	TP1001	B-1				
✱D755	F-2	FL505	K-6	IC122	J-4	IC1002	L-6	✱Q122	N-7	TP1002	C-2				
✱D756	E-2	FL506	J-7	IC123	M-5	IC1003	A-3	✱Q123	N-6	TP1003	B-1				
✱D757	E-2	FL507	J-6	IC124	M-5	IC1004	L-7	Q124	N-6						
D1000	L-5	FL508	J-7	IC125	N-5	IC1005	A-3	✱Q125	P-6						
D1001	B-3	FL509	J-6	IC126	P-6	IC1006	A-3	Q126	P-6						
✱D1002	A-4	FL510	J-7	✱IC300	G-6	IC1007	A-2	✱Q127	R-6						
✱D1003	C-3	FL511	J-6	✱IC301	G-7	IC1008	D-3	Q128	R-6						
✱D1004	B-3	FL512	J-7	✱IC302	G-7	IC1009	D-3	Q129	M-6						
D1005	B-3	FL513	J-6	✱IC303	M-7	IC1010	L-6	✱Q600	N-1						
D1006	C-3	FL514	J-7	✱IC304	M-7	IC1011	C-3	Q601	P-1						
		FL515	J-6	IC306	G-7	IC1012	L-6	✱Q602	P-1						
E100	R-5	FL516	H-7	IC307	H-4	IC1013	L-6	Q603	P-1						
E300	F-4	FL517	H-6	IC308	H-5	IC1014	L-7	✱Q604	N-2						
E500	H-1	FL600	N-1	IC309	H-6	✱IC1015	A-1	Q605	P-2						
E600	P-2	FL601	N-2	IC310	E-4	IC1016	A-2	✱Q606	P-2						
E601	P-3	FL602	N-2	✱IC311	H-6	IC1017	L-5	Q607	P-2						
E750	F-3	FL603	N-3	IC312	E-5	IC1019	B-2	✱Q608	N-3						
E1000	A-1	FL604	N-4	✱IC313	E-6	IC1020	B-3	Q609	P-2						
E1001	C-3	FL1000	B-7	✱IC314	F-6	IC1021	C-3	✱Q610	P-2						
		FL1001	A-7	✱IC315	E-7	IC1022	B-3	Q611	P-2						
FB300	H-6	FL1002	C-6	✱IC500	C-7	IC1023	C-1	✱Q612	N-3						
FB301	G-6	FL1003	C-6	✱IC501	C-7	✱IC1024	B-4	Q613	P-3						
FB302	G-7	FL1004	B-6	✱IC502	H-7	IC1025	D-1	✱Q614	P-3						
FB303	G-7	FL1005	B-6	✱IC503	H-6	✱IC1026	C-5	Q615	P-3						
✱FB304	M-7	FL1006	B-6	IC504	J-2	IC1027	A-5	✱Q616	N-4						
✱FB305	H-5	FL1007	B-6	IC505	L-2	IC1028	A-4	Q617	P-4						
FB306	H-7	FL1008	B-6	IC506	K-1	IC1029	B-5	✱Q618	P-4						
FB307	G-7	FL1009	B-6	✱IC507	L-1	IC1030	D-2	Q619	P-4						
FB308	G-7	FL1010	C-7	IC508	N-1	IC1031	C-1	✱Q620	N-4						
✱FB500	L-1	FL1011	C-7	✱IC509	J-6	IC1032	B-5	✱Q750	H-4						
✱FB501	M-1	FL1012	B-7	✱IC510	H-6	IC1033	C-2	Q1000	L-6						
✱FB502	C-7	FL1013	B-7	✱IC511	K-7	IC1034	C-3	✱Q1001	L-6						
✱FB503	H-7	FL1014	B-7	IC512	M-2	IC1035	D-4	Q1002	L-6						
FB504	K-7	FL1015	B-7	IC513	K-1	IC1036	D-4	Q1003	L-6						
FB505	M-7	FL1016	B-7	IC514	K-1	✱IC1037	A-7	✱Q1004	B-3						
FB506	L-7	FL1017	B-7	IC600	N-3	✱IC1038	B-6	✱Q1005	B-3						
FB1000	A-1	FL1018	A-6	✱IC601	N-4	✱IC1039	B-7	✱Q1006	B-4						
✱FB1001	A-5	FL1019	A-6	✱IC602	N-2	✱IC1040	A-6	✱Q1007	B-2						
✱FB1002	C-3	FL1020	A-6	IC603	M-2	✱IC1041	A-7	Q1011	L-5						
FB1003	A-2	FL1021	A-6	IC604	R-1	IC1042	D-4	✱Q1012	B-1						
✱FB1004	A-5	FL1022	A-6	✱IC605	M-4	✱IC1043	C-4								
✱FB1005	D-3	FL1023	A-6	IC606	R-1	IC1044	A-2	SL300	F-5						
FB1006	J-7	FL1024	A-6	IC607	R-2	IC1045	C-3	SL500	H-1						
FB1007	J-7	FL1025	A-6	IC608	P-2	IC1046	C-4	SL501	H-1						
FB1008	J-7	FL1026	B-7	IC609	N-4	✱IC1047	C-4	SL502	H-1						
FB1009	D-7	FL1027	A-7	IC610	M-4	IC1049	C-4	SL503	H-1						
FB1010	D-7	FL1028	A-7	IC611	P-4	IC1050	D-4	SL504	H-1						
		FL1029	A-7	IC612	R-3	IC1051	K-5	SL505	H-1						

✱ : B SIDE

LOT NO. G-1

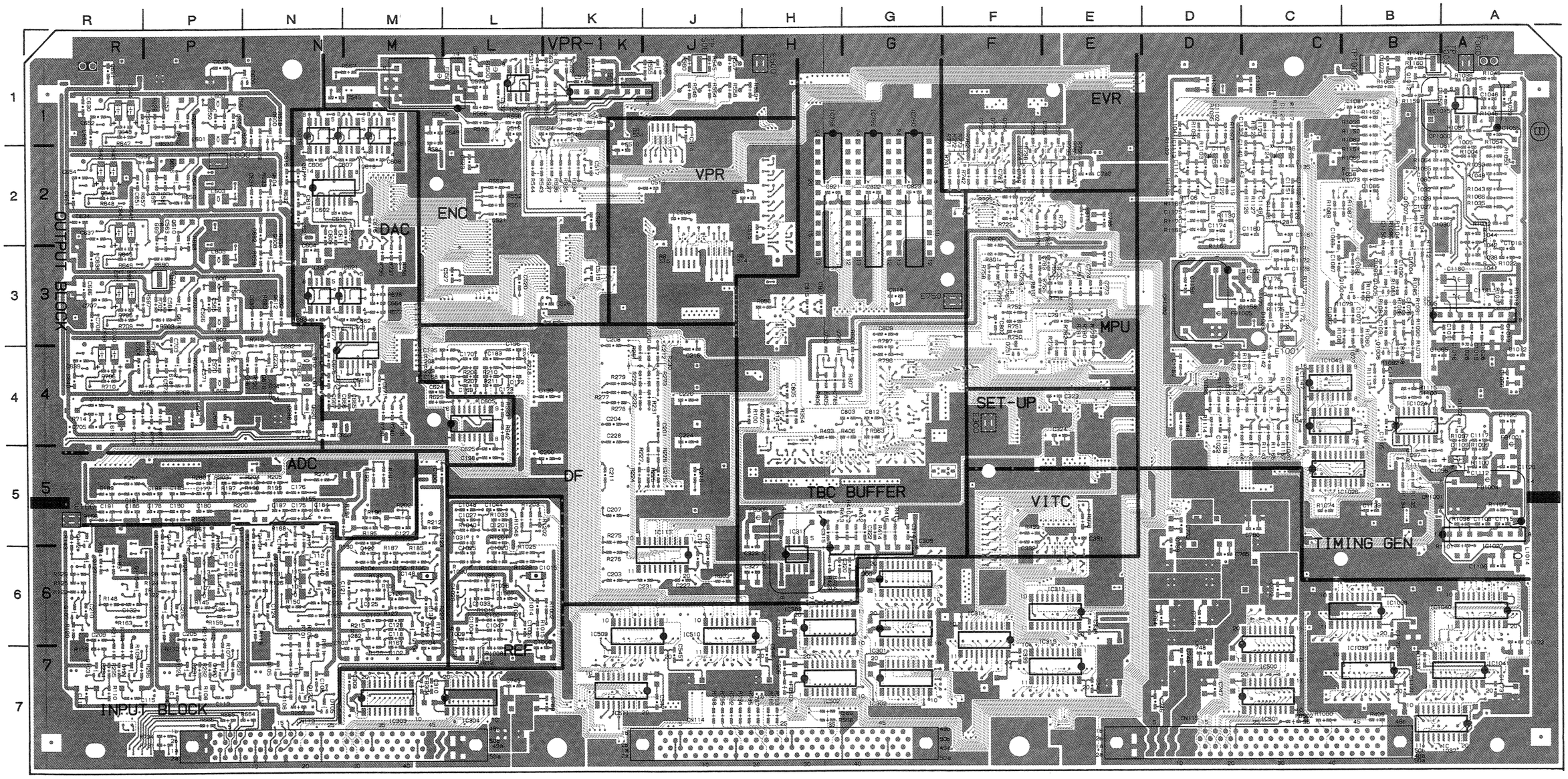
1-5 (b)



VPR-1 BOARD -A SIDE-

1-648-532-12 (LOT No. 306 - 312)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB



VPR-1 BOARD -B SIDE-

1-648-532-12 (LOT No. 306 - 312)

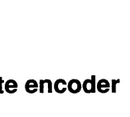
DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB

VPR-1, DUS-690/691/700/724

VPR-1 ; Video signal processor, A/D, D/A, Reference clock generator, Composite encoder
DUS-690/691/700/724

(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

DUS-690 BOARD -A SIDE-
1-649-615-11



DUS-700 BOARD -A SIDE-
1-649-988-11
for PAL models

DUS-691 BOARD -A SIDE-
1-649-616-11

DUS-724 BOARD -A SIDE-
1-650-668-11
for PAL models

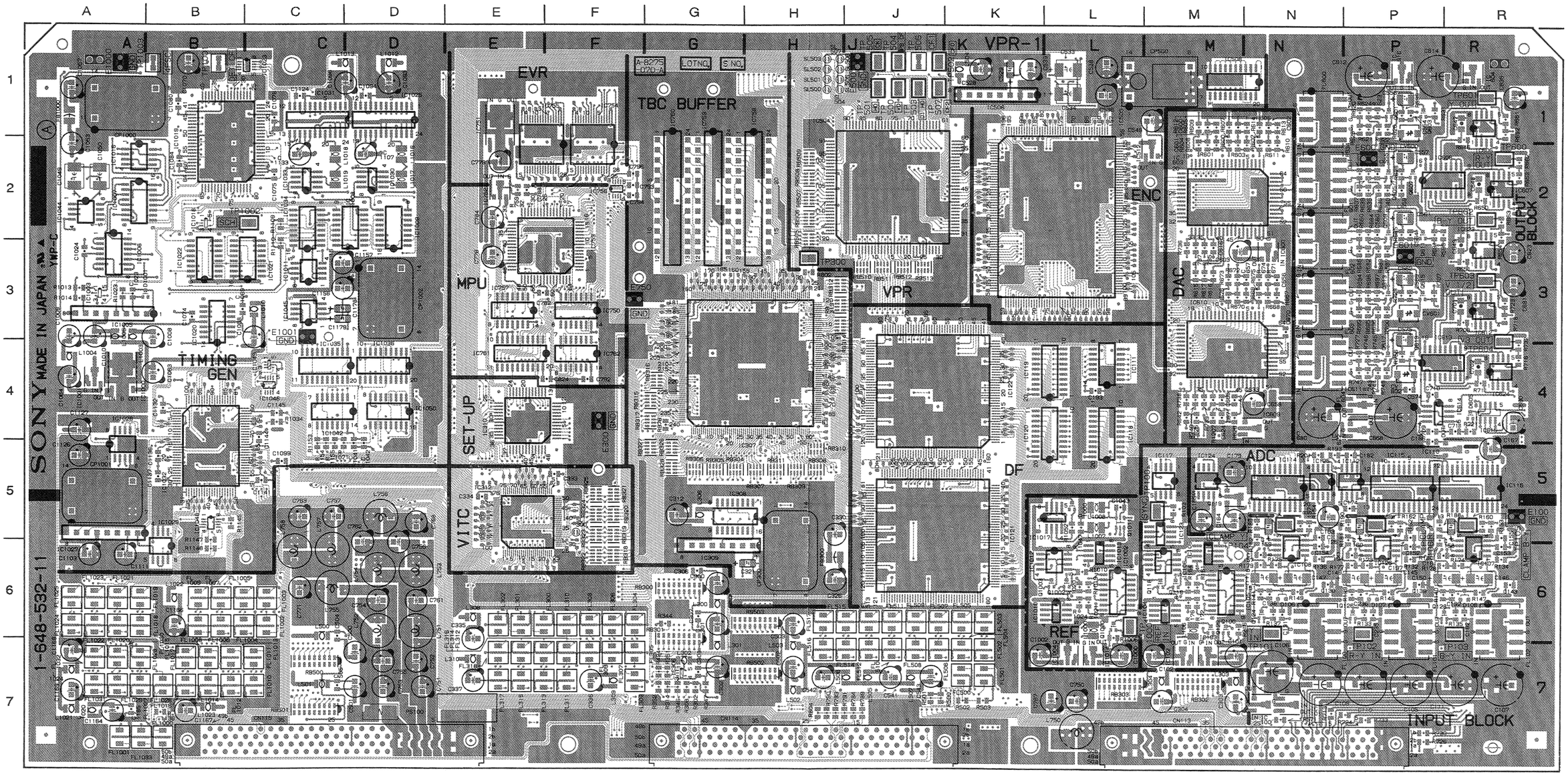
VPR-1(1-648-532-11)

CN113	M-7	FL505	K-6	IC123	M-5	IC1006	A-3	Q129	M-6
CN114	H-7	FL506	J-7	IC124	M-5	IC1007	A-2	✱Q600	N-1
CN115	C-7	FL507	J-6	IC125	N-5	IC1008	D-3	Q601	P-1
		FL508	J-7	IC126	P-6	IC1009	D-3	✱Q602	P-1
CP300	H-6	FL509	J-6	✱IC300	G-6	IC1010	L-6	Q603	P-1
CP500	M-1	FL510	J-7	✱IC301	G-7	IC1011	C-3	✱Q604	N-2
CP1000	A-1	FL511	J-6	✱IC302	G-7	IC1012	L-6	Q605	P-2
CP1001	A-5	FL512	J-7	✱IC303	M-7	IC1013	L-6	✱Q606	P-2
CP1002	D-3	FL513	J-6	✱IC304	M-7	IC1014	L-7	Q607	P-2
		FL514	J-7	IC306	G-7	✱IC1015	A-1	✱Q608	N-3
CV600	P-1	FL515	J-6	IC307	H-4	IC1016	A-2	Q609	P-2
CV601	P-3	FL516	H-7	IC308	H-5	IC1017	L-5	✱Q610	P-2
CV602	P-4	FL517	H-6	IC309	H-6	IC1018	B-2	Q611	P-2
		FL600	N-1	IC310	E-4	IC1019	B-2	✱Q612	N-3
✱D105	N-7	FL601	N-2	✱IC311	H-6	IC1020	B-3	Q613	P-3
D106	N-6	FL602	N-2	IC312	E-5	IC1021	C-3	✱Q614	P-3
D107	P-6	FL603	N-3	✱IC313	E-6	IC1022	B-3	Q615	P-3
D108	R-6	FL604	N-4	✱IC314	F-6	IC1023	C-1	✱Q616	N-4
D605	R-4	FL1000	B-7	✱IC315	E-7	✱IC1024	B-4	Q617	P-4
✱D606	N-1	FL1001	A-7	✱IC500	C-7	IC1025	D-1	✱Q618	P-4
✱D607	P-4	FL1002	C-6	✱IC501	C-7	✱IC1026	C-5	Q619	P-4
✱D750	H-4	FL1003	C-6	✱IC502	H-7	IC1027	A-5	✱Q620	N-4
✱D752	F-2	FL1004	B-6	✱IC503	H-6	IC1028	A-4	✱Q750	H-4
✱D753	F-2	FL1005	B-6	IC504	J-2	IC1029	B-5	Q1000	L-6
✱D754	F-2	FL1006	B-6	IC505	L-2	IC1030	D-2	✱Q1001	L-6
✱D755	F-2	FL1007	B-6	IC506	K-1	IC1031	C-1	Q1002	L-6
✱D756	E-2	FL1008	B-6	✱IC507	L-1	IC1032	B-5	Q1003	L-6
✱D757	E-2	FL1009	B-6	IC508	N-1	IC1033	C-2	✱Q1004	B-3
D1000	L-5	FL1010	C-7	✱IC509	J-6	IC1034	C-3	✱Q1005	B-3
D1001	B-3	FL1011	C-7	✱IC510	H-6	IC1035	D-4	✱Q1006	B-4
✱D1002	A-4	FL1012	B-7	✱IC511	K-7	IC1036	D-4	✱Q1007	B-2
✱D1003	C-3	FL1013	B-7	IC512	M-2	✱IC1037	A-7	Q1011	L-5
✱D1004	B-3	FL1014	B-7	IC600	N-3	✱IC1038	B-6	✱Q1012	B-1
		FL1015	B-7	✱IC601	N-4	✱IC1039	B-7		
E100	R-5	FL1016	B-7	✱IC602	N-2	✱IC1040	A-6	SL300	F-5
E300	F-4	FL1017	B-7	IC603	M-2	✱IC1041	A-7	SL500	H-1
E500	J-1	FL1018	A-6	IC604	R-1	IC1042	D-4	SL501	H-1
E600	P-2	FL1019	A-6	✱IC605	M-4	✱IC1043	C-4	SL502	H-1
E601	P-3	FL1020	A-6	IC606	R-1	IC1044	A-2	SL503	H-1
E750	F-3	FL1021	A-6	IC607	R-2	IC1045	C-3	SL504	H-1
E1000	A-1	FL1022	A-6	IC608	P-2	IC1046	C-4	SL505	H-1
E1001	C-3	FL1023	A-6	IC609	N-4	✱IC1047	C-4	SL506	H-1
		FL1024	A-6	IC610	M-4	IC1048	B-5	SL507	H-1
FB300	H-6	FL1025	A-6	IC611	P-4	IC1049	C-4		
✱FB500	L-1	FL1026	B-7	IC612	R-3	IC1050	D-4	TP100	M-5
FB1000	A-1	FL1027	A-7	IC613	P-4			TP101	N-6
✱FB1001	A-5	FL1028	A-7	IC614	P-4	PS100	D-7	TP102	P-6
✱FB1002	C-3	FL1029	A-7	IC615	R-4			TP103	R-6
		FL1030	A-7	IC616	P-1	Q100	M-6	TP104	N-5
FL100	N-6	FL1031	A-7	✱IC617	M-2	✱Q101	N-6	TP105	R-5
FL101	P-6	FL1032	A-7	✱IC618	N-2	✱Q102	P-7	TP106	P-5
FL102	R-6	FL1033	A-7	✱IC619	N-2	✱Q103	R-7	TP300	H-3
FL300	E-6			✱IC620	N-3	✱Q104	M-6	TP500	J-1
FL301	E-6	IC100	N-7	✱IC621	N-3	✱Q105	N-7	TP501	J-1
FL302	E-6	IC101	N-7	IC622	P-4	✱Q106	P-6	TP502	J-1
FL303	F-7	IC102	M-7	IC623	R-3	✱Q107	R-6	TP503	J-1
FL304	F-6	IC103	M-7	IC624	R-4	✱Q108	N-6	TP504	J-1
FL305	F-7	IC104	M-6	IC750	F-3	✱Q109	N-5	TP505	J-1
FL306	F-6	IC105	M-6	IC751	E-1	✱Q111	P-5	TP506	J-1
FL307	F-7	IC106	M-6	IC752	E-2	✱Q112	R-5	TP507	J-1
FL308	F-6	IC107	R-6	IC753	F-3	✱Q113	N-5	TP600	R-2
FL309	F-7	IC108	N-6	IC754	F-1	✱Q114	P-6	TP601	R-1
FL310	F-6	IC109	M-6	IC755	F-1	✱Q115	R-6	TP602	R-2
FL311	F-7	IC110	R-5	IC756	F-2	Q116	M-6	TP603	R-3
FL312	F-7	IC111	L-4	IC757	E-3	✱Q117	P-5	TP604	R-3
FL313	E-7	IC112	P-5	IC758	G-1	Q118	M-6	TP1000	L-6
FL314	E-7	✱IC113	J-5	IC759	G-1	Q119	M-5	TP1001	B-1
FL315	E-7	IC114	N-5	IC760	G-1	✱Q120	P-7	TP1002	C-2
FL316	E-7	IC115	P-5	IC761	E-3	✱Q121	R-7	TP1003	B-1
FL317	E-7	IC116	R-5	IC762	F-3	✱Q122	N-7		
FL318	E-7	IC117	M-5	IC1000	A-4	✱Q123	N-6		
FL500	K-7	IC118	L-5	IC1001	A-4	Q124	N-6		
FL501	K-7	IC119	L-4	IC1002	L-6	✱Q125	P-6		
FL502	K-7	IC120	L-5	IC1003	A-3	Q126	P-6		
FL503	K-6	IC121	J-5	IC1004	L-7	✱Q127	R-6		
FL504	K-7	IC122	J-4	IC1005	A-3	Q128	R-6		

✱ : B SIDE

LOT NO. G-1

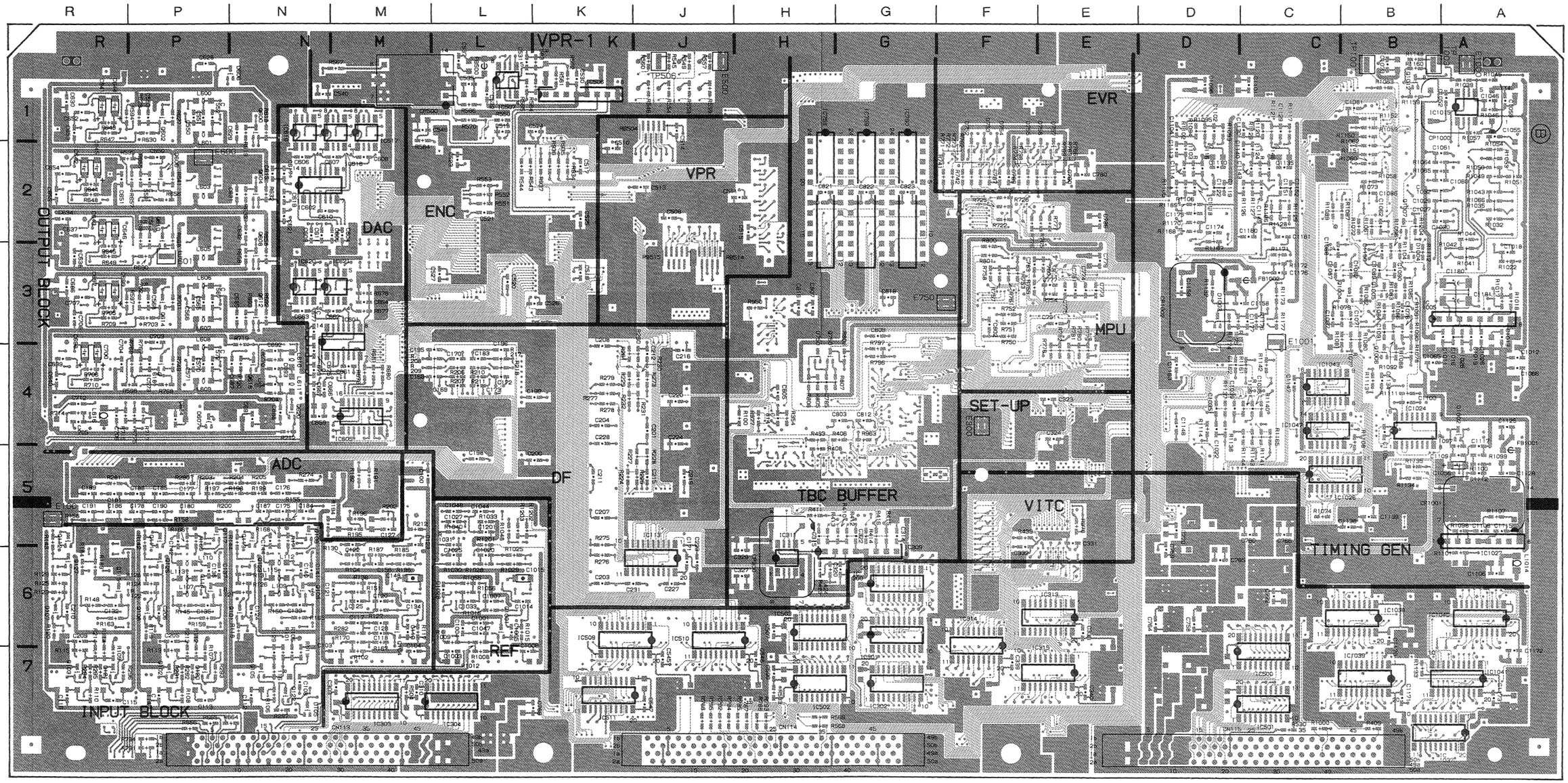
1-5 (a)



VPR-1 BOARD -A SIDE-

1-648-532-11 (LOT No. 302 - 306)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB



VPR-1 BOARD -B SIDE-

1-648-532-11 (LOT No. 302 - 306)

DVW-A500(J)	; VPR-1A	MCB
DVW-A500(UC)	; VPR-1A	MCB
DVW-A500P(EK)	; VPR-1AP	MCB
DVW-A500P(UC)	; VPR-1APG	MCB
DVW-500(J)	; VPR-1	MCB
DVW-500(UC)	; VPR-1	MCB
DVW-500P(EK)	; VPR-1P	MCB

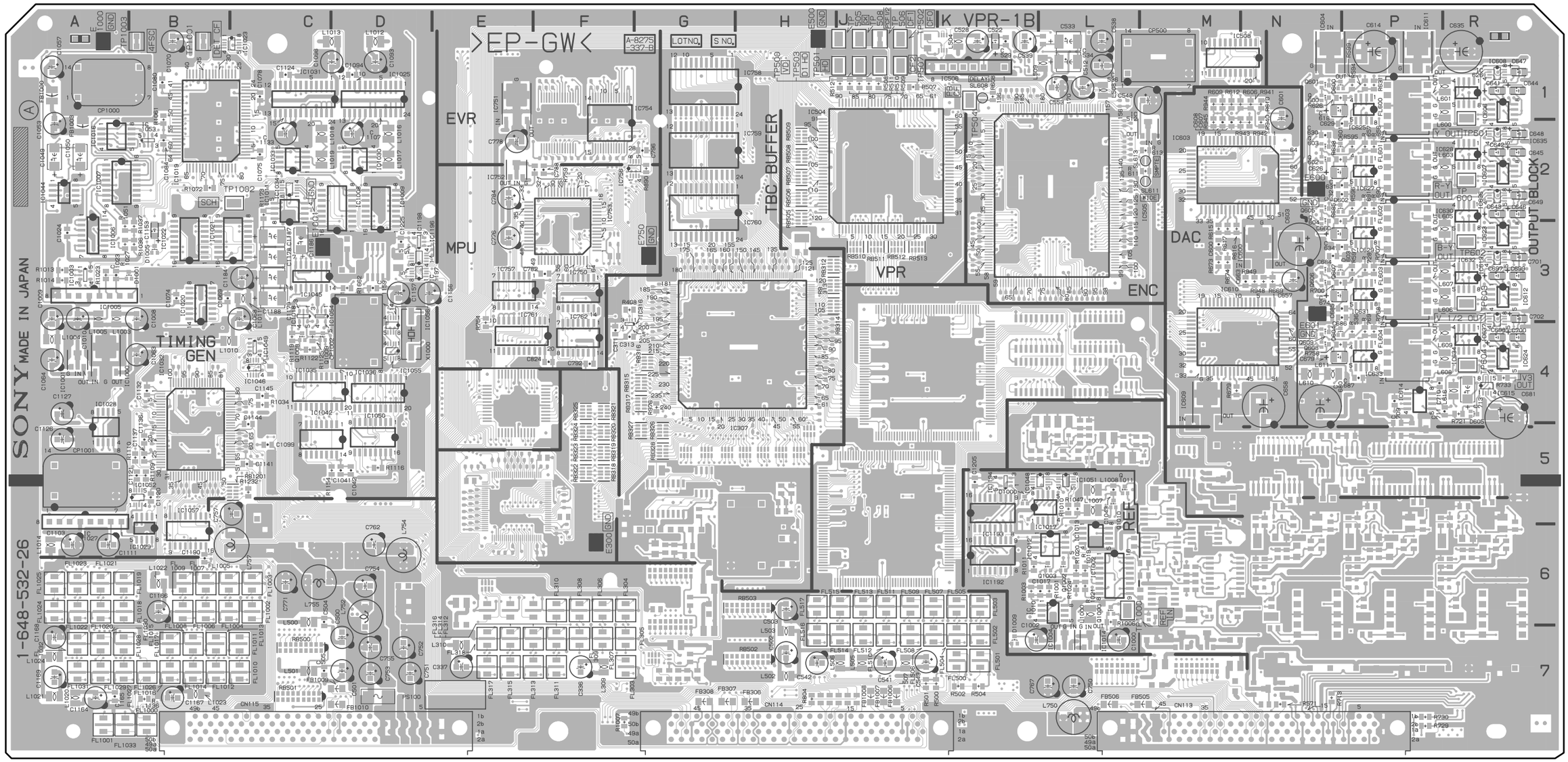
VPR-1B ; Video signal processor, D/A, Reference clock generator, Composite encoder

(Board's Lot No. 803 through 908)
All player models

VPR-1B (1-648-532-26)

CN113	N7	FL601	P2	IC753	F3	L610	N4	TP504	K1
CN114	H7	FL602	P3	IC754	F1	L611	N4	TP505	J1
CN115	C7	FL603	P3	IC756	F2	L616	R4	TP506	J1
		FL604	P4	IC757	E3	L750	L7	TP507	J1
CP500	M1	FL1000	B7	IC758	G1	L752	D6	TP508	J1
CP1000	A1	FL1001	A7	IC759	G2	L754	D6	TP600	R2
CP1001	A5	FL1002	C6	IC760	G2	L755	C6	TP601	R1
CP1002	D4	FL1003	C6	IC761	F3	L757	C6	TP602	R3
		FL1004	B6	IC762	F4	L1000	L6	TP603	R3
D603	N3	FL1005	B6	IC1000	A4	L1003	A3	TP604	R4
D604	N4	FL1006	B6	IC1001	A4	L1004	A4	TP1000	L6
D605	R4	FL1007	B6	IC1002	L6	L1005	A3	TP1001	B1
D606	*N3	FL1008	B6	IC1003	A3	L1007	L5	TP1002	C2
D607	*N4	FL1009	B6	IC1004	L7	L1008	L5	TP1003	B1
D750	*H4	FL1010	C7	IC1006	A2	L1010	B4		
D751	*F4	FL1011	C7	IC1007	A2	L1011	C3	*:B SIDE	
D752	*F2	FL1012	B7	IC1008	D3	L1012	D1		
D753	*F2	FL1013	B7	IC1009	D3	L1013	C1		
D754	*F2	FL1014	B7	IC1010	L6	L1014	A6		
D1000	K5	FL1015	B7	IC1011	C2	L1016	D2		
D1002	*A4	FL1016	B7	IC1012	K6	L1017	D2		
D1003	*C3	FL1017	B7	IC1013	L6	L1018	C2		
D1004	*B3	FL1018	A6	IC1014	L7	L1019	C2		
D1005	B3	FL1019	A6	IC1015	*A1	L1020	A7		
D1006	*C3	FL1020	A6	IC1016	A2	L1021	A7		
D1007	*K5	FL1021	A6	IC1017	K5	L1022	B6		
D1009	K7	FL1022	A6	IC1018	C3	L1023	B7		
D1010	*A4	FL1023	A6	IC1019	B2	L1024	A7		
		FL1024	A6	IC1020	B3				
E300	F6	FL1025	A6	IC1021	C3	PS100	D7		
E500	H1	FL1026	B7	IC1022	B3				
E600	N2	FL1027	A7	IC1023	C1	Q600	N1		
E601	N3	FL1028	A7	IC1024	*B4	Q601	N1		
E750	G3	FL1029	A7	IC1025	D1	Q602	N2		
E1000	A1	FL1030	A7	IC1026	*C5	Q603	N2		
E1001	C3	FL1031	A7	IC1027	A5	Q604	N2		
		FL1032	A7	IC1028	A5	Q605	N2		
FB306	H7	FL1033	A7	IC1029	B5	Q606	N3		
FB307	G7			IC1030	D2	Q607	N3		
FB308	G7	IC307	H4	IC1031	C1	Q608	N4		
FB500	*L1	IC314	*F6	IC1032	B5	Q609	N4		
FB501	*M1	IC315	*E7	IC1033	C2	Q620	*N4		
FB502	*C7	IC316	F4	IC1034	C2	Q750	*H4		
FB503	*H7	IC500	*C7	IC1035	D4	Q1000	L6		
FB505	M7	IC501	*C7	IC1036	D4	Q1001	*L6		
FB506	L7	IC502	*H7	IC1037	*A7	Q1002	L6		
FB1000	A1	IC503	*H6	IC1038	*B6	Q1003	L6		
FB1001	*A5	IC504	J2	IC1039	*B7	Q1004	*B3		
FB1002	*D3	IC505	L2	IC1040	*A6	Q1005	*B3		
FB1003	A2	IC506	K1	IC1041	*A7	Q1006	*B4		
FB1005	*D4	IC507	*L1	IC1042	D5	Q1008	C4		
FB1006	J7	IC508	N1	IC1043	*C4	Q1009	C4		
FB1007	J7	IC509	*J6	IC1044	A2	Q1010	L5		
FB1008	J7	IC510	*H6	IC1045	C3	Q1011	L5		
FB1009	D7	IC511	*K7	IC1046	C4	Q1012	*B1		
FB1010	D7	IC512	M2	IC1047	*C4				
		IC600	N3	IC1048	L5	RB312	H3		
FL303	F7	IC601	*N4	IC1049	C4	RB313	H3		
FL304	F6	IC602	*N2	IC1050	D4	RB314	H3		
FL305	F7	IC603	M2	IC1051	L5	RB315	G4		
FL306	F6	IC604	N1	IC1052	B5	RB316	G4		
FL307	F7	IC605	*M4	IC1053	B2	RB317	G4		
FL308	F6	IC606	R1	IC1054	C3	RB318	F5		
FL309	F7	IC607	R2	IC1057	B5	RB319	F5		
FL310	F6	IC608	R1	IC1058	*B6	RB320	F5		
FL311	F7	IC609	M4	IC1192	K6	RB321	F4		
FL312	F7	IC610	M4	IC1193	K6	RB322	F5		
FL313	E7	IC611	P1	IC1194	K5	RB323	F5		
FL314	E7	IC612	R3	IC1196	D3	RB324	F5		
FL315	E7	IC613	R3	IC1197	D3	RB325	F4		
FL316	E7	IC614	P4	IC1198	D3	RB326	G5		
FL317	E7	IC615	R4			RB327	G5		
FL318	E7	IC619	*N2	L309	F7	RB328	G5		
FL500	K7	IC621	*N3	L310	E7	RB500	C7		
FL501	K7	IC623	R3	L500	C6	RB501	C7		
FL502	K7	IC624	R4	L501	C7	RB502	H7		
FL503	K6	IC625	P1	L502	H7	RB503	H6		
FL504	K7	IC626	R1	L503	H7	RB504	*J1		
FL505	K6	IC627	P2	L504	K1	RB505	H2		
FL506	J7	IC628	R2	L505	J7	RB506	H2		
FL507	J6	IC629	P2	L506	J7	RB507	H2		
FL508	J7	IC630	R2	L507	J7	RB508	H2		
FL509	J6	IC631	P3	L508	L1	RB509	H2		
FL510	J7	IC632	R3	L509	L1	RB510	J3		
FL511	J6	IC633	P4	L600	R1	RB511	J3		
FL512	J7	IC634	R4	L601	R1	RB512	J3		
FL513	J6	IC635	R2	L603	R2	RB513	J3		
FL514	J7	IC636	R2	L605	R3				
FL515	J6	IC637	R3	L606	R3	TP500	J1		
FL516	H7	IC750	F3	L607	R3	TP501	J1		
FL517	H6	IC751	E1	L608	R4	TP502	J1		
FL600	P1	IC752	E2	L609	R4	TP503	J1		

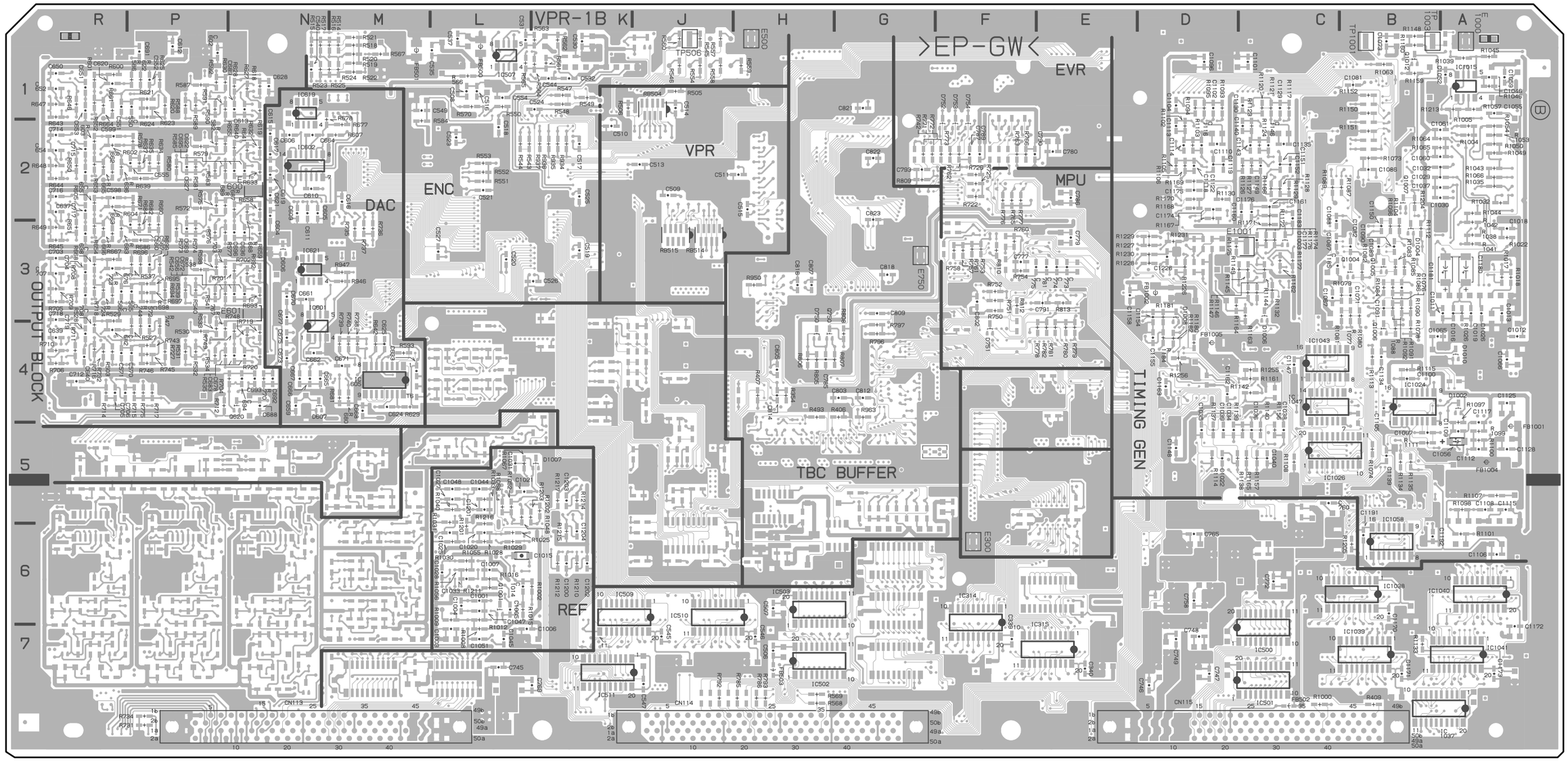
1-9 (f)



VPR-1B BOARD -A SIDE-

1-648-532-26 (LOT No. 803 - 908)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1BA	MCB
DVW-510(UC)	; VPR-1BA	MCB
DVW-510P(EK)	; VPR-1BAP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB



VPR-1B BOARD -B SIDE-

1-648-532-26 (LOT No. 803 - 908)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1BA	MCB
DVW-510(UC)	; VPR-1BA	MCB
DVW-510P(EK)	; VPR-1BAP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

VPR-1B ; Video signal processor, D/A, Reference clock generator, Composite encoder

(Board's Lot No. 705 through 802)
All player models

VPR-1B(1-648-532-25)

CN113	N-7	FL504	K-7	IC606	R-1	*IC1039	B-7	Q601	N-1
CN114	H-7	FL505	K-6	IC607	R-2	*IC1040	A-6	Q602	N-2
CN115	C-7	FL506	J-7	IC608	R-1	*IC1041	A-7	Q603	N-2
		FL507	J-6	IC609	M-4	IC1042	D-5	Q604	N-2
CP500	M-1	FL508	J-7	IC610	M-4	*IC1043	C-4	Q605	N-2
CP1000	A-1	FL509	J-6	IC611	P-1	IC1044	A-2	Q606	N-3
CP1001	A-5	FL510	J-7	IC612	R-3	IC1045	C-3	Q607	N-3
CP1002	D-4	FL511	J-6	IC613	R-3	IC1046	C-4	Q608	N-4
		FL512	J-7	IC614	P-4	*IC1047	C-4	Q609	N-4
D603	N-3	FL513	J-6	IC615	R-4	IC1048	L-5	*Q620	N-4
D604	N-4	FL514	J-7	*IC619	N-2	IC1049	C-4	*Q750	H-4
D605	R-4	FL515	J-6	*IC621	N-3	IC1050	D-4	Q1000	L-6
*D606	N-3	FL516	H-7	IC623	R-3	IC1051	L-5	*Q1001	L-6
*D607	N-4	FL517	H-6	IC624	R-4	IC1052	B-5	Q1002	L-6
*D750	H-4	FL600	P-1	IC625	P-1	IC1053	B-2	Q1003	L-6
*D751	F-4	FL601	P-2	IC626	R-1	IC1054	C-3	*Q1004	B-3
*D752	F-2	FL602	P-3	IC627	P-2	IC1057	B-5	*Q1005	B-3
*D753	F-2	FL603	P-3	IC628	R-2	*IC1058	B-6	*Q1006	B-4
*D754	F-2	FL604	P-4	IC629	P-2	IC1192	K-6	Q1008	C-4
D1000	K-5	FL1000	B-7	IC630	R-2	IC1193	K-6	Q1009	C-4
*D1002	A-4	FL1001	A-7	IC631	P-3	IC1194	K-5	Q1010	L-5
*D1003	C-3	FL1002	C-6	IC632	R-3	IC1196	D-3	Q1011	L-5
*D1004	B-3	FL1003	C-6	IC633	P-4	IC1197	D-3	*Q1012	B-1
D1005	B-3	FL1004	B-6	IC634	R-4	IC1198	D-3		
*D1006	C-3	FL1005	B-6	IC635	R-2			RB312	H-3
*D1007	K-5	FL1006	B-6	IC636	R-2	L309	F-7	RB313	H-3
D1009	K-7	FL1007	B-6	IC637	R-3	L310	E-7	RB314	H-3
*D1010	A-4	FL1008	B-6	IC750	F-3	L500	C-6	RB315	G-4
		FL1009	B-6	IC751	E-1	L501	C-7	RB316	G-4
E300	F-6	FL1010	C-7	IC752	E-2	L502	H-7	RB317	G-4
E500	H-1	FL1011	C-7	IC753	F-3	L503	H-7	RB318	F-5
E600	N-2	FL1012	B-7	IC754	F-1	L504	K-1	RB319	F-5
E601	N-3	FL1013	B-7	IC756	F-2	L505	J-7	RB320	F-5
E750	G-3	FL1014	B-7	IC757	E-3	L506	J-7	RB321	F-4
E1000	A-1	FL1015	B-7	IC758	G-1	L507	J-7	RB322	F-5
E1001	C-3	FL1016	B-7	IC759	G-2	L508	L-1	RB323	F-5
		FL1017	B-7	IC760	G-2	L509	L-1	RB324	F-5
FB306	H-7	FL1018	A-6	IC761	F-3	L600	R-1	RB325	F-4
FB307	G-7	FL1019	A-6	IC762	F-4	L601	R-1	RB326	G-5
FB308	G-7	FL1020	A-6	IC1000	A-4	L603	R-2	RB327	G-5
*FB500	L-1	FL1021	A-6	IC1001	A-4	L605	R-3	RB328	G-5
*FB501	M-1	FL1022	A-6	IC1002	L-6	L606	R-3	RB500	C-7
*FB502	C-7	FL1023	A-6	IC1003	A-3	L607	R-3	RB501	C-7
*FB503	H-7	FL1024	A-6	IC1004	L-7	L608	R-4	RB502	H-7
FB505	M-7	FL1025	A-6	IC1006	A-2	L609	R-4	RB503	H-6
FB506	L-7	FL1026	B-7	IC1007	A-2	L610	N-4	*RB504	J-1
FB1000	A-1	FL1027	A-7	IC1008	D-3	L611	N-4	RB505	H-2
*FB1001	A-5	FL1028	A-7	IC1009	D-3	L616	R-4	RB506	H-2
*FB1002	D-3	FL1029	A-7	IC1010	L-6	L750	L-7	RB507	H-2
FB1003	A-2	FL1030	A-7	IC1011	C-2	L752	D-6	RB508	H-2
*FB1005	D-4	FL1031	A-7	IC1012	K-6	L754	D-6	RB509	H-2
FB1006	J-7	FL1032	A-7	IC1013	L-6	L755	C-6	RB510	J-3
FB1007	J-7	FL1033	A-7	IC1014	L-7	L757	C-6	RB511	J-3
FB1008	J-7			*IC1015	A-1	L1000	L-6	RB512	J-3
FB1009	D-7	IC307	H-4	IC1016	A-2	L1003	A-3	RB513	J-3
FB1010	D-7	*IC314	F-6	IC1017	K-5	L1004	A-4		
		*IC315	E-7	IC1018	C-3	L1005	A-3	TP500	J-1
FL303	F-7	IC316	F-4	IC1019	B-2	L1007	L-5	TP501	J-1
FL304	F-6	*IC500	C-7	IC1020	B-3	L1008	L-5	TP502	J-1
FL305	F-7	*IC501	C-7	IC1021	C-3	L1010	B-4	TP503	J-1
FL306	F-6	*IC502	H-7	IC1022	B-3	L1011	C-3	TP504	K-1
FL307	F-7	*IC503	H-6	IC1023	C-1	L1012	D-1	TP505	J-1
FL308	F-6	IC504	J-2	*IC1024	B-4	L1013	C-1	TP506	J-1
FL309	F-7	IC505	L-2	IC1025	D-1	L1014	A-6	TP507	J-1
FL310	F-6	IC506	K-1	*IC1026	C-5	L1016	D-2	TP508	J-1
FL311	F-7	*IC507	L-1	IC1027	A-5	L1017	D-2	TP600	R-2
FL312	F-7	IC508	N-1	IC1028	A-5	L1018	C-2	TP601	R-1
FL313	E-7	*IC509	J-6	IC1029	B-5	L1019	C-2	TP602	R-3
FL314	E-7	*IC510	H-6	IC1030	D-2	L1020	A-7	TP603	R-3
FL315	E-7	*IC511	K-7	IC1031	C-1	L1021	A-7	TP604	R-4
FL316	E-7	IC512	M-2	IC1032	B-5	L1022	B-6	TP1000	L-6
FL317	E-7	IC600	N-3	IC1033	C-2	L1023	B-7	TP1001	B-1
FL318	E-7	*IC601	N-4	IC1034	C-2	L1024	A-7	TP1002	C-2
FL500	K-7	*IC602	N-2	IC1035	D-4			TP1003	B-1
FL501	K-7	IC603	M-2	IC1036	D-4	PS100	D-7		
FL502	K-7	IC604	N-1	*IC1037	A-7				
FL503	K-6	*IC605	M-4	*IC1038	B-6	Q600	N-1		

*: B SIDE

LOT NO. G-1

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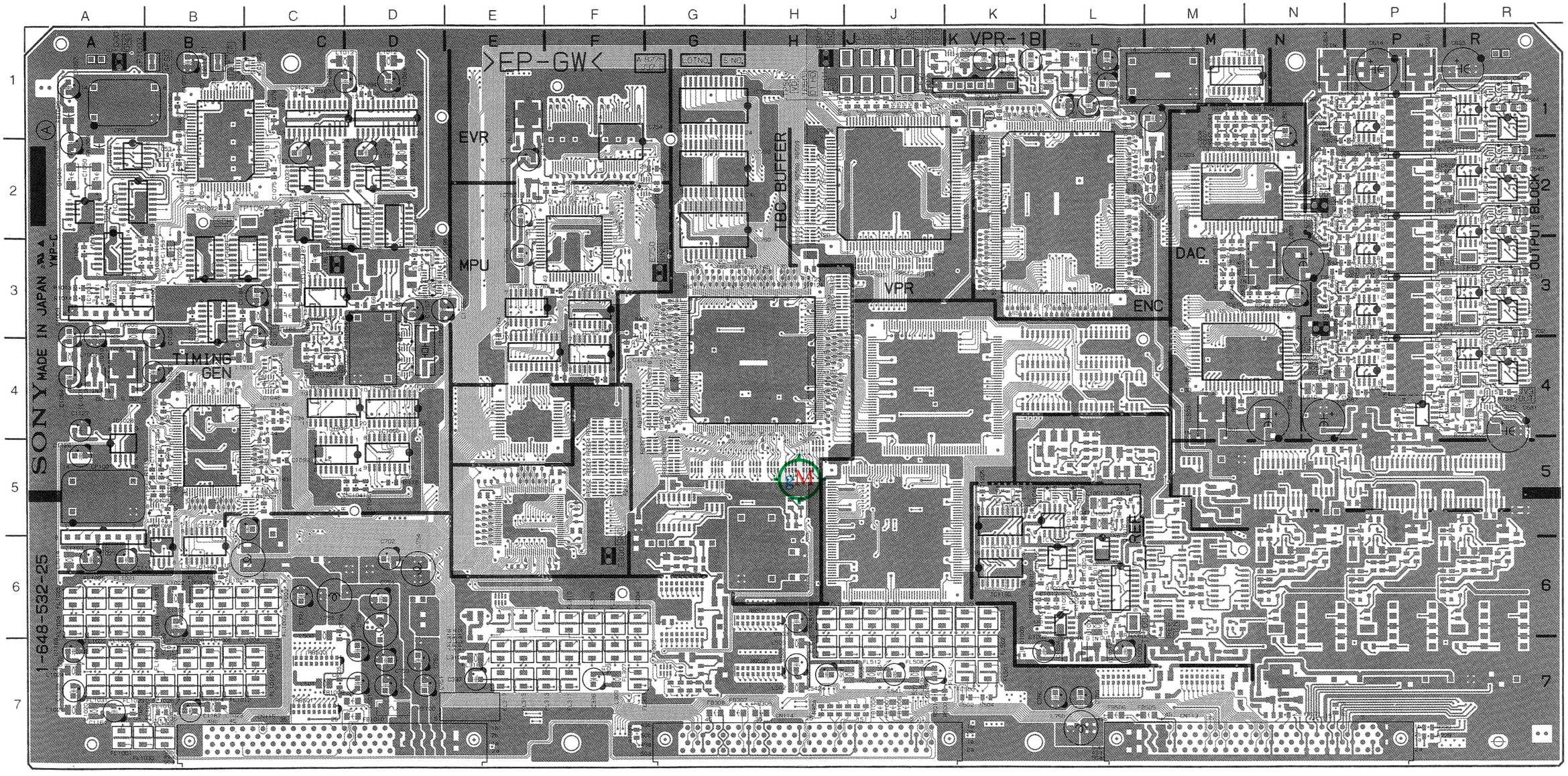
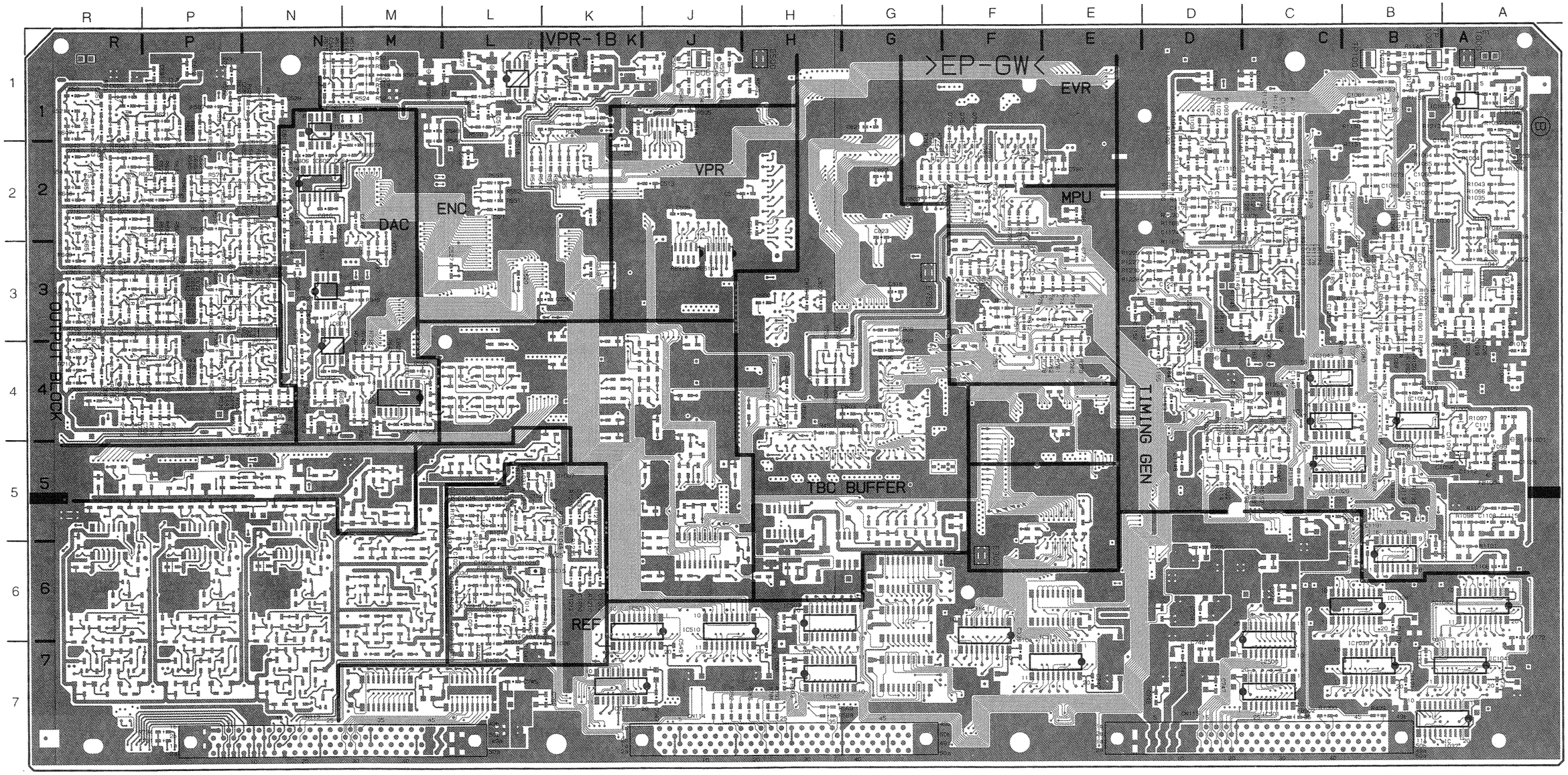


VPR-1B BOARD -A SIDE-

1-648-532-25 (LOT No. 705 - 802)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB



VPR-1B BOARD -B SIDE-

1-648-532-25 (LOT No. 705 - 802)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

VPR-1B ; Video signal processor, D/A, Reference clock generator, Composite encoder

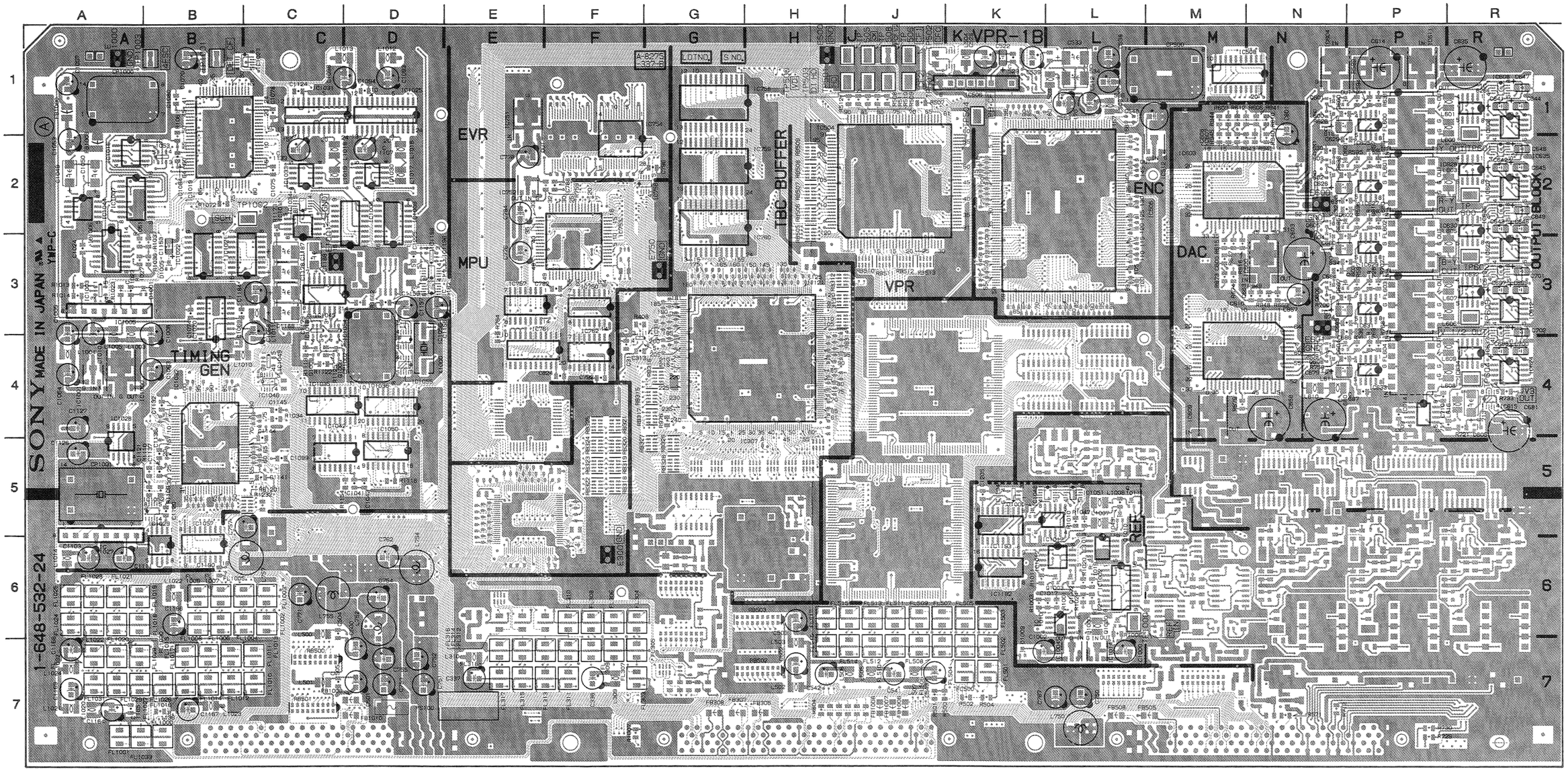
(Board's Lot No. 503 through 704)
All player models

VPR-1B(1-648-532-24)

CN113	M-7	FL316	E-7	✱IC511	K-7	IC1029	B-5	TP602	R-3
CN114	H-7	FL317	E-7	IC512	M-2	IC1030	D-2	TP603	R-3
CN115	C-7	FL318	E-7	IC600	N-3	IC1031	C-1	TP604	R-4
		FL500	K-7	✱IC601	N-4	IC1032	B-5	TP1000	L-6
CP500	M-1	FL501	K-7	✱IC602	N-2	IC1033	C-2	TP1001	B-1
CP1000	A-1	FL502	K-7	IC603	M-2	IC1034	C-2	TP1002	C-2
CP1001	A-5	FL503	K-6	IC604	N-1	IC1035	D-4	TP1003	B-1
CP1002	D-3	FL504	K-7	✱IC605	M-4	IC1036	D-4		
		FL505	K-6	IC606	R-1	✱IC1037	A-7	X1000	C-4
D600	N-1	FL506	J-7	IC607	R-2	✱IC1038	B-6		
D601	N-2	FL507	J-6	IC608	R-1	✱IC1039	B-7		
D602	N-2	FL508	J-7	IC609	N-4	✱IC1040	A-6		
D603	N-3	FL509	J-6	IC610	M-4	✱IC1041	A-7		
D604	N-4	FL510	J-7	IC611	P-1	IC1042	D-5		
D605	R-4	FL511	J-6	IC612	R-3	✱IC1043	C-4		
✱D606	N-3	FL512	J-7	IC613	R-3	IC1044	A-2		
✱D607	N-4	FL513	J-6	IC614	P-4	IC1045	C-3		
✱D750	H-4	FL514	J-7	IC615	R-4	IC1046	C-4		
✱D751	F-4	FL515	J-6	✱IC619	N-2	✱IC1047	C-4		
✱D752	F-2	FL516	H-7	✱IC621	N-3	IC1048	K-5		
✱D753	F-2	FL517	H-6	IC623	R-3	IC1049	C-4		
✱D754	F-2	FL600	P-1	IC624	R-4	IC1050	D-5		
D1000	K-5	FL601	P-2	IC625	P-1	IC1051	L-5		
D1001	B-3	FL602	P-2	IC626	R-1	IC1052	B-5		
✱D1002	A-4	FL603	P-3	IC627	P-2	IC1053	B-2		
✱D1003	C-3	FL604	P-4	IC628	R-2	IC1054	C-3		
✱D1004	B-3	FL1000	B-7	IC629	P-3	IC1055	D-4		
D1005	B-3	FL1001	A-7	IC630	R-2	IC1056	D-4		
✱D1006	C-6	FL1002	C-6	IC631	P-3	IC1057	B-5		
✱D1007	K-5	FL1003	C-6	IC632	R-3	✱IC1058	B-6		
✱D1008	D-4	FL1004	B-6	IC633	P-4	IC1192	K-6		
D1009	K-7	FL1005	B-6	IC634	R-4	IC1193	K-6		
✱D1010	A-4	FL1006	B-6	IC635	R-2	IC1194	K-5		
		FL1007	B-6	IC636	R-3	IC1196	D-3		
E300	F-6	FL1008	B-6	IC637	R-4	IC1197	D-3		
E500	H-1	FL1009	B-6	IC750	F-3	IC1198	D-3		
E600	N-2	FL1010	C-7	IC751	E-1				
E601	N-3	FL1011	C-7	IC752	E-2	PS100	D-7		
E750	F-3	FL1012	B-7	IC753	F-3				
E1000	A-1	FL1013	B-7	IC754	F-1	Q600	N-1		
E1001	C-3	FL1014	B-7	IC756	F-2	Q601	N-1		
		FL1015	B-7	IC757	E-3	Q602	N-2		
FB306	H-7	FL1016	B-7	IC758	G-1	Q603	N-2		
FB307	G-7	FL1017	B-7	IC759	G-2	Q604	N-3		
FB308	G-7	FL1018	A-6	IC760	G-2	Q605	N-2		
✱FB500	L-1	FL1019	A-6	IC761	E-3	Q606	N-3		
✱FB501	M-1	FL1020	A-6	IC762	F-3	Q607	N-3		
✱FB502	C-7	FL1021	A-6	IC1000	A-4	Q608	N-4		
✱FB503	H-7	FL1022	A-6	IC1001	A-4	Q609	N-4		
FB505	M-7	FL1023	A-6	IC1002	L-6	✱Q620	N-4		
FB506	L-7	FL1024	A-6	IC1003	A-3	✱Q750	H-4		
FB1000	A-1	FL1025	A-6	IC1004	L-7	Q1000	L-6		
✱FB1001	A-5	FL1026	B-7	IC1005	A-3	✱Q1001	L-6		
✱FB1002	C-3	FL1027	A-7	IC1006	A-2	Q1002	L-6		
FB1003	A-2	FL1028	A-7	IC1007	A-2	Q1003	L-6		
✱FB1004	A-5	FL1029	A-7	IC1008	D-3	✱Q1004	B-3		
✱FB1005	D-4	FL1030	A-7	IC1009	D-3	✱Q1005	B-3		
FB1006	J-7	FL1031	A-7	IC1010	L-6	✱Q1006	B-4		
FB1007	J-7	FL1032	A-7	IC1011	C-2	✱Q1007	B-2		
FB1008	J-7	FL1033	A-7	IC1012	L-6	Q1008	C-3		
FB1009	D-7			IC1013	L-6	Q1009	C-3		
FB1010	D-7	IC307	H-4	IC1014	L-7	Q1010	L-5		
		✱IC314	F-6	✱IC1015	A-1	Q1011	L-5		
FL303	F-7	✱IC315	E-7	IC1016	A-2	✱Q1012	B-1		
FL304	F-6	IC316	F-4	IC1017	L-5				
FL305	F-7	✱IC500	C-7	IC1018	C-3	TP500	J-1		
FL306	F-6	✱IC501	C-7	IC1019	B-2	TP501	J-1		
FL307	F-7	✱IC502	H-7	IC1020	B-3	TP502	J-1		
FL308	F-6	✱IC503	H-6	IC1021	C-3	TP503	J-1		
FL309	F-7	IC504	J-2	IC1022	B-3	TP504	K-1		
FL310	F-6	IC505	L-2	IC1023	C-1	TP505	J-1		
FL311	F-7	IC506	K-1	✱IC1024	B-4	TP506	J-1		
FL312	F-7	✱IC507	L-1	IC1025	D-1	TP507	J-1		
FL313	E-7	IC508	N-1	✱IC1026	C-5	TP508	J-1		
FL314	E-7	✱IC509	J-6	IC1027	A-5	TP600	R-2		
FL315	E-7	✱IC510	H-6	IC1028	A-4	TP601	R-2		

✱ : B SIDE

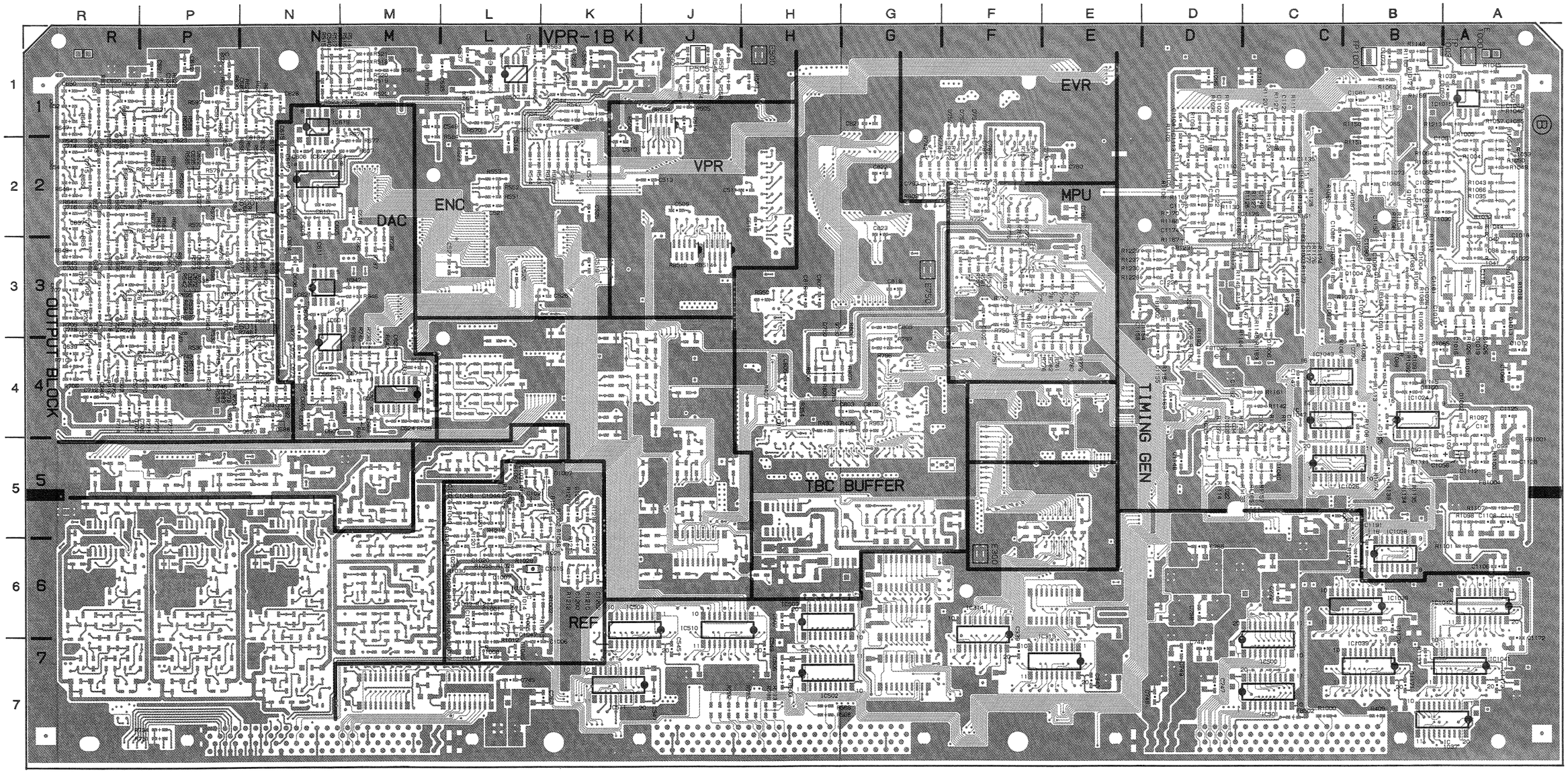
LOT NO. G-1



VPR-1B BOARD -A SIDE-

1-648-532-24 (LOT No. 503 - 704)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB



VPR-1B BOARD -B SIDE-

1-648-532-24 (LOT No. 503 - 704)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(J)	; VPR-1BA	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

VPR-1B ; Video signal processor, D/A, Reference clock generator, Composite encoder

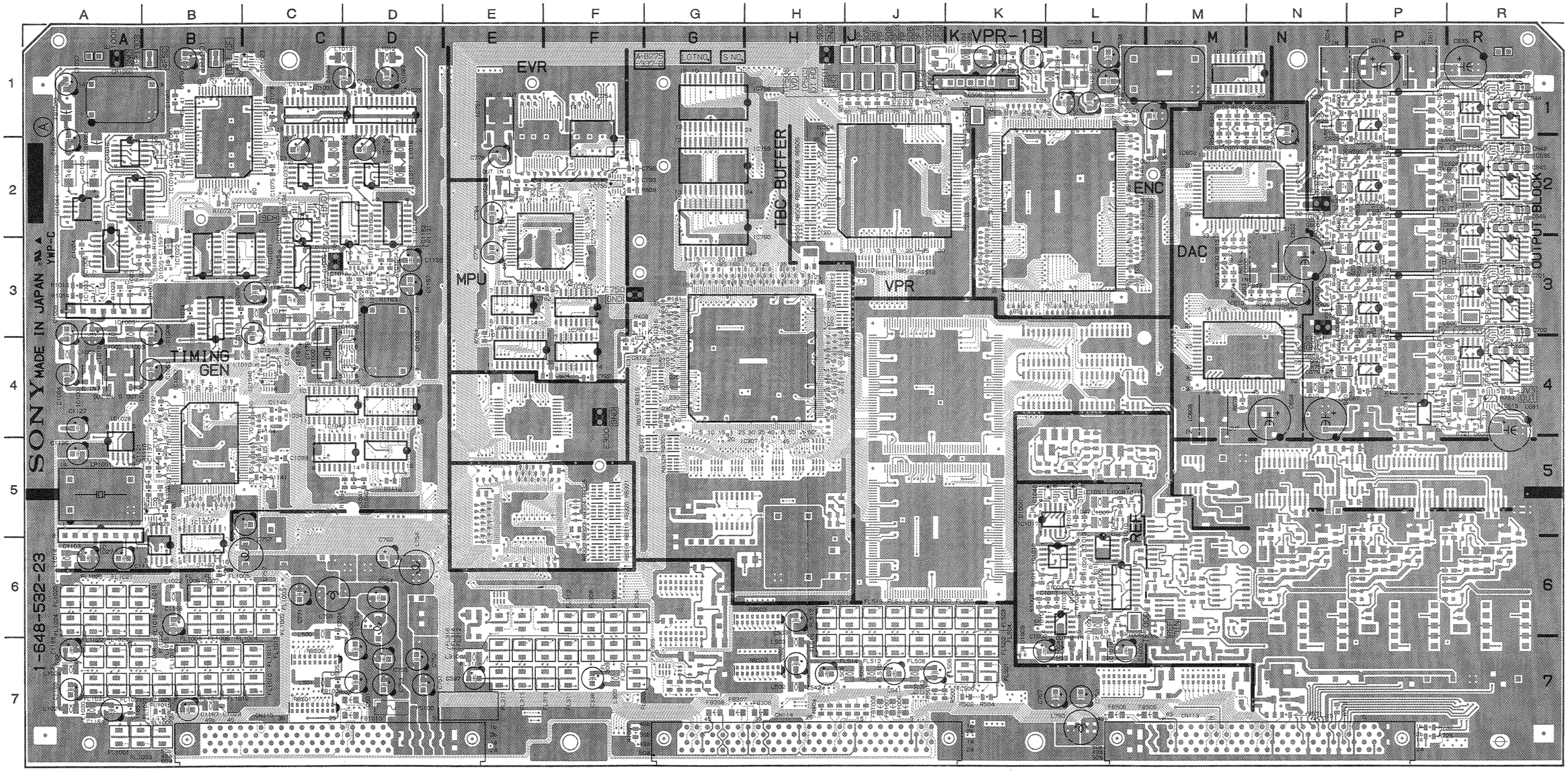
(Board's Lot No. 411 through 502)
All player models

VPR-1B(1-648-532-23)

CN113	M-7	FL314	E-7	✱IC509	J-6	IC1027	A-5	TP1000	L-6
CN114	H-7	FL315	E-7	✱IC510	H-6	IC1028	A-4	TP1001	B-1
CN115	C-7	FL316	E-7	✱IC511	K-7	IC1029	B-5	TP1002	C-2
		FL317	E-7	IC512	M-2	IC1030	D-2	TP1003	B-1
CP500	M-1	FL318	E-7	IC600	N-3	IC1031	C-1		
CP1000	A-1	FL500	K-7	✱IC601	N-4	IC1032	B-5	X1000	C-4
CP1001	A-5	FL501	K-7	✱IC602	N-2	IC1033	C-2		
CP1002	D-3	FL502	K-7	IC603	M-2	IC1034	C-2		
		FL503	K-6	IC604	N-1	IC1035	D-4		
D600	N-1	FL504	K-7	✱IC605	M-4	IC1036	D-4		
D601	N-2	FL505	K-6	IC606	R-1	✱IC1037	A-7		
D602	N-2	FL506	J-7	IC607	R-2	✱IC1038	B-6		
D603	N-3	FL507	J-6	IC608	R-1	✱IC1039	B-7		
D604	N-4	FL508	J-7	IC609	N-4	✱IC1040	A-6		
D605	R-4	FL509	J-6	IC610	M-4	✱IC1041	A-7		
✱D606	N-3	FL510	J-7	IC611	P-1	IC1042	D-5		
✱D607	N-4	FL511	J-6	IC612	R-3	✱IC1043	C-4		
✱D750	H-4	FL512	J-7	IC613	R-3	IC1044	A-2		
✱D751	F-4	FL513	J-6	IC614	P-4	IC1045	C-3		
✱D752	F-2	FL514	J-7	IC615	R-4	IC1046	C-4		
✱D753	F-2	FL515	J-6	✱IC619	N-2	✱IC1047	C-4		
✱D754	F-2	FL516	H-7	✱IC621	N-3	IC1048	K-5		
D1000	K-5	FL517	H-6	IC623	R-3	IC1049	C-4		
D1001	B-3	FL600	P-1	IC624	R-4	IC1050	D-5		
✱D1002	A-4	FL601	P-2	IC625	P-1	IC1051	L-5		
✱D1003	C-3	FL602	P-2	IC626	R-1	IC1052	B-5		
✱D1004	B-3	FL603	P-3	IC627	P-2	IC1053	B-2		
D1005	B-3	FL604	P-4	IC628	R-2	IC1054	D-3		
D1006	C-6	FL1000	B-7	IC629	P-3	IC1055	D-4		
✱D1007	K-5	FL1001	A-7	IC630	R-2	IC1056	D-4		
✱D1008	D-4	FL1002	C-6	IC631	P-3	IC1057	B-5		
D1009	K-7	FL1003	C-6	IC632	R-3	✱IC1058	B-6		
✱D1010	A-4	FL1004	B-6	IC633	P-4				
✱D1011	D-3	FL1005	B-6	IC634	R-4	PS100	D-7		
D1012	D-3	FL1006	B-6	IC635	R-2				
		FL1007	B-6	IC636	R-3	Q600	N-1		
E300	F-4	FL1008	B-6	IC637	R-4	Q601	N-1		
E500	H-1	FL1009	B-6	IC750	F-3	Q602	N-2		
E600	N-2	FL1010	C-7	IC751	E-1	Q603	N-2		
E601	N-3	FL1011	C-7	IC752	E-2	Q604	N-3		
E750	F-3	FL1012	B-7	IC753	F-3	Q605	N-2		
E1000	A-1	FL1013	B-7	IC754	F-1	Q606	N-3		
E1001	C-3	FL1014	B-7	IC756	F-2	Q607	N-3		
		FL1015	B-7	IC757	E-3	Q608	N-4		
FB306	H-7	FL1016	B-7	IC758	G-1	Q609	N-4		
FB307	G-7	FL1017	B-7	IC759	G-2	✱Q620	N-4		
FB308	G-7	FL1018	A-6	IC760	G-2	✱Q750	H-4		
✱FB500	L-1	FL1019	A-6	IC761	E-3	Q1000	L-6		
✱FB501	M-1	FL1020	A-6	IC762	F-3	✱Q1001	L-6		
✱FB502	C-7	FL1021	A-6	IC1000	A-4	Q1002	L-6		
✱FB503	H-7	FL1022	A-6	IC1001	A-4	Q1003	L-6		
FB505	M-7	FL1023	A-6	IC1002	L-6	✱Q1004	B-3		
FB506	L-7	FL1024	A-6	IC1003	A-3	✱Q1005	B-3		
FB1000	A-1	FL1025	A-6	IC1004	L-7	✱Q1006	B-4		
✱FB1001	A-5	FL1026	B-7	IC1005	A-3	✱Q1007	B-2		
✱FB1002	C-3	FL1027	A-7	IC1006	A-2	✱Q1008	D-3		
FB1003	A-2	FL1028	A-7	IC1007	A-2	✱Q1009	D-3		
✱FB1004	A-5	FL1029	A-7	IC1008	D-3	Q1010	L-5		
✱FB1005	D-4	FL1030	A-7	IC1009	D-3	Q1011	L-5		
FB1006	J-7	FL1031	A-7	IC1010	L-6	✱Q1012	B-1		
FB1007	J-7	FL1032	A-7	IC1011	C-2	✱Q1013	D-3		
FB1008	J-7	FL1033	A-7	IC1012	L-6				
FB1009	D-7			IC1013	L-6	TP500	J-1		
FB1010	D-7	IC307	H-4	IC1014	L-7	TP501	J-1		
		✱IC314	F-6	✱IC1015	A-1	TP502	J-1		
FL303	F-7	✱IC315	E-7	IC1016	A-2	TP503	J-1		
FL304	F-6	IC316	F-4	IC1017	L-5	TP504	K-1		
FL305	F-7	✱IC500	C-7	IC1018	D-3	TP505	J-1		
FL306	F-6	✱IC501	C-7	IC1019	B-2	TP506	J-1		
FL307	F-7	✱IC502	H-7	IC1020	B-3	TP507	J-1		
FL308	F-6	✱IC503	H-6	IC1021	C-3	TP508	J-1		
FL309	F-7	IC504	J-2	IC1022	B-3	TP600	R-2		
FL310	F-6	IC505	L-2	IC1023	C-1	TP601	R-2		
FL311	F-7	IC506	K-1	✱IC1024	B-4	TP602	R-3		
FL312	F-7	✱IC507	L-1	IC1025	D-1	TP603	R-3		
FL313	E-7	IC508	N-1	✱IC1026	C-5	TP604	R-4		

✱ : B SIDE

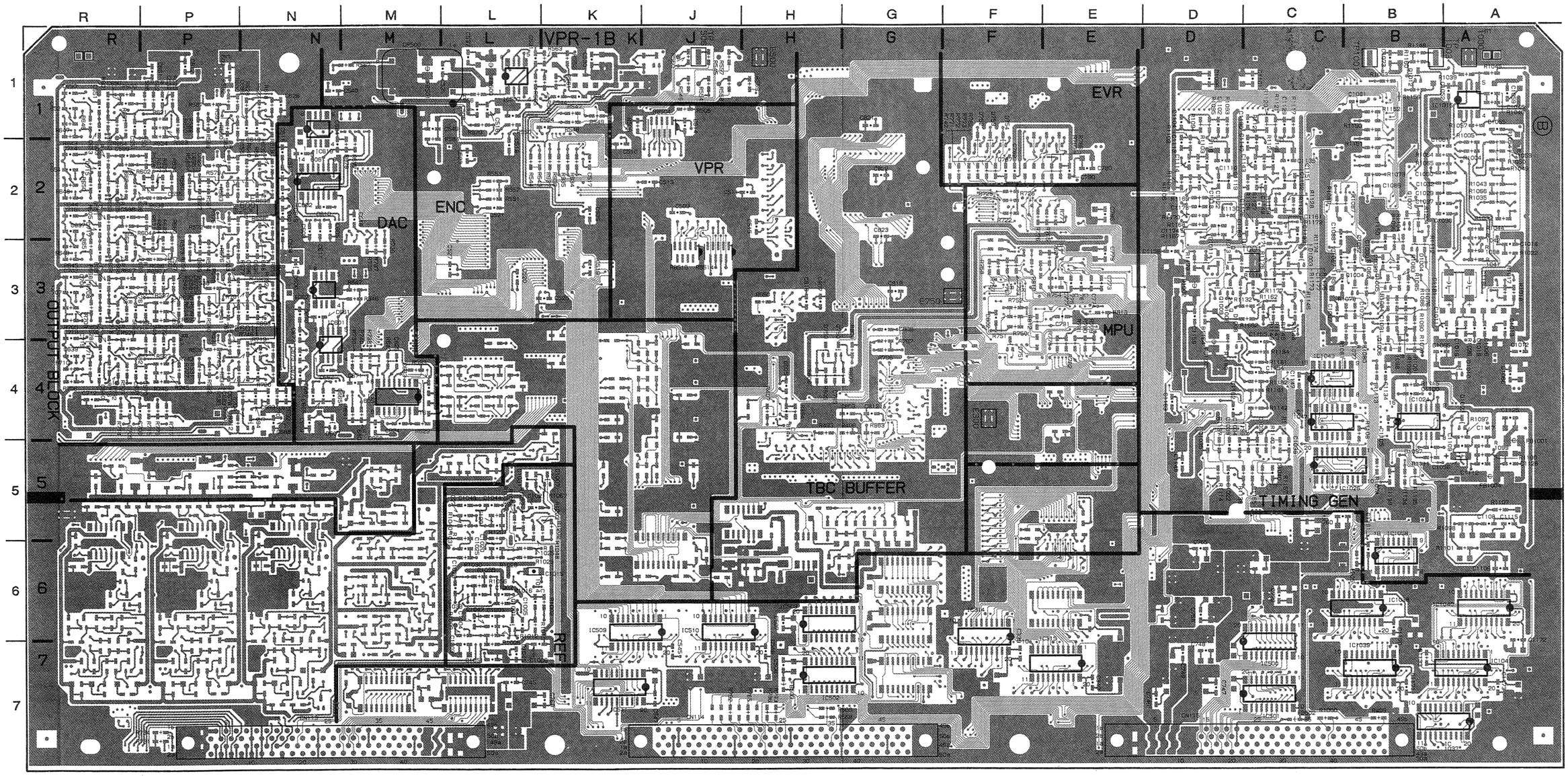
LOT NO. G-1



VPR-1B BOARD -A SIDE-

1-648-532-23 (LOT No. 411 - 502)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB



VPR-1B BOARD -B SIDE-

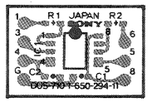
1-648-532-23 (LOT No. 411 - 502)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

VPR-1B, DUS-710

VPR-1B ; Video signal processor, D/A, Reference clock generator, Composite encoder
DUS-710

(Board's Lot No. 401 through 410)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



DUS-710 BOARD -A SIDE-
1-650-294-11

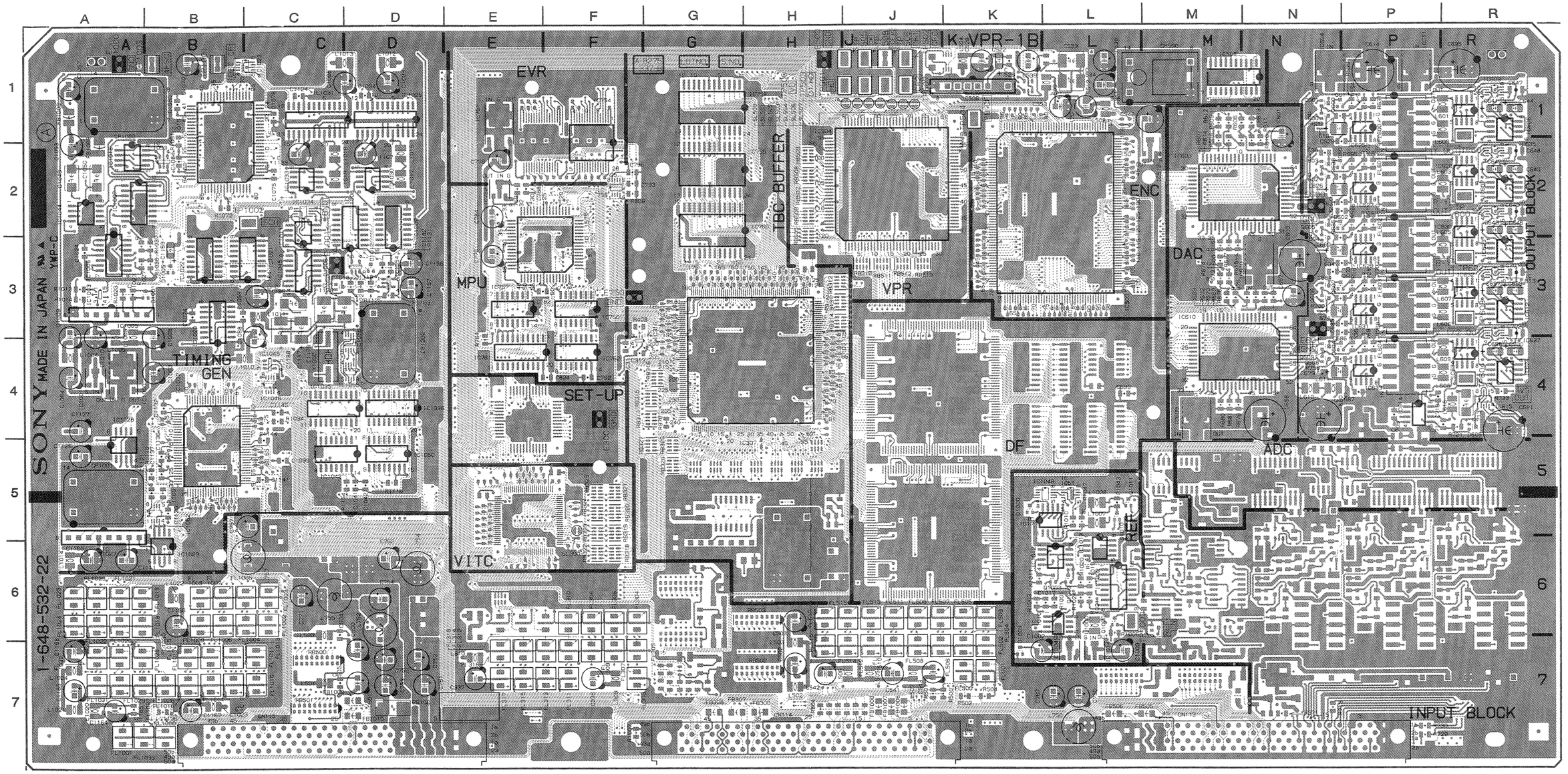
VPR-1B(1-648-532-22)

CN113	M-7	FL314	E-7	✱IC509	J-6	IC1027	A-5	TP507	J-1
CN114	H-7	FL315	E-7	✱IC510	H-6	IC1028	A-4	TP508	J-1
CN115	C-7	FL316	E-7	✱IC511	K-7	IC1029	B-5	TP600	R-2
		FL317	E-7	IC512	M-2	IC1030	D-2	TP601	R-2
CP500	M-1	FL318	E-7	IC600	N-3	IC1031	C-1	TP602	R-3
CP1000	A-1	FL500	K-7	✱IC601	N-4	IC1032	B-5	TP603	R-3
CP1001	A-5	FL501	K-7	✱IC602	N-2	IC1033	C-2	TP604	R-4
CP1002	D-3	FL502	K-7	IC603	M-2	IC1034	C-2	TP1000	L-6
		FL503	K-6	IC604	N-1	IC1035	D-4	TP1001	B-1
D600	N-1	FL504	K-7	✱IC605	M-4	IC1036	D-4	TP1002	C-2
D601	N-2	FL505	K-6	IC606	R-1	✱IC1037	A-7	TP1003	B-1
D602	N-2	FL506	J-7	IC607	R-2	✱IC1038	B-6		
D603	N-3	FL507	J-6	IC608	R-1	✱IC1039	B-7	X1000	C-4
D604	N-4	FL508	J-7	IC609	N-4	✱IC1040	A-6		
D605	R-4	FL509	J-6	IC610	M-4	✱IC1041	A-7		
✱D606	N-3	FL510	J-7	IC611	P-1	IC1042	D-5		
✱D607	N-4	FL511	J-6	IC612	R-3	✱IC1043	C-4		
✱D750	H-4	FL512	J-7	IC613	R-3	IC1044	A-2		
✱D751	F-4	FL513	J-6	IC615	R-4	IC1045	C-3		
✱D752	F-2	FL514	J-7	IC616	P-1	IC1046	C-4		
✱D753	F-2	FL515	J-6	✱IC619	N-2	✱IC1047	C-4		
✱D754	F-2	FL516	H-7	✱IC621	N-3	IC1048	K-5		
D1000	K-5	FL517	H-6	IC623	R-3	IC1049	C-4		
D1001	B-3	FL600	P-1	IC624	R-4	IC1050	D-5		
✱D1002	A-4	FL601	P-2	IC625	P-1	IC1051	L-5		
✱D1003	C-3	FL602	P-2	IC626	R-1	IC1052	B-5		
✱D1004	B-3	FL603	P-3	IC627	P-2	IC1053	B-2		
D1005	B-3	FL604	P-4	IC628	R-2	IC1054	D-3		
D1006	C-6	FL1000	B-7	IC629	P-3	IC1055	D-4		
✱D1007	K-5	FL1001	A-7	IC630	R-2	IC1056	D-4		
✱D1008	D-4	FL1002	C-6	IC631	P-3				
D1009	K-7	FL1003	C-6	IC632	R-3	PS100	D-7		
✱D1010	A-4	FL1004	B-6	IC633	P-4				
✱D1011	D-3	FL1005	B-6	IC634	R-4	Q600	N-1		
D1012	D-3	FL1006	B-6	IC635	R-2	Q601	N-1		
		FL1007	B-6	IC636	R-3	Q602	N-2		
E300	F-4	FL1008	B-6	IC637	R-4	Q603	N-2		
E500	H-1	FL1009	B-6	IC750	F-3	Q604	N-3		
E600	N-2	FL1010	C-7	IC751	E-1	Q605	N-2		
E601	N-3	FL1011	C-7	IC752	E-2	Q606	N-3		
E750	F-3	FL1012	B-7	IC753	F-3	Q607	N-3		
E1000	A-1	FL1013	B-7	IC754	F-1	Q608	N-4		
E1001	C-3	FL1014	B-7	IC756	F-2	Q609	N-4		
		FL1015	B-7	IC757	E-3	✱Q620	N-4		
FB306	H-7	FL1016	B-7	IC758	G-1	✱Q750	H-4		
FB307	G-7	FL1017	B-7	IC759	G-2	Q1000	L-6		
FB308	G-7	FL1018	A-6	IC760	G-2	✱Q1001	L-6		
✱FB500	L-1	FL1019	A-6	IC761	E-3	Q1002	L-6		
✱FB501	M-1	FL1020	A-6	IC762	F-3	Q1003	L-6		
✱FB502	C-7	FL1021	A-6	IC1000	A-4	✱Q1004	B-3		
✱FB503	H-7	FL1022	A-6	IC1001	A-4	✱Q1005	B-3		
FB505	M-7	FL1023	A-6	IC1002	L-6	✱Q1006	B-4		
FB506	L-7	FL1024	A-6	IC1003	A-3	✱Q1007	B-2		
FB1000	A-1	FL1025	A-6	IC1004	L-7	✱Q1008	D-3		
✱FB1001	A-5	FL1026	B-7	IC1005	A-3	✱Q1009	D-3		
✱FB1002	C-3	FL1027	A-7	IC1006	A-2	Q1010	L-5		
FB1003	A-2	FL1028	A-7	IC1007	A-2	Q1011	L-5		
✱FB1004	A-5	FL1029	A-7	IC1008	D-3	✱Q1012	B-1		
✱FB1005	D-4	FL1030	A-7	IC1009	D-3	✱Q1013	D-3		
FB1006	J-7	FL1031	A-7	IC1010	L-6				
FB1007	J-7	FL1032	A-7	IC1011	C-2	SL300	F-5		
FB1008	J-7	FL1033	A-7	IC1012	L-6	SL500	H-1		
FB1009	D-7			IC1013	L-6	SL501	H-1		
FB1010	D-7	IC307	H-4	IC1014	L-7	SL502	H-1		
		✱IC314	F-6	✱IC1015	A-1	SL503	H-1		
FL303	F-7	✱IC315	E-7	IC1016	A-2	SL504	H-1		
FL304	F-6	IC316	F-4	IC1017	L-5	SL506	H-1		
FL305	F-7	✱IC500	C-7	IC1018	D-3	SL507	H-1		
FL306	F-6	✱IC501	C-7	IC1019	B-2				
FL307	F-7	✱IC502	H-7	IC1020	B-3	TP500	J-1		
FL308	F-6	✱IC503	H-6	IC1021	C-3	TP501	J-1		
FL309	F-7	IC504	J-2	IC1022	B-3	TP502	J-1		
FL310	F-6	IC505	L-2	IC1023	C-1	TP503	J-1		
FL311	F-7	IC506	K-1	✱IC1024	B-4	TP504	K-1		
FL312	F-7	✱IC507	L-1	IC1025	D-1	TP505	J-1		
FL313	E-7	IC508	N-1	✱IC1026	C-5	TP506	J-1		

✱ : B SIDE

LOT NO. G-1

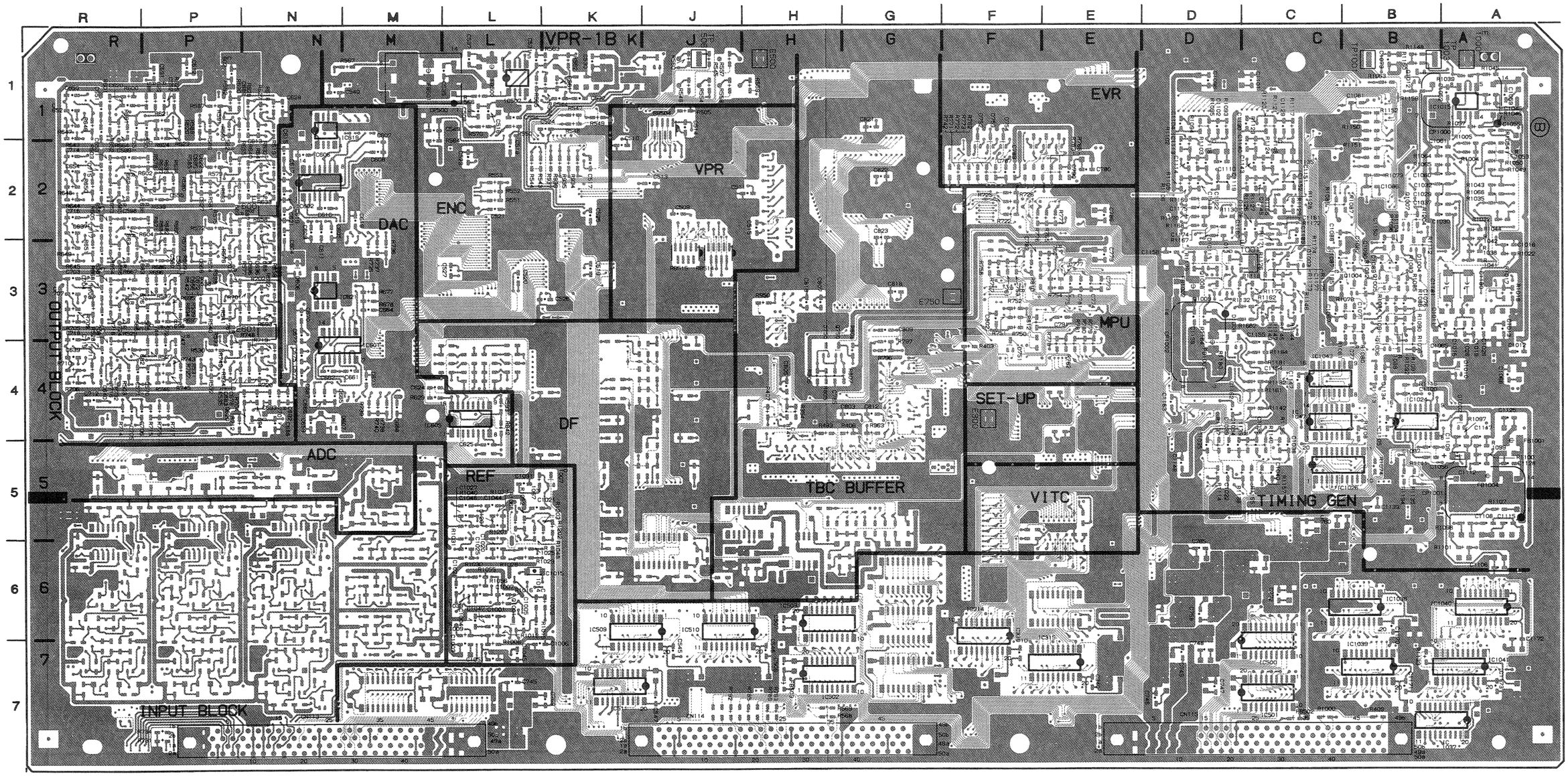
1-9 (b)



VPR-1B BOARD -A SIDE-

1-648-532-22 (LOT No. 401 - 410)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB



VPR-1B BOARD -B SIDE-

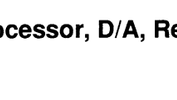
1-648-532-22 (LOT No. 401 - 410)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

VPR-1B, DUS-744/769

VPR-1B ; Video signal processor, D/A, Reference clock generator, Composite encoder
DUS-744/769

(Board's Lot No. 307 through 312)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)



DUS-769 BOARD -A SIDE-

1-653-049-11
for VPR-1B (1-648-532-21) of LOT No. 311/312

DUS-744 BOARD -A SIDE-

1-651-604-11

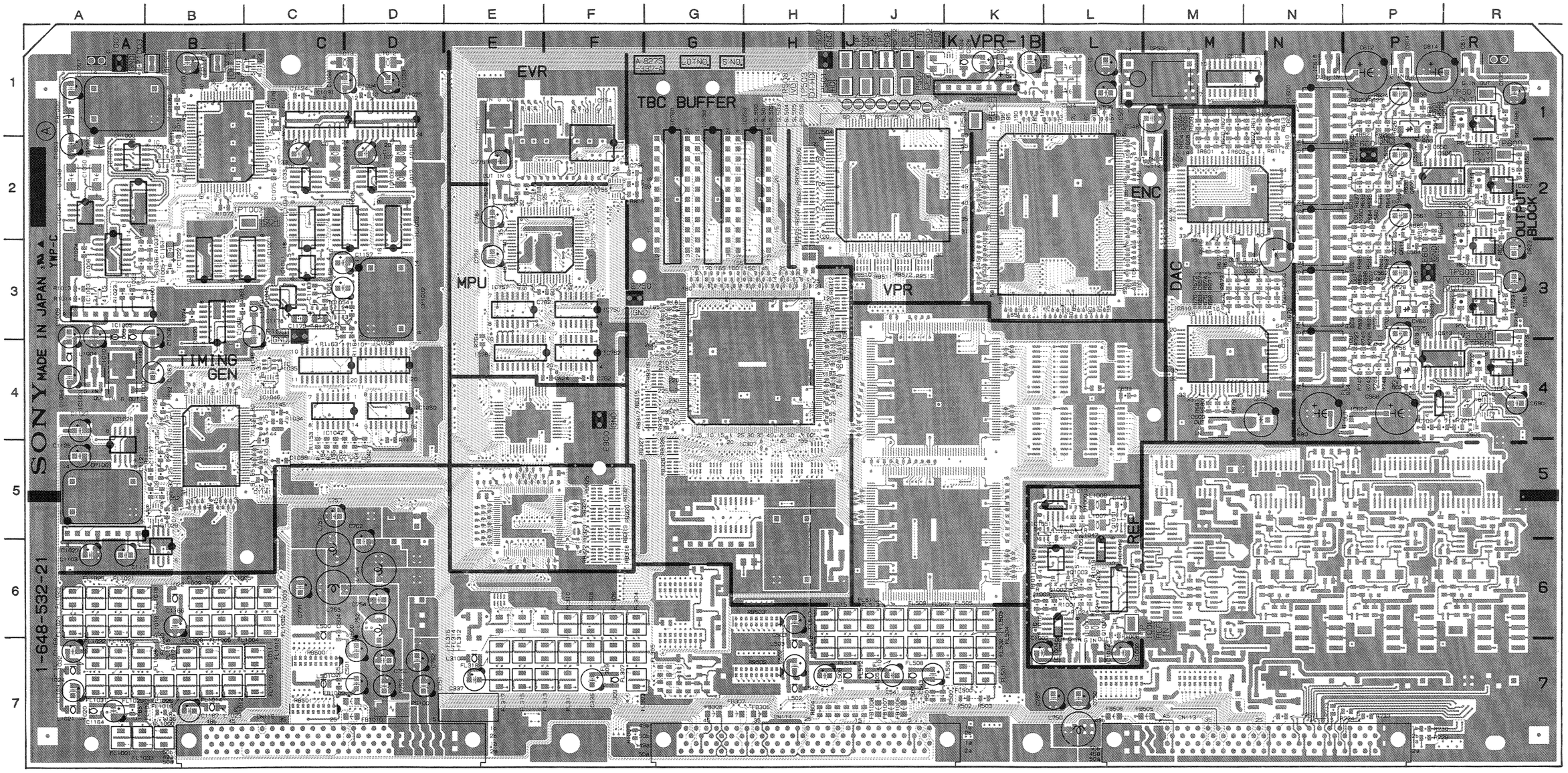
VPR-1B(1-648-532-21)

CN113	M-7	FL502	K-7	IC604	R-1	IC1044	A-2
CN114	H-7	FL503	K-6	✱IC605	M-4	IC1045	C-3
CN115	C-7	FL504	K-7	IC606	R-1	IC1046	C-4
		FL505	K-6	IC607	R-2	✱IC1047	C-4
CP500	M-1	FL506	J-7	IC608	P-2	IC1049	C-4
CP1000	A-1	FL507	J-6	IC609	N-4	IC1050	D-4
CP1001	A-5	FL508	J-7	IC610	M-4	IC1051	K-5
CP1002	D-3	FL509	J-6	IC611	P-4	IC1052	B-5
		FL510	J-7	IC612	R-3	IC1053	B-2
CV600	P-1	FL511	J-6	IC613	P-4	IC1054	C-3
CV601	P-3	FL512	J-7	IC614	P-4		
CV602	P-4	FL513	J-6	IC615	R-4	PS100	D-7
		FL514	J-7	IC616	P-1		
D605	R-4	FL515	J-6	✱IC617	M-2	✱Q600	N-1
✱D606	N-1	FL516	H-7	✱IC618	N-2	Q601	P-1
✱D607	P-4	FL517	H-6	✱IC619	N-2	✱Q602	P-1
✱D750	H-4	FL600	N-1	✱IC620	N-3	Q603	P-1
✱D751	F-4	FL601	N-2	✱IC621	N-3	✱Q604	N-2
✱D752	F-2	FL602	N-2	IC622	P-4	Q605	P-2
✱D753	F-2	FL603	N-3	IC623	R-3	✱Q606	P-2
✱D754	F-2	FL604	N-4	IC624	R-4	Q607	P-2
D1000	L-5	FL1000	B-7	IC750	F-3	✱Q608	N-3
D1001	B-3	FL1001	A-7	IC751	E-1	Q609	P-2
✱D1002	A-4	FL1002	C-6	IC752	E-2	✱Q610	P-2
✱D1003	C-3	FL1003	C-6	IC753	F-3	Q611	P-2
✱D1004	B-3	FL1004	B-6	IC754	F-1	✱Q612	N-3
D1005	B-3	FL1005	B-6	IC756	F-2	Q613	P-3
D1006	C-6	FL1006	B-6	IC757	E-3	✱Q614	P-3
		FL1007	B-6	IC758	G-1	Q615	P-3
E300	F-4	FL1008	B-6	IC759	G-1	✱Q616	N-4
E500	H-1	FL1009	B-6	IC760	G-1	Q617	P-4
E600	P-2	FL1010	C-7	IC761	E-3	✱Q618	P-4
E601	P-3	FL1011	C-7	IC762	F-3	Q619	P-4
E750	F-3	FL1012	B-7	IC1000	A-4	✱Q620	N-4
E1000	A-1	FL1013	B-7	IC1001	A-4	✱Q750	H-4
E1001	C-3	FL1014	B-7	IC1002	L-6	Q1000	L-6
		FL1015	B-7	IC1003	A-3	✱Q1001	L-6
FB306	H-7	FL1016	B-7	IC1004	L-7	Q1002	L-6
FB307	G-7	FL1017	B-7	IC1005	A-3	Q1003	L-6
FB308	G-7	FL1018	A-6	IC1006	A-2	✱Q1004	B-3
✱FB500	L-1	FL1019	A-6	IC1007	A-2	✱Q1005	B-3
✱FB501	M-1	FL1020	A-6	IC1008	D-3	✱Q1006	B-4
✱FB502	C-7	FL1021	A-6	IC1009	D-3	Q1011	L-5
✱FB503	H-7	FL1022	A-6	IC1010	L-6	✱Q1012	B-1
FB505	M-7	FL1023	A-6	IC1011	C-3		
FB506	L-7	FL1024	A-6	IC1012	L-6	SL500	H-1
FB1000	A-1	FL1025	A-6	IC1013	L-6	SL501	H-1
✱FB1001	A-5	FL1026	B-7	IC1014	L-7	SL502	H-1
✱FB1002	C-3	FL1027	A-7	✱IC1015	A-1	SL503	H-1
FB1003	A-2	FL1028	A-7	IC1016	A-2	SL504	H-1
✱FB1004	A-5	FL1029	A-7	IC1017	L-5	SL505	H-1
✱FB1005	D-3	FL1030	A-7	IC1019	B-2	SL506	H-1
FB1006	J-7	FL1031	A-7	IC1020	B-3	SL507	H-1
FB1007	J-7	FL1032	A-7	IC1021	C-3		
FB1008	J-7	FL1033	A-7	IC1022	B-3	TP500	J-1
FB1009	D-7			IC1023	C-1	TP501	J-1
FB1010	D-7	IC307	H-4	✱IC1024	B-4	TP502	J-1
		✱IC314	F-6	IC1025	D-1	TP503	J-1
FL303	F-7	✱IC315	E-7	✱IC1026	C-5	TP504	K-1
FL304	F-6	✱IC500	C-7	IC1027	A-5	TP505	J-1
FL305	F-7	✱IC501	C-7	IC1028	A-4	TP506	J-1
FL306	F-6	✱IC502	H-7	IC1029	B-5	TP507	J-1
FL307	F-7	✱IC503	H-6	IC1030	D-2	TP508	J-1
FL308	F-6	IC504	J-2	IC1031	C-1	TP600	R-2
FL309	F-7	IC505	L-2	IC1032	B-5	TP601	R-1
FL310	F-6	IC506	K-1	IC1033	C-2	TP602	R-2
FL311	F-7	✱IC507	L-1	IC1034	C-3	TP603	R-3
FL312	F-7	IC508	N-1	IC1035	D-4	TP604	R-3
FL313	E-7	✱IC509	J-6	IC1036	D-4	TP1000	L-6
FL314	E-7	✱IC510	H-6	✱IC1037	A-7	TP1001	B-1
FL315	E-7	✱IC511	K-7	✱IC1038	B-6	TP1002	C-2
FL316	E-7	IC512	M-2	✱IC1039	B-7	TP1003	B-1
FL317	E-7	IC600	N-3	✱IC1040	A-6		
FL318	E-7	✱IC601	N-4	✱IC1041	A-7		
FL500	K-7	✱IC602	N-2	IC1042	D-4		
FL501	K-7	IC603	M-2	✱IC1043	C-4		

✱ : B SIDE

LOT NO. G-1

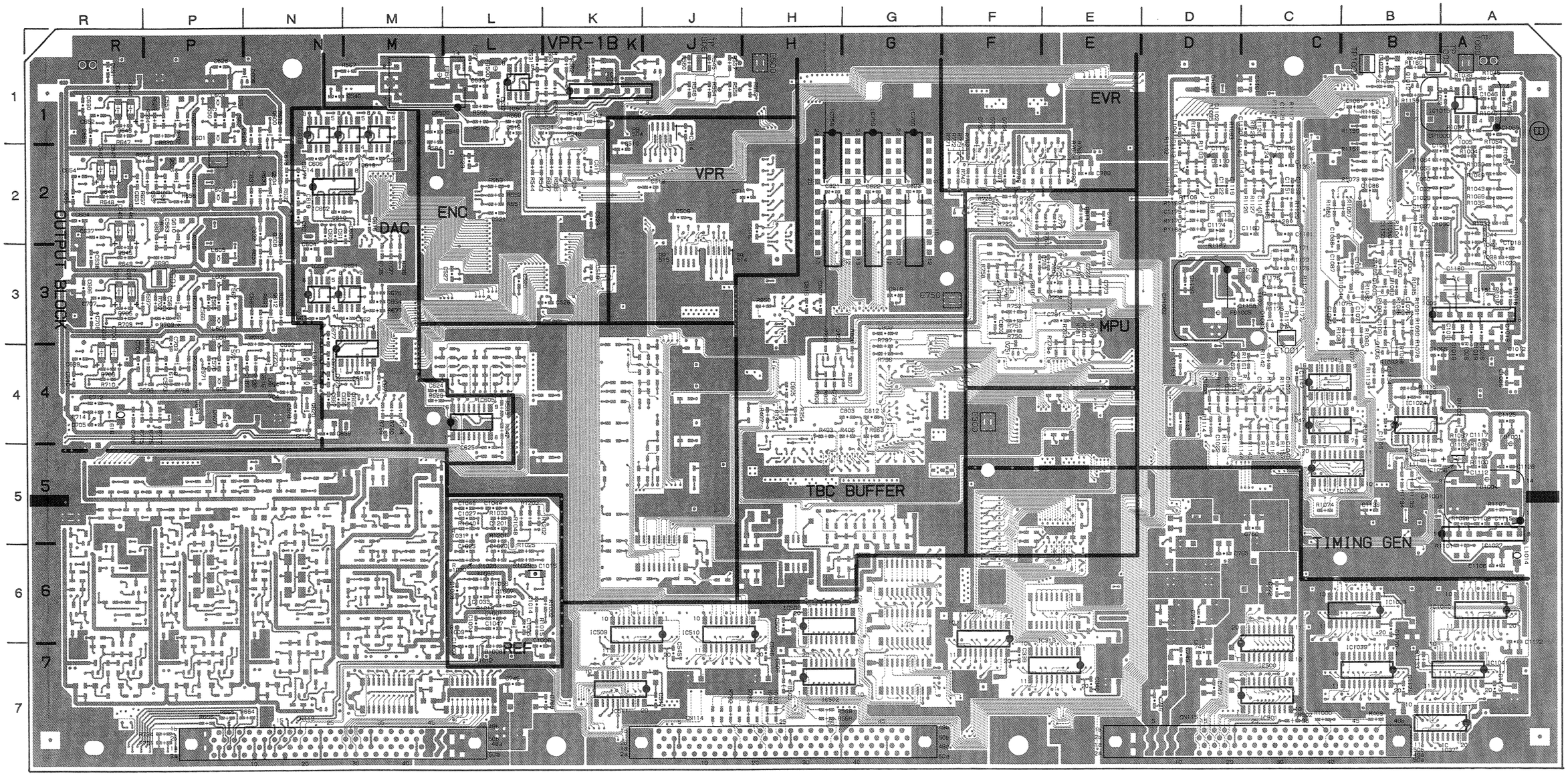
1-9 (a)



VPR-1B BOARD -A SIDE-

1-648-532-21 (LOT No. 307 - 312)

DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB



VPR-1B BOARD -B SIDE-

1-648-532-21 (LOT No. 307 - 312)

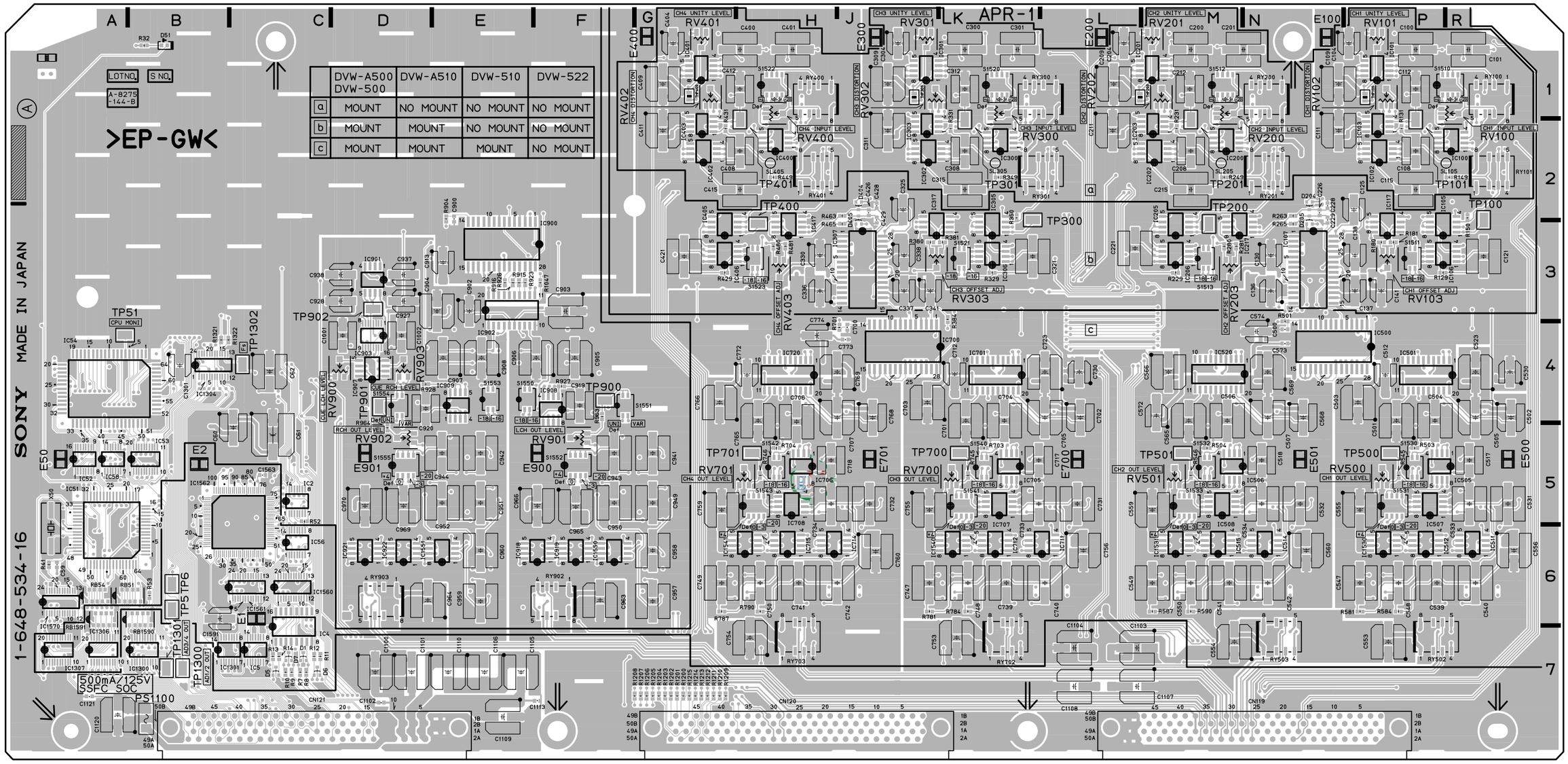
DVW-A510(J)	; VPR-1BA	MCB
DVW-A510(UC)	; VPR-1BA	MCB
DVW-A510P(EK)	; VPR-1BAP	MCB
DVW-510(J)	; VPR-1B	MCB
DVW-510(UC)	; VPR-1B	MCB
DVW-510P(EK)	; VPR-1BP	MCB
DVW-CA510(UC)	; VPR-1BA	MCB
DVW-CA510P(EK)	; VPR-1BAP	MCB

APR-1 ; Audio signal processor, A/D, D/A, AES/EBU interface

(Board's Lot No. 910 and higher)
All DVWs

APR-1 (1-648-834-16)

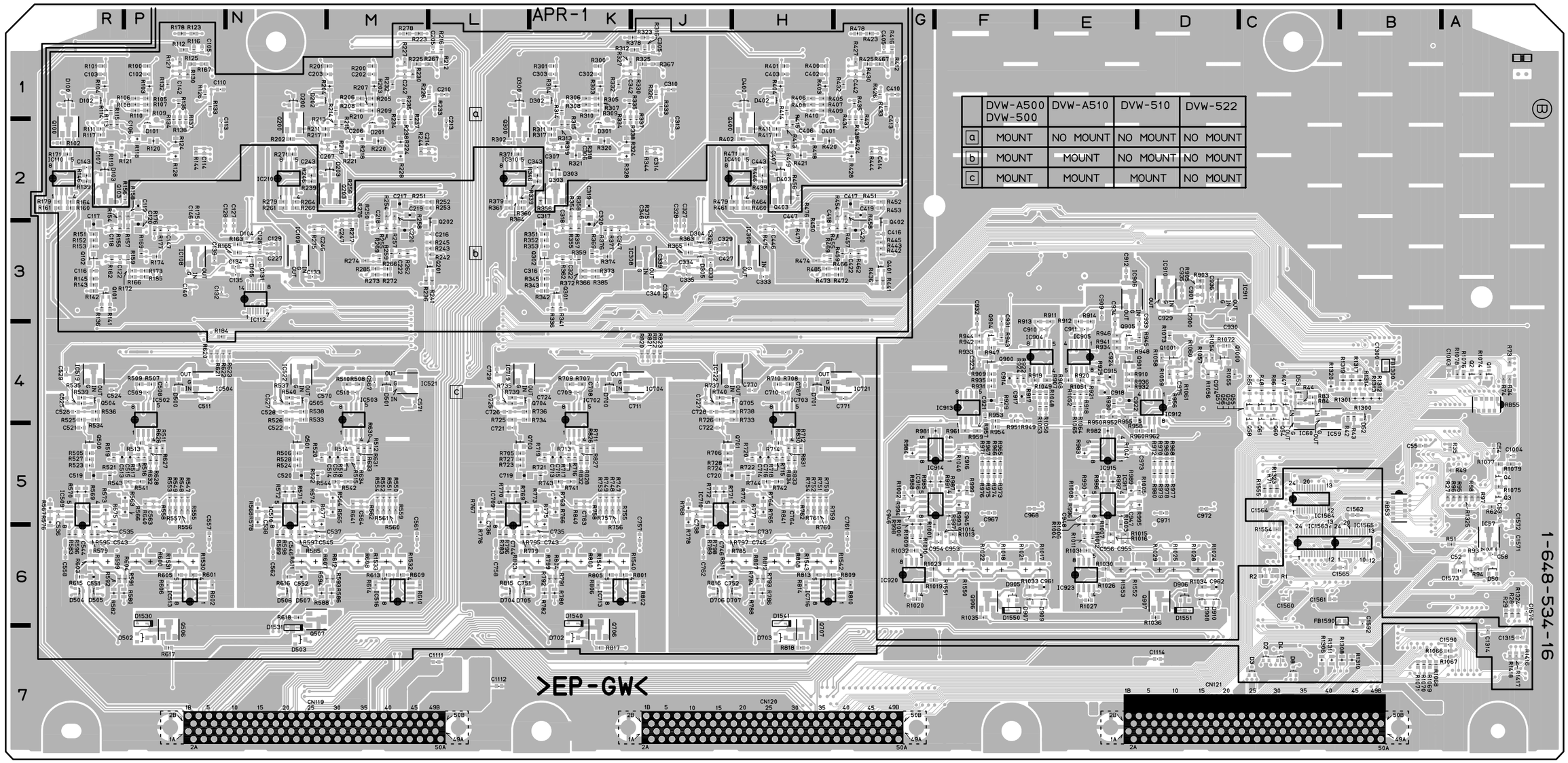
CN119	N7	IC53	B5	IC904	*F4	RB54	A6	TP701	H5
CN120	H7	IC54	A4	IC905	*E4	RB55	*A4	TP900	F4
CN121	C7	IC56	C6	IC906	*E3	RB1590	B6	TP901	D4
		IC57	*A6	IC907	D4	RB1591	A6	TP902	D3
D1	C7	IC58	A5	IC908	F4			TP1300	B7
D2	*C7	IC59	*C4	IC909	E4	RV100	R1	TP1301	B7
D3	*C7	IC60	*C4	IC910	*D3	RV101	P1	TP1302	C4
D4	*C7	IC100	R2	IC911	*D3	RV102	P1		
D5	C7	IC101	P1	IC912	*D4	RV103	P3	X50	A6
D6	C7	IC102	P2	IC913	*F4	RV200	M1		
D7	C7	IC103	P2	IC914	*F5	RV201	M1	*:B SIDE	
D8	*C7	IC105	R3	IC915	*E5	RV202	M1		
D50	*A6	IC106	R3	IC916	*F5	RV203	M3		
D51	B1	IC107	N3	IC917	*E5	RV300	K1		
D52	*B4	IC108	*P3	IC918	F6	RV301	J1		
D53	*C4	IC109	*N3	IC919	F6	RV302	J1		
D100	*R1	IC110	*R2	IC920	*G6	RV303	J3		
D101	*P2	IC112	*N3	IC921	D6	RV400	H1		
D102	*R1	IC117	P3	IC922	D6	RV401	G1		
D103	*R2	IC200	M2	IC923	*E6	RV402	G1		
D104	*N3	IC201	M1	IC1300	B7	RV403	H3		
D105	*N3	IC202	M2	IC1301	B7	RV500	P5		
D200	*N1	IC203	M2	IC1304	B4	RV501	M5		
D201	*M2	IC205	M3	IC1306	A7	RV700	K5		
D202	*N1	IC206	M3	IC1307	A7	RV701	H5		
D203	*M2	IC210	*N2	IC1530	P6	RV900	D4		
D204	N2	IC217	N3	IC1531	M6	RV901	F5		
D205	N2	IC300	K2	IC1540	K6	RV902	D5		
D300	*L1	IC301	J1	IC1541	H6	RV903	D4		
D301	*K2	IC302	K2	IC1550	F6				
D302	*K1	IC303	J2	IC1551	E6	RY100	R1		
D303	*K2	IC305	K3	IC1560	C6	RY101	R2		
D304	*J3	IC306	K3	IC1561	C6	RY200	N1		
D305	*J3	IC307	J3	IC1562	C5	RY201	N2		
D400	*H1	IC308	*J3	IC1563	*C6	RY300	L1		
D401	*H2	IC309	*H3	IC1564	*C5	RY301	L2		
D402	*H1	IC310	*L2	IC1565	*C6	RY400	H1		
D403	*H2	IC317	K3	IC1570	A6	RY401	H2		
D404	J2	IC400	H2			RY502	P7		
D405	J2	IC401	G1	PS1100	B7	RY503	N7		
D500	*P4	IC402	G2			RY702	K7		
D501	*M4	IC403	G2	Q1	*A4	RY703	H7		
D502	*P7	IC405	H3	Q2	*A4	RY902	F6		
D503	*N7	IC406	H3	Q3	*A5	RY903	D6		
D504	*R6	IC410	*H2	Q4	*A5				
D505	*R6	IC417	H3	Q54	*C4	S1510	R1		
D506	*N6	IC500	P4	Q55	*C4	S1511	P3		
D507	*N6	IC501	R4	Q56	*C4	S1512	M1		
D700	*K4	IC502	*P5	Q57	*C4	S1513	M3		
D701	*H4	IC503	*M5	Q58	*C4	S1520	K1		
D702	*K7	IC504	*P4	Q59	*C4	S1521	K3		
D703	*H7	IC505	R5	Q60	*C4	S1522	H1		
D704	*L6	IC506	M5	Q61	*C4	S1523	H3		
D705	*L6	IC507	P5	Q100	*R2	S1530	P5		
D706	*J6	IC508	M5	Q101	*R3	S1531	P5		
D707	*H6	IC509	*R5	Q102	*R3	S1532	M5		
D900	*D3	IC510	*N5	Q103	*R2	S1533	M5		
D905	*F6	IC511	R6	Q200	*N2	S1540	K5		
D906	*D6	IC512	P6	Q201	*L3	S1541	K5		
D907	*F6	IC513	*P6	Q202	*L3	S1542	H5		
D908	*D6	IC514	N6	Q203	*M2	S1543	H5		
D909	*E6	IC515	M6	Q300	*L2	S1550	E4		
D910	*D6	IC516	*M6	Q301	*K3	S1551	F4		
D1530	*P6	IC519	*R4	Q302	*K3	S1552	F5		
D1531	*N7	IC520	M4	Q303	*K2	S1553	E4		
D1540	*K6	IC521	*M4	Q400	*H2	S1554	D4		
D1541	*H6	IC522	*N4	Q401	*G3	S1555	D5		
D1550	*F6	IC700	J4	Q402	*G3				
D1551	*D6	IC701	K4	Q403	*H2	SL105	R2		
		IC702	*K5	Q500	*R5	SL205	M2		
E1	C6	IC703	*H5	Q501	*N5	SL305	K2		
E2	B5	IC704	*J4	Q504	*R4	SL405	H2		
E50	A5	IC705	K5	Q505	*N4				
E100	N1	IC706	H5	Q506	*P7	THP100	P1		
E200	L1	IC707	K5	Q507	*N6	THP200	L1		
E300	J1	IC708	H5	Q700	*L5	THP300	J1		
E400	G1	IC709	*L5	Q701	*J5	THP400	G1		
E500	R5	IC710	*H5	Q704	*L4				
E501	N5	IC711	L6	Q705	*H4	TP5	B6		
E700	L5	IC712	K6	Q706	*K7	TP6	B6		
E701	J5	IC713	*J6	Q707	*H7	TP51	A4		
E900	F5	IC714	J6	Q900	*F4	TP100	R2		
E901	D5	IC715	H6	Q901	*E4	TP101	P2		
		IC716	*G6	Q904	*F4	TP200	M3		
FB1300	*B4	IC719	*L4	Q905	*E4	TP201	M2		
FB1590	*B6	IC720	H4	Q906	*F6	TP300	K2		
		IC721	*G4	Q907	*D6	TP301	K2		
IC2	C5	IC722	*H4	Q1000	*D4	TP400	H3		
IC4	C7	IC900	F3	Q1001	*D4	TP401	H2		
IC5	C7	IC901	D3			TP500	P5		
IC51	A6	IC902	E4	RB51	B6	TP501	M5		
IC52	A5	IC903	D4	RB53	*B5	TP700	K5		



APR-1 BOARD -A SIDE-

1-648-534-16 (LOT No. 910 -)

DVW-A500(J)	; APR-1	MCB
DVW-A500(UC)	; APR-1	MCB
DVW-A500P(EK)	; APR-1	MCB
DVW-A500P(UC)	; APR-1	MCB
DVW-500(J)	; APR-1	MCB
DVW-500(UC)	; APR-1	MCB
DVW-500P(EK)	; APR-1	MCB
DVW-500P(UC)	; APR-1	MCB
DVW-A510(J)	; APR-1BA	MCB
DVW-A510(UC)	; APR-1BA	MCB
DVW-A510P(EK)	; APR-1BA	MCB
DVW-510(J)	; APR-1B	MCB
DVW-510(UC)	; APR-1B	MCB
DVW-510P(EK)	; APR-1B	MCB
DVW-CA510(J)	; APR-1B	MCB
DVW-CA510(UC)	; APR-1B	MCB
DVW-CA510P(EK)	; APR-1B	MCB


APR-1
>EP-GW<
1-648-534-16
CN119
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CN161

APR-1 ; Audio signal processor, A/D, D/A, AES/EBU interface

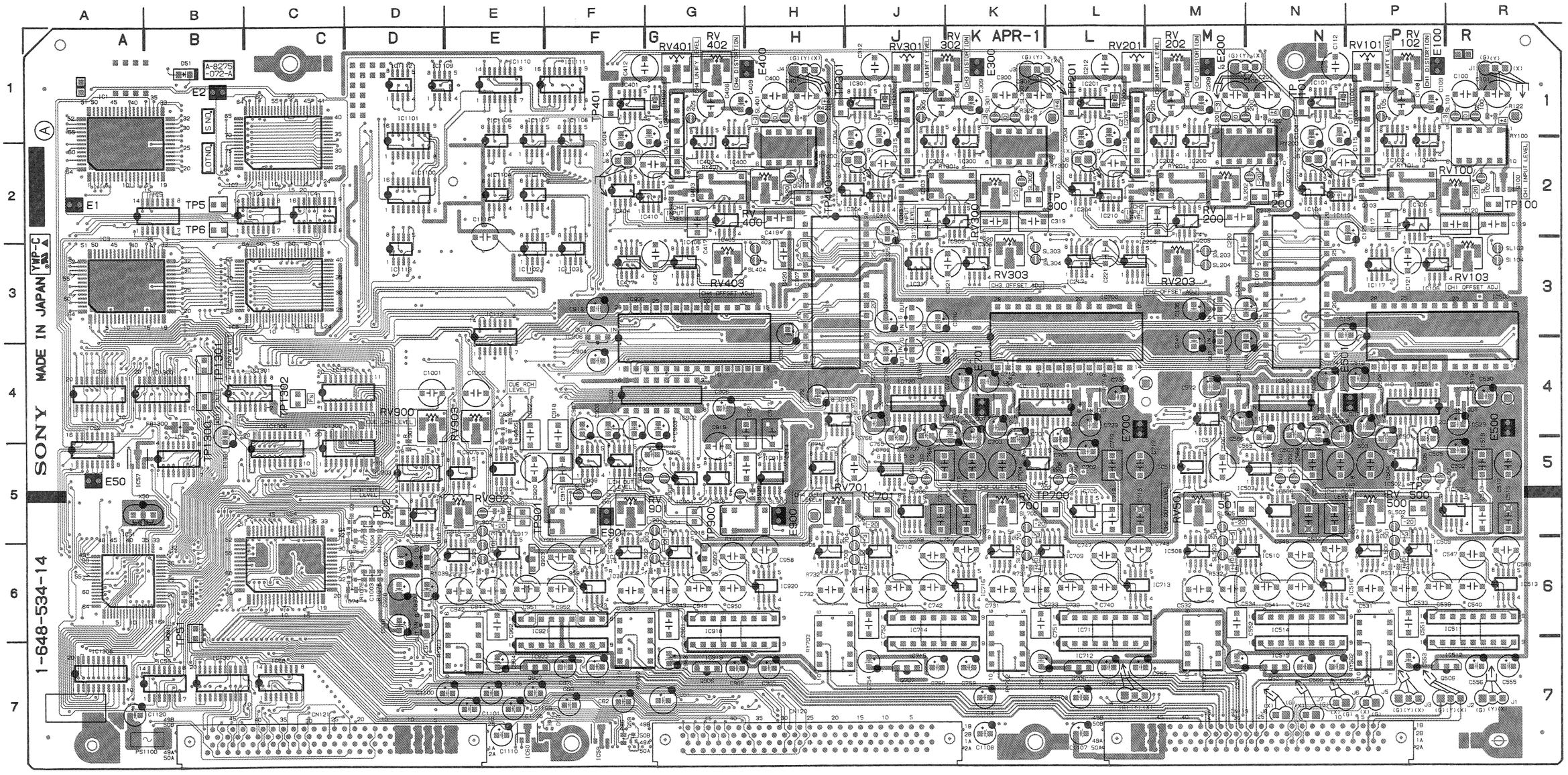
(Board's Lot No. 501 through 909)
All recorder models

APR-1(1-648-534-14)

CN119	N-7	E1	A-2	IC500	R-3	IC1106	E-2	R531	P-6	SL404	H-3
CN120	H-7	E2	B-1	IC501	P-4	IC1107	E-2	R532	M-6	SL405	G-1
CN121	C-7	E50	A-5	IC502	P-5	IC1108	F-2	R731	K-6	SL500	P-6
		E100	P-1	IC503	N-5	IC1109	D-1	R732	J-6	SL501	P-6
✱D1	D-2	E200	M-1	IC504	P-4	IC1110	E-1	R1038	G-6	SL502	P-5
✱D2	C-2	E300	K-1	IC505	R-5	IC1111	F-1	R1039	E-6	SL503	M-6
✱D3	C-2	E400	H-1	IC506	N-5	IC1112	D-1			SL504	M-6
✱D4	C-2	E500	R-4	IC507	P-6	IC1113	D-3	✱RB51	A-6	SL505	M-5
✱D5	C-2	E501	P-4	IC508	M-6	IC1300	A-4	✱RB53	A-4	SL506	P-5
✱D6	C-2	E700	L-4	IC509	P-6	IC1301	B-4	✱RB54	A-5	SL507	P-5
✱D7	C-2	E701	K-4	IC510	N-6	IC1304	C-4	✱RB55	C-6	SL509	N-5
✱D8	D-2	E900	H-5	IC511	P-6	IC1306	A-7			SL510	N-5
✱D50	A-5	E901	F-5	IC512	P-7	IC1307	B-7	RV100	R-2	SL700	K-6
D51	B-1			IC513	R-6	IC1308	C-5	RV101	P-1	SL701	K-6
✱D52	F-7	FB1300	B-4	IC514	N-6	IC1309	C-5	RV102	P-1	SL702	K-5
D53	F-7			IC515	N-7			RV103	R-3	SL703	J-6
✱D100	R-2	IC1	A-1	IC516	N-6	PS1100	A-7	RV200	M-2	SL704	J-6
✱D101	P-1	IC2	B-5	IC517	M-4			RV201	L-1	SL705	J-5
✱D102	P-2	IC3	A-3	IC518	M-5	Q1	D-6	RV202	M-1	SL706	L-5
✱D103	P-2	IC4	C-2	IC519	R-4	Q2	D-6	RV203	M-3	SL707	L-5
✱D104	P-3	IC5	B-2	IC520	N-4	Q3	D-5	RV300	K-2	SL709	J-5
✱D105	P-3	IC6	C-2	IC521	M-4	Q4	D-5	RV301	J-1	SL710	J-5
✱D200	N-2	IC7	C-2	IC522	N-4	✱Q54	F-7	RV302	K-1	SL900	G-5
✱D201	M-1	IC8	C-3	IC700	L-3	✱Q55	F-7	RV303	K-3	SL901	E-5
✱D202	M-2	IC51	A-6	IC701	K-4	✱Q56	G-7	RV400	H-2	SL902	G-6
✱D203	M-2	IC52	A-5	IC702	K-5	✱Q57	F-7	RV401	G-1	SL903	G-6
✱D204	M-3	IC53	A-4	IC703	J-5	✱Q58	F-7	RV402	G-1	SL904	G-5
✱D205	M-3	IC54	C-6	IC704	K-4	Q59	F-7	RV403	G-3	SL905	E-6
✱D300	K-2	IC56	B-7	IC705	L-5	✱Q60	G-7	RV500	P-5	SL906	E-6
✱D301	K-1	IC57	A-5	IC706	J-5	✱Q61	F-7	RV501	M-5	SL907	E-5
✱D302	K-2	IC58	C-7	IC707	K-6	Q100	R-2	RV700	K-5	SL908	F-5
✱D303	K-2	IC59	F-7	IC708	H-6	✱Q101	N-2	RV701	H-5	SL909	G-5
✱D304	J-3	IC60	E-7	IC709	L-6	✱Q102	P-2	RV900	D-4	SL910	F-5
✱D305	J-3	IC100	P-2	IC710	J-6	Q103	P-2	RV901	F-5	SL911	F-5
✱D400	H-2	IC101	N-1	IC711	L-6	Q200	N-2	RV902	E-5		
✱D401	H-1	IC102	P-2	IC712	L-7	✱Q201	L-2	RV903	E-4	TH100	N-1
✱D402	H-2	IC103	P-1	IC713	L-6	✱Q202	L-2			TH200	L-1
✱D403	G-2	IC104	N-2	IC714	J-6	Q203	L-2	RY100	R-2	TH300	J-1
✱D404	H-3	IC105	P-2	IC715	J-7	Q300	K-2	RY101	P-2	TH400	G-1
✱D405	H-3	IC106	P-3	IC716	K-6	✱Q301	J-2	RY200	N-2		
✱D500	P-4	IC107	N-3	IC717	H-4	✱Q302	J-2	RY201	M-2	TP5	B-2
✱D501	M-4	IC108	M-4	IC718	H-5	Q303	J-2	RY300	K-2	TP6	B-2
✱D502	P-7	IC109	M-3	IC719	L-4	Q400	H-2	RY301	J-2	TP51	B-6
✱D503	N-7	IC110	N-2	IC720	J-4	✱Q401	F-2	RY400	H-2	TP100	R-2
✱D504	P-6	IC112	E-3	IC721	J-4	✱Q402	G-2	RY401	G-2	TP101	N-1
✱D505	M-6	IC117	P-3	IC722	K-4	Q403	G-2	RY502	P-7	TP200	N-2
✱D506	P-6	IC200	M-2	IC900	F-3	✱Q500	R-5	RY503	M-7	TP201	L-1
✱D507	M-6	IC201	L-1	IC901	D-5	✱Q501	N-5	RY702	K-7	TP300	K-2
✱D700	K-4	IC202	M-2	IC902	G-4	✱Q504	R-4	RY703	H-7	TP301	H-1
✱D701	J-4	IC203	L-1	IC903	D-5	✱Q505	M-5	RY900	G-5	TP400	H-2
✱D702	L-7	IC204	L-2	IC904	G-5	Q506	P-7	RY901	F-5	TP401	F-1
✱D703	J-7	IC205	M-2	IC905	F-5	Q507	N-7	RY902	F-7	TP500	P-5
✱D704	K-6	IC206	L-3	IC906	F-3	✱Q700	L-5	RY903	E-7	TP501	M-5
✱D705	H-6	IC210	L-2	IC907	E-5	✱Q701	J-5			TP700	L-5
✱D706	K-6	IC217	L-3	IC908	G-5	✱Q704	L-4	SL100	R-1	TP701	J-5
✱D707	H-6	IC300	K-2	IC909	F-5	✱Q705	H-5	SL101	R-1	TP900	G-5
✱D900	D-5	IC301	J-1	IC910	D-6	Q706	L-7	SL102	R-2	TP901	E-5
✱D903	G-6	IC302	J-2	IC911	D-6	Q707	J-7	SL103	R-3	TP902	D-5
✱D904	F-6	IC303	J-1	IC912	E-5	✱Q900	G-4	SL104	R-3	TP1300	B-4
✱D905	G-7	IC304	J-2	IC913	H-5	✱Q901	E-4	SL105	P-1	TP1301	B-4
✱D906	E-7	IC305	K-2	IC914	F-6	Q902	G-6	SL200	M-1	TP1302	C-4
✱D907	F-6	IC306	K-3	IC915	E-6	Q903	E-6	SL201	M-1		
✱D908	E-6	IC307	H-3	IC916	G-6	✱Q904	G-4	SL202	N-2	X50	A-5
✱D909	F-6	IC308	J-4	IC917	E-6	Q905	E-4	SL203	M-3		
✱D910	E-6	IC309	J-3	IC918	G-6	Q906	G-7	SL204	M-3		
✱D1100	E-2	IC310	J-2	IC919	G-7	Q907	E-7	SL205	M-1		
✱D1101	E-1	IC317	J-3	IC920	H-6	✱Q1000	D-4	SL300	K-1		
✱D1102	E-2	IC400	G-2	IC921	E-6	✱Q1001	E-4	SL301	K-1		
✱D1103	E-2	IC401	F-1	IC922	E-7	✱Q1100	D-2	SL302	K-2		
✱D1104	E-2	IC402	G-2	IC923	F-6	✱Q1101	D-3	SL303	K-3		
✱D1105	E-1	IC403	G-1	IC1100	D-2	✱Q1103	D-2	SL304	K-3		
✱D1106	E-2	IC404	F-2	IC1101	D-2			SL305	J-1		
✱D1107	E-2	IC405	G-2	IC1102	E-3	R122	R-1	SL400	H-1		
✱D1108	F-1	IC406	G-3	IC1103	F-3	R222	N-1	SL401	H-1		
✱D1109	F-2	IC410	F-2	IC1104	E-2	R322	K-1	SL402	H-2		
		IC417	F-3	IC1105	E-2	R422	H-1	SL403	H-3		

✱ : B SIDE

LOT NO. B-2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SONY MADE IN JAPAN
1-648-534-14
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E900
E700
E500
CUE RCH LEVEL
CH1 INPUT LEVEL
CH2 INPUT LEVEL
CH3 INPUT LEVEL
CH4 INPUT LEVEL
CH1 UNITY LEVEL
CH2 UNITY LEVEL
CH3 UNITY LEVEL
CH4 UNITY LEVEL
CH1 DISTORTION
CH2 DISTORTION
CH3 DISTORTION
CH4 DISTORTION
CH1 OFFSET ADJ
CH2 OFFSET ADJ
CH3 OFFSET ADJ
CH1 OUT LEVEL
CH2 OUT LEVEL
CH3 OUT LEVEL
CN120
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CN1103
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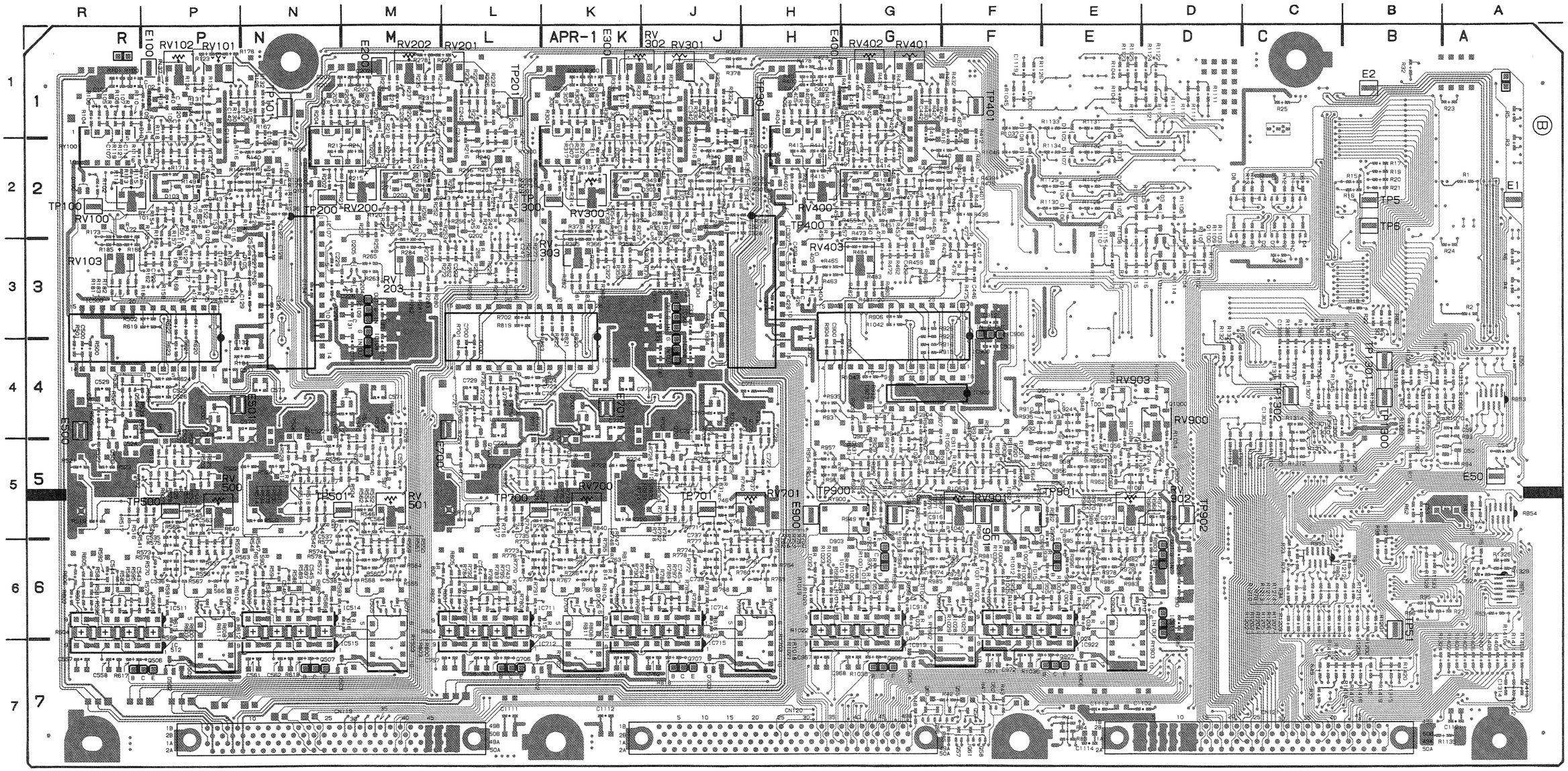


APR-1 BOARD -B SIDE-

1-648-534-14 (LOT No. 501 - 909)

DVW-A500(J)	; APR-1	MCB
DVW-A500(UC)	; APR-1	MCB
DVW-A500P(EK)	; APR-1P	MCB
DVW-A500P(UC)	; APR-1PG	MCB
DVW-500(J)	; APR-1	MCB
DVW-500(UC)	; APR-1	MCB
DVW-500P(EK)	; APR-1P	MCB
DVW-500P(UC)	; APR-1PG	MCB

APR-1 ; Audio signal processor, A/D, D/A, AES/EBU interface

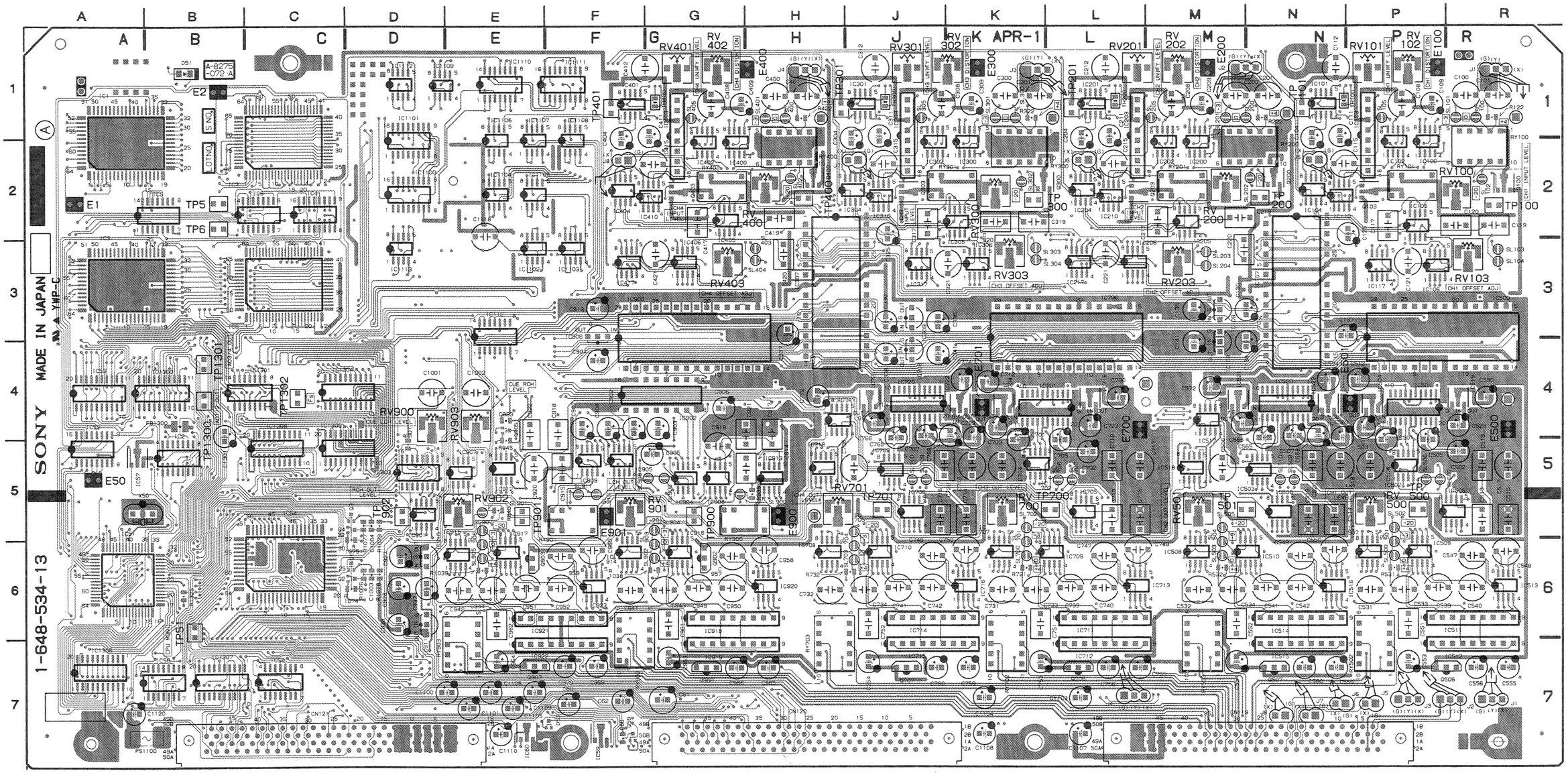
(Board's Lot No. 403 through 412)
All recorder models

APR-1(1-648-534-13)

CN119	N-7	E1	A-2	IC500	R-3	IC1106	E-2	R531	P-6	SL404	H-3
CN120	H-7	E2	B-1	IC501	P-4	IC1107	E-2	R532	M-6	SL405	G-1
CN121	C-7	E50	A-5	IC502	P-5	IC1108	F-2	R731	K-6	SL500	P-6
		E100	P-1	IC503	N-5	IC1109	D-1	R732	J-6	SL501	P-6
✱D1	D-2	E200	M-1	IC504	P-4	IC1110	E-1	R1038	G-6	SL502	P-5
✱D2	C-2	E300	K-1	IC505	R-5	IC1111	F-1	R1039	E-6	SL503	M-6
✱D3	C-2	E400	H-1	IC506	N-5	IC1112	D-1			SL504	M-6
✱D4	C-2	E500	R-4	IC507	P-6	IC1113	D-3	✱RB51	A-6	SL505	M-5
✱D5	C-2	E501	P-4	IC508	M-6	IC1300	A-4	✱RB53	A-4	SL506	P-5
✱D6	C-2	E700	L-4	IC509	P-6	IC1301	B-4	✱RB54	A-5	SL507	P-5
✱D7	C-2	E701	K-4	IC510	N-6	IC1304	C-4	✱RB55	C-6	SL509	N-5
✱D8	D-2	E900	H-5	IC511	P-6	IC1306	A-7			SL510	N-5
✱D50	A-5	E901	F-5	IC512	P-7	IC1307	B-7	RV100	R-2	SL700	K-6
D51	B-1			IC513	R-6	IC1308	C-5	RV101	P-1	SL701	K-6
✱D52	F-7	FB1300	B-4	IC514	N-6	IC1309	C-5	RV102	P-1	SL702	K-5
D53	F-7			IC515	N-7			RV103	R-3	SL703	J-6
✱D100	R-2	IC1	A-1	IC516	N-6	PS1100	A-7	RV200	M-2	SL704	J-6
✱D101	P-1	IC2	B-5	IC517	M-4			RV201	L-1	SL705	J-5
✱D102	P-2	IC3	A-3	IC518	M-5	Q1	D-6	RV202	M-1	SL706	L-5
✱D103	P-2	IC4	C-2	IC519	R-4	Q2	D-6	RV203	M-3	SL707	L-5
✱D104	P-3	IC5	B-2	IC520	N-4	Q3	D-5	RV300	K-2	SL709	J-5
✱D105	P-3	IC6	C-2	IC521	M-4	Q4	D-5	RV301	J-1	SL710	J-5
✱D200	N-2	IC7	C-2	IC522	N-4	✱Q54	F-7	RV302	K-1	SL900	G-5
✱D201	M-1	IC8	C-3	IC700	L-3	✱Q55	F-7	RV303	K-3	SL901	E-5
✱D202	M-2	IC51	A-6	IC701	K-4	✱Q56	G-7	RV400	H-2	SL902	G-6
✱D203	M-2	IC52	A-5	IC702	K-5	✱Q57	F-7	RV401	G-1	SL903	G-6
✱D204	M-3	IC53	A-4	IC703	J-5	✱Q58	F-7	RV402	G-1	SL904	G-5
✱D205	M-3	IC54	C-6	IC704	K-4	Q59	F-7	RV403	G-3	SL905	E-6
✱D300	K-2	IC56	B-7	IC705	L-5	✱Q60	G-7	RV500	P-5	SL906	E-6
✱D301	K-1	IC57	A-5	IC706	J-5	✱Q61	F-7	RV501	M-5	SL907	E-5
✱D302	K-2	IC58	C-7	IC707	K-6	Q100	R-2	RV700	K-5	SL908	F-5
✱D303	K-2	IC59	F-7	IC708	H-6	✱Q101	N-2	RV701	H-5	SL909	G-5
✱D304	J-3	IC60	E-7	IC709	L-6	✱Q102	P-2	RV900	D-4	SL910	F-5
✱D305	J-3	IC100	P-2	IC710	J-6	Q103	P-2	RV901	F-5	SL911	F-5
✱D400	H-2	IC101	N-1	IC711	L-6	Q200	N-2	RV902	E-5		
✱D401	H-1	IC102	P-2	IC712	L-7	✱Q201	L-2	RV903	E-4	TH100	N-1
✱D402	H-2	IC103	P-1	IC713	L-6	✱Q202	L-2			TH200	L-1
✱D403	G-2	IC104	N-2	IC714	J-6	Q203	L-2	RY100	R-2	TH300	J-1
✱D404	H-3	IC105	P-2	IC715	J-7	Q300	K-2	RY101	P-2	TH400	G-1
✱D405	H-3	IC106	P-3	IC716	K-6	✱Q301	J-2	RY200	N-2		
✱D500	P-4	IC107	N-3	IC717	H-4	✱Q302	J-2	RY201	M-2	TP5	B-2
✱D501	M-4	IC108	M-4	IC718	H-5	Q303	J-2	RY300	K-2	TP6	B-2
✱D502	P-7	IC109	M-3	IC719	L-4	Q400	H-2	RY301	J-2	TP51	B-6
✱D503	N-7	IC110	N-2	IC720	J-4	✱Q401	F-2	RY400	H-2	TP100	R-2
✱D504	P-6	IC112	E-3	IC721	J-4	✱Q402	G-2	RY401	G-2	TP101	N-1
✱D505	M-6	IC117	P-3	IC722	K-4	Q403	G-2	RY502	P-7	TP200	N-2
✱D506	P-6	IC200	M-2	IC900	F-3	✱Q500	R-5	RY503	M-7	TP201	L-1
✱D507	M-6	IC201	L-1	IC901	D-5	✱Q501	N-5	RY702	K-7	TP300	K-2
✱D700	K-4	IC202	M-2	IC902	G-4	✱Q504	R-4	RY703	H-7	TP301	H-1
✱D701	J-4	IC203	L-1	IC903	D-5	✱Q505	M-5	RY900	G-5	TP400	H-2
✱D702	L-7	IC204	L-2	IC904	G-5	Q506	P-7	RY901	F-5	TP401	F-1
✱D703	J-7	IC205	M-2	IC905	F-5	Q507	N-7	RY902	F-7	TP500	P-5
✱D704	K-6	IC206	L-3	IC906	F-3	✱Q700	L-5	RY903	E-7	TP501	M-5
✱D705	H-6	IC210	L-2	IC907	E-5	✱Q701	J-5			TP700	L-5
✱D706	K-6	IC217	L-3	IC908	G-5	✱Q704	L-4	SL100	R-1	TP701	J-5
✱D707	H-6	IC300	K-2	IC909	F-5	✱Q705	H-5	SL101	R-1	TP900	G-5
✱D900	D-5	IC301	J-1	IC910	D-6	Q706	L-7	SL102	R-2	TP901	E-5
✱D903	G-6	IC302	J-2	IC911	D-6	Q707	J-7	SL103	R-3	TP902	D-5
✱D904	F-6	IC303	J-1	IC912	E-5	✱Q900	G-4	SL104	R-3	TP1300	B-4
✱D905	G-7	IC304	J-2	IC913	H-5	✱Q901	E-4	SL105	P-1	TP1301	B-4
✱D906	E-7	IC305	K-2	IC914	F-6	Q902	G-6	SL200	M-1	TP1302	C-4
✱D907	F-6	IC306	K-3	IC915	E-6	Q903	E-6	SL201	M-1		
✱D908	E-6	IC307	H-3	IC916	G-6	✱Q904	G-4	SL202	N-2	X50	A-5
✱D909	F-6	IC308	J-4	IC917	E-6	Q905	E-4	SL203	M-3		
✱D910	E-6	IC309	J-3	IC918	G-6	Q906	G-7	SL204	M-3		
✱D1100	E-2	IC310	J-2	IC919	G-7	Q907	E-7	SL205	M-1		
✱D1101	E-1	IC317	J-3	IC920	H-6	✱Q1000	D-4	SL300	K-1		
✱D1102	E-2	IC400	G-2	IC921	E-6	✱Q1001	E-4	SL301	K-1		
✱D1103	E-2	IC401	F-1	IC922	E-7	✱Q1100	D-2	SL302	K-2		
✱D1104	E-2	IC402	G-2	IC923	F-6	✱Q1101	D-3	SL303	K-3		
✱D1105	E-1	IC403	G-1	IC1100	D-2	✱Q1103	D-2	SL304	K-3		
✱D1106	E-2	IC404	F-2	IC1101	D-2			SL305	J-1		
✱D1107	E-2	IC405	G-2	IC1102	E-3	R122	R-1	SL400	H-1		
✱D1108	F-1	IC406	G-3	IC1103	F-3	R222	N-1	SL401	H-1		
✱D1109	F-2	IC410	F-2	IC1104	E-2	R322	K-1	SL402	H-2		
		IC417	F-3	IC1105	E-2	R422	H-1	SL403	H-3		

✱ : B SIDE

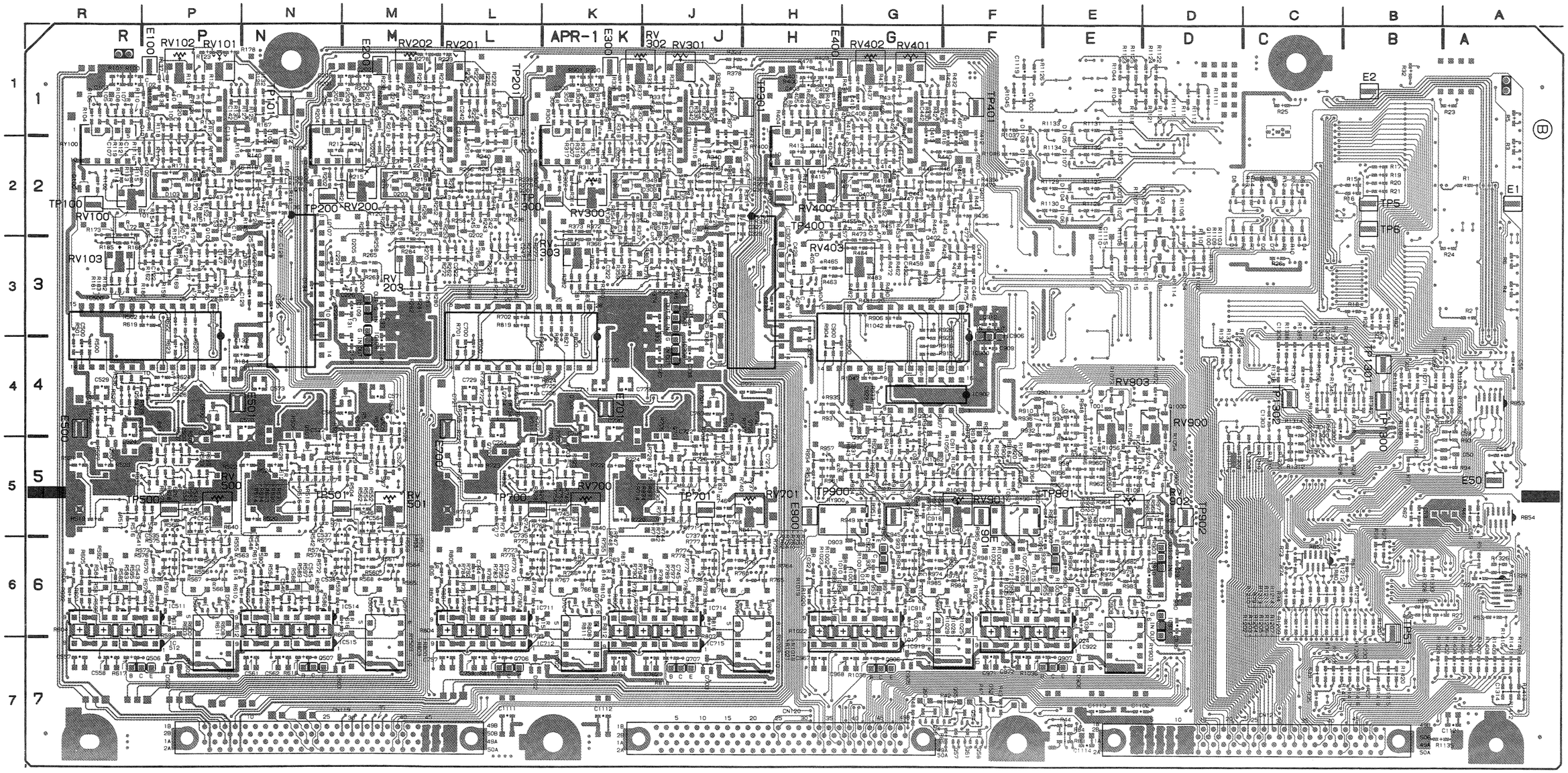
LOT NO. B-2



APR-1 BOARD -A SIDE-

1-648-534-13 (LOT No. 403 - 412)

DVW-A500(J)	; APR-1	MCB
DVW-A500(UC)	; APR-1	MCB
DVW-A500P(EK)	; APR-1P	MCB
DVW-A500P(UC)	; APR-1PG	MCB
DVW-500(J)	; APR-1	MCB
DVW-500(UC)	; APR-1	MCB
DVW-500P(EK)	; APR-1P	MCB
DVW-500P(UC)	; APR-1PG	MCB



APR-1 BOARD -B SIDE-

1-648-534-13 (LOT No. 403 - 412)

DVW-A500(J)	; APR-1	MCB
DVW-A500(UC)	; APR-1	MCB
DVW-A500P(EK)	; APR-1P	MCB
DVW-A500P(UC)	; APR-1PG	MCB
DVW-500(J)	; APR-1	MCB
DVW-500(UC)	; APR-1	MCB
DVW-500P(EK)	; APR-1P	MCB
DVW-500P(UC)	; APR-1PG	MCB

APR-1 ; Audio signal processor, A/D, D/A, AES/EBU interface

(Board's Lot No. 306 through 402)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

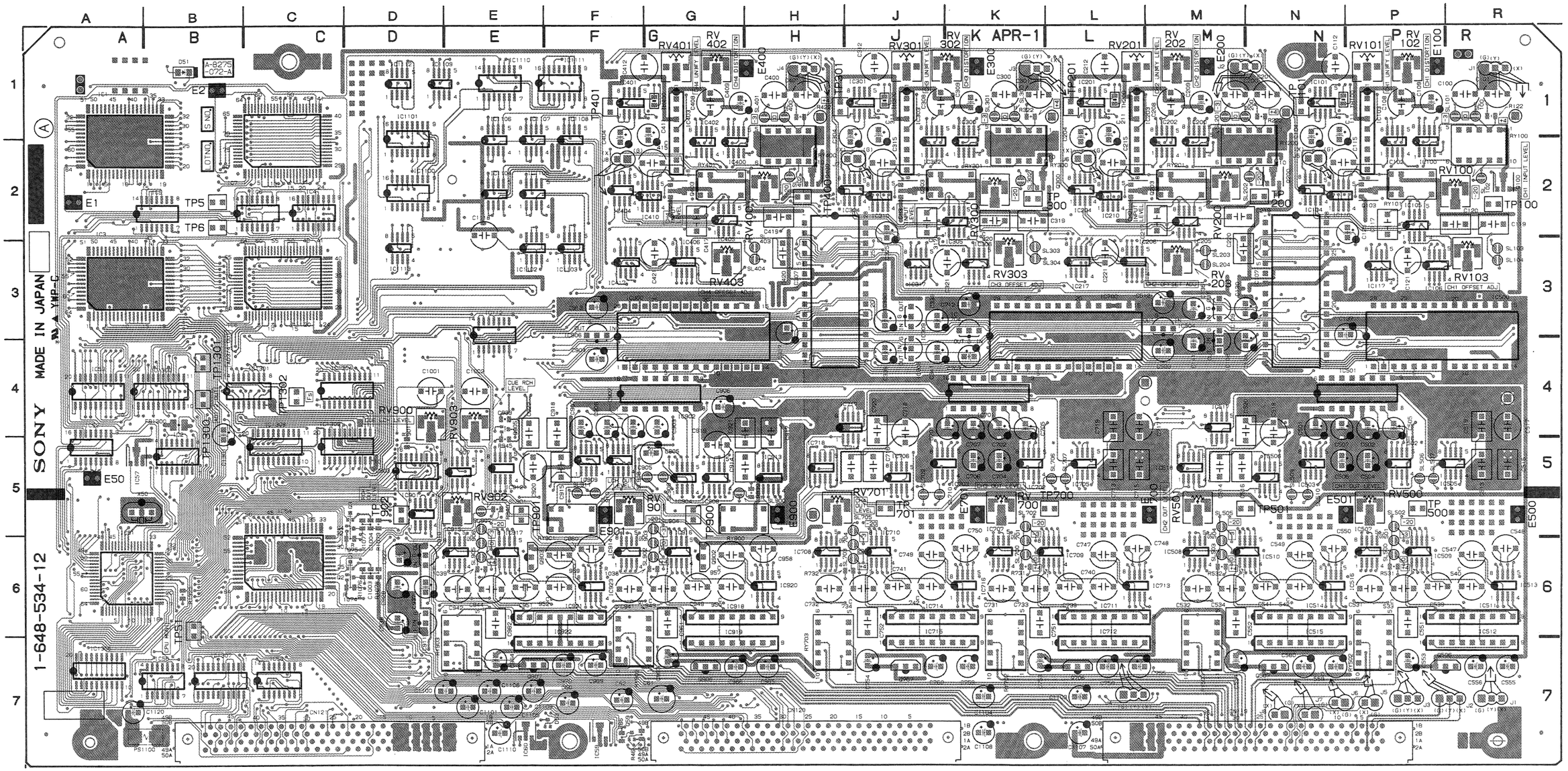
APR-1(1-648-534-12)

CN119	N-7	E200	M-1	IC504	M-3	IC1307	B-7	RV100	R-2	SL704	J-6
CN120	H-7	E300	K-1	IC505	R-5	IC1308	C-5	RV101	P-1	SL705	J-5
CN121	C-7	E400	H-1	IC506	N-5	IC1309	C-5	RV102	P-1	SL706	L-5
		E500	R-5	IC507	P-6			RV103	R-3	SL707	L-5
✱D1	D-2	E501	P-5	IC508	M-6	PS1100	A-7	RV200	M-2	SL709	J-5
✱D2	C-2	E700	M-5	IC509	P-6			RV201	L-1	SL710	J-5
✱D3	C-2	E701	K-5	IC510	N-6	Q1	D-6	RV202	M-1	SL900	G-5
✱D4	C-2	E900	H-5	IC511	P-6	Q2	D-6	RV203	M-3	SL901	E-5
✱D5	C-2	E901	F-5	IC512	P-7	Q3	D-5	RV300	K-2	SL902	G-6
✱D6	C-2			IC513	R-6	Q4	D-5	RV301	J-1	SL903	G-6
✱D7	C-2	FB1300	B-4	IC514	N-6	✱Q54	F-7	RV302	K-1	SL904	G-5
✱D8	D-2			IC515	N-7	✱Q55	F-7	RV303	K-3	SL905	E-6
✱D50	A-5	IC1	A-1	IC516	N-6	✱Q56	G-7	RV400	H-2	SL906	E-6
D51	B-1	IC2	B-5	IC517	M-4	✱Q57	F-7	RV401	G-1	SL907	E-5
✱D52	F-7	IC3	A-3	IC518	M-5	✱Q58	F-7	RV402	G-1	SL908	F-5
D53	F-7	IC4	C-2	IC700	L-3	Q59	F-7	RV403	G-3	SL909	G-5
✱D100	R-2	IC5	B-2	IC701	K-4	✱Q60	G-7	RV500	P-5	SL910	F-5
✱D101	P-1	IC6	C-2	IC702	K-5	✱Q61	F-7	RV501	M-5	SL911	F-5
✱D102	P-2	IC7	C-2	IC703	J-5	Q100	R-2	RV700	K-5		
✱D103	P-2	IC8	C-3	IC704	K-3	✱Q101	N-2	RV701	H-5	TH100	N-1
✱D104	P-3	IC51	A-6	IC705	L-5	✱Q102	P-2	RV900	D-4	TH200	L-1
✱D105	P-3	IC52	A-5	IC706	J-5	Q103	P-2	RV901	F-5	TH300	J-1
✱D200	N-2	IC53	A-4	IC707	K-6	Q200	N-2	RV902	E-5	TH400	G-1
✱D201	M-1	IC54	C-6	IC708	H-6	✱Q201	L-2	RV903	E-4		
✱D202	M-2	IC56	B-7	IC709	K-6	✱Q202	L-2			TP5	B-2
✱D203	M-2	IC57	A-5	IC710	J-6	Q203	L-2	RY100	R-2	TP6	B-2
✱D204	M-3	IC58	C-7	IC711	L-6	Q300	K-2	RY101	P-2	TP51	B-6
✱D205	M-3	IC59	F-7	IC712	L-7	✱Q301	J-2	RY200	N-2	TP100	R-2
✱D300	K-2	IC60	E-7	IC713	L-6	✱Q302	J-2	RY201	M-2	TP101	N-1
✱D301	K-1	IC100	P-2	IC714	J-6	Q303	J-2	RY300	K-2	TP200	N-2
✱D302	K-2	IC101	N-1	IC715	J-7	Q400	H-2	RY301	J-2	TP201	L-1
✱D303	K-2	IC102	P-2	IC716	K-6	✱Q401	F-2	RY400	H-2	TP300	K-2
✱D304	J-3	IC103	P-1	IC717	H-4	✱Q402	G-2	RY401	G-2	TP301	H-1
✱D305	J-3	IC104	N-2	IC718	H-5	Q403	G-2	RY502	P-7	TP400	H-2
✱D400	H-2	IC105	P-2	IC900	F-3	✱Q500	R-4	RY503	M-7	TP401	F-1
✱D401	H-1	IC106	P-3	IC901	D-5	✱Q501	M-5	RY702	K-7	TP500	P-5
✱D402	H-2	IC107	N-3	IC902	G-4	✱Q504	P-4	RY703	H-7	TP501	N-5
✱D403	G-2	IC108	M-4	IC903	D-5	✱Q505	M-5	RY900	G-5	TP700	L-5
✱D404	H-3	IC109	M-3	IC904	G-5	Q506	P-7	RY901	F-5	TP701	J-5
✱D405	H-3	IC110	N-2	IC905	F-5	Q507	N-7	RY902	F-7	TP900	G-5
✱D502	P-7	IC112	E-3	IC906	F-3	✱Q700	L-4	RY903	E-7	TP901	E-5
✱D503	N-7	IC117	P-3	IC907	E-5	✱Q701	J-5			TP902	D-5
✱D504	P-6	IC200	M-2	IC908	G-5	✱Q704	L-4	SL100	R-1	TP1300	B-4
✱D505	M-6	IC201	L-1	IC909	F-5	✱Q705	H-5	SL101	R-1	TP1301	B-4
✱D506	P-6	IC202	M-2	IC910	D-6	Q706	L-7	SL102	R-2	TP1302	C-4
✱D507	M-6	IC203	L-1	IC911	D-6	Q707	J-7	SL103	R-3		
✱D702	L-7	IC204	L-2	IC912	E-5	✱Q900	G-4	SL104	R-3	X50	A-5
✱D703	J-7	IC205	M-2	IC913	H-5	✱Q901	F-4	SL200	M-1		
✱D704	K-6	IC206	L-3	IC914	F-6	Q902	G-6	SL201	M-1		
✱D705	H-6	IC210	L-2	IC915	E-6	Q903	E-6	SL202	N-2		
✱D706	K-6	IC217	L-3	IC916	G-6	✱Q904	G-4	SL203	M-3		
✱D707	H-6	IC300	K-2	IC917	E-6	Q905	E-4	SL204	M-3		
✱D900	D-5	IC301	J-1	IC918	G-6	Q906	G-7	SL300	K-1		
✱D903	G-6	IC302	J-2	IC919	G-7	Q907	E-7	SL301	K-1		
✱D904	F-6	IC303	J-1	IC920	H-6	✱Q1000	D-4	SL302	K-2		
✱D905	G-7	IC304	J-2	IC921	E-6	✱Q1001	E-4	SL303	K-3		
✱D906	E-7	IC305	K-2	IC922	E-7	✱Q1100	D-2	SL304	K-3		
✱D907	F-6	IC306	K-3	IC923	F-6	✱Q1101	D-3	SL400	H-1		
✱D908	E-6	IC307	H-3	IC1100	D-2	✱Q1103	D-2	SL401	H-1		
✱D909	F-6	IC308	J-4	IC1101	D-2			SL402	H-2		
✱D910	E-6	IC309	J-3	IC1102	E-3	R122	R-1	SL403	H-3		
✱D1100	E-2	IC310	J-2	IC1103	F-3	R222	N-1	SL404	H-3		
✱D1101	E-1	IC317	J-3	IC1104	E-2	R322	K-1	SL500	P-6		
✱D1102	E-2	IC400	G-2	IC1105	E-2	R422	H-1	SL501	P-6		
✱D1103	E-2	IC401	F-1	IC1106	E-2	R531	P-6	SL502	P-5		
✱D1104	E-2	IC402	G-2	IC1107	E-2	R532	M-6	SL503	M-6		
✱D1105	E-1	IC403	G-1	IC1108	F-2	R731	K-6	SL504	M-6		
✱D1106	E-2	IC404	F-2	IC1109	D-1	R732	J-6	SL505	M-5		
✱D1107	E-2	IC405	G-2	IC1110	E-1	R1038	G-6	SL506	P-5		
✱D1108	F-1	IC406	G-3	IC1111	F-1	R1039	E-6	SL507	P-5		
✱D1109	F-2	IC410	F-2	IC1112	D-1			SL509	N-5		
		IC417	F-3	IC1113	D-3	✱RB51	A-6	SL510	N-5		
E1	A-2	IC500	R-3	IC1300	A-4	✱RB53	A-4	SL700	K-6		
E2	B-1	IC501	N-4	IC1301	B-4	✱RB54	A-5	SL701	K-6		
E50	A-5	IC502	P-5	IC1304	C-4	✱RB55	C-6	SL702	K-5		
E100	P-1	IC503	N-5	IC1306	A-7			SL703	J-6		

✱ : B SIDE

LOT NO. B-2

1-13 (b)


SONY MADE IN JAPAN
1-648-534-12
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RV401
RV 402
RV301
RV 302
RV201
RV 202
RV101
RV 102
RV100
RV303
RV 203
RV103
RV900
RV902
RV 90
RV701
RV 700
RV501
RV 502
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TP 300
TP 700
TP 500
TP100
TP501
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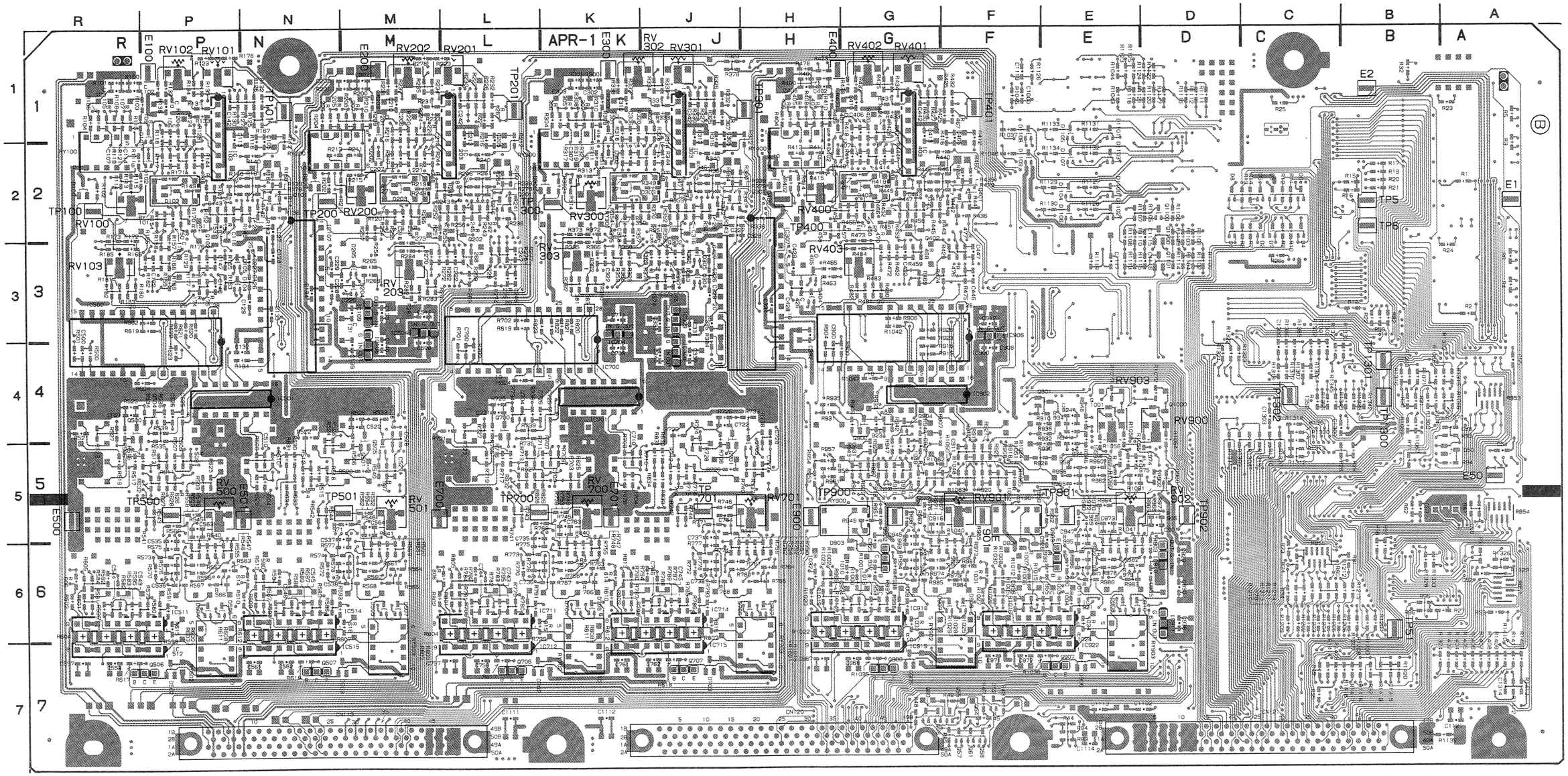


APR-1 BOARD -B SIDE-

1-648-534-12 (LOT No. 306 - 402)

DVW-A500(J)	; APR-1	MCB
DVW-A500(UC)	; APR-1	MCB
DVW-A500P(EK)	; APR-1P	MCB
DVW-500(J)	; APR-1	MCB
DVW-500(UC)	; APR-1	MCB
DVW-500P(EK)	; APR-1P	MCB

APR-1 ; Audio signal processor, A/D, D/A, AES/EBU interface

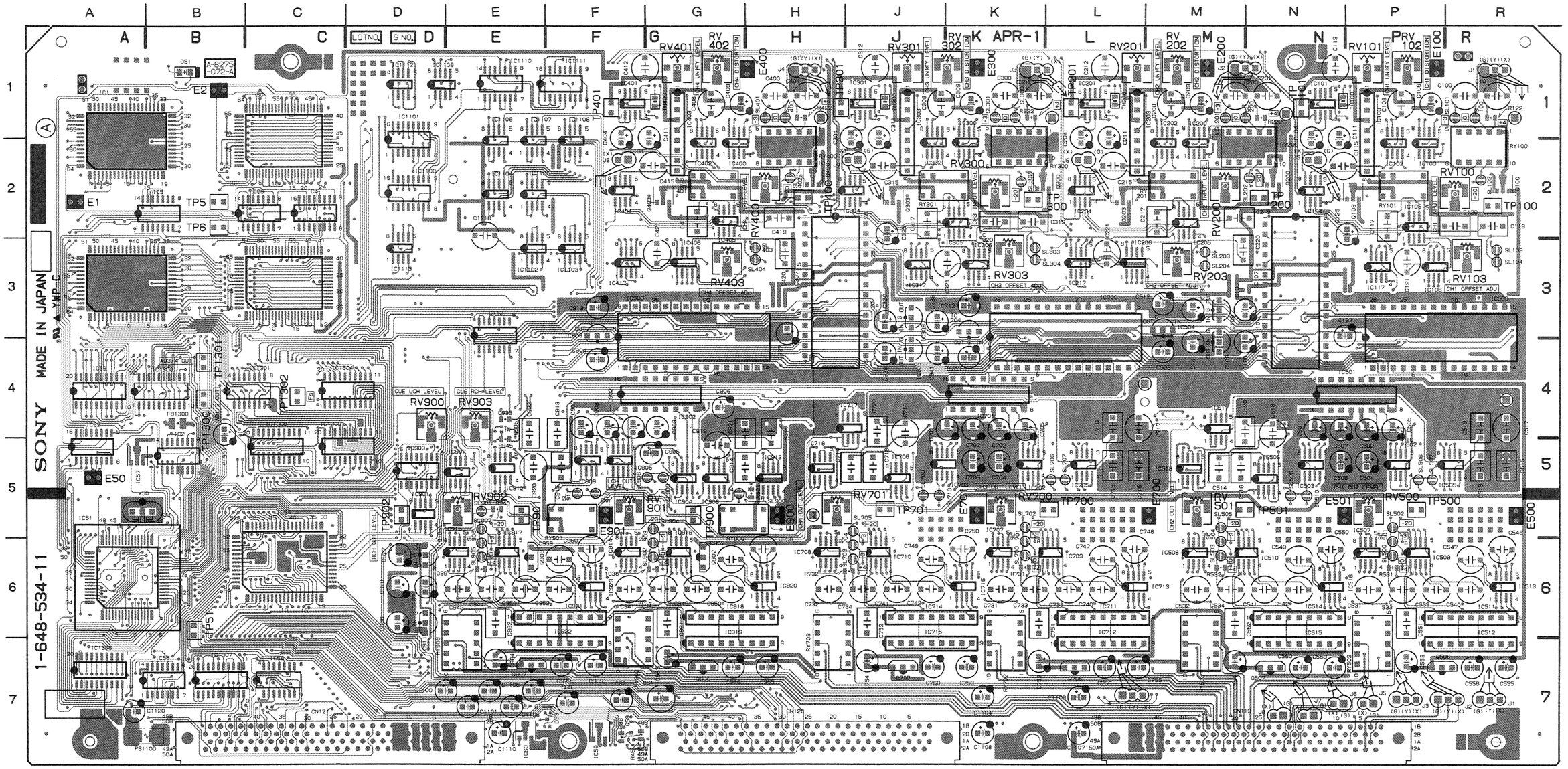
(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

APR-1(1-648-534-11)

CN119	N-7	E200	M-1	IC508	M-6	PS1100	A-7	RV302	K-1	SL904	G-5
CN120	H-7	E300	K-1	IC509	P-6			RV303	K-3	SL905	E-6
CN121	C-7	E400	H-1	IC510	M-6	✱Q54	F-7	RV400	H-2	SL906	E-6
		E500	R-5	IC511	P-6	✱Q55	F-7	RV401	G-1	SL907	E-5
✱D1	D-2	E501	P-5	IC512	P-7	✱Q56	G-7	RV402	G-1	SL908	F-5
✱D2	C-2	E700	M-5	IC513	R-6	✱Q57	F-7	RV403	G-3	SL909	G-5
✱D3	C-2	E701	K-5	IC514	N-6	✱Q58	F-7	RV500	P-5	SL910	F-5
✱D4	C-2	E900	H-5	IC515	N-7	Q59	F-7	RV501	M-5	SL911	F-5
✱D5	C-2	E901	F-5	IC516	N-6	✱Q60	G-7	RV700	K-5		
✱D6	C-2			IC517	M-5	✱Q61	F-7	RV701	H-5	TH100	N-1
✱D7	C-2	FB1300	B-4	IC518	M-5	Q100	R-2	RV900	D-4	TH200	L-1
✱D8	D-2			IC700	K-4	✱Q101	N-2	RV901	F-5	TH300	J-1
✱D50	A-5	IC1	A-2	IC701	K-4	✱Q102	P-2	RV902	E-5	TH400	G-1
D51	B-1	IC2	B-5	IC702	K-5	Q103	P-2	RV903	E-4		
✱D52	F-7	IC3	A-3	IC703	J-5	Q200	N-2			TP5	B-2
D53	F-7	IC4	C-2	IC704	K-3	✱Q201	L-2	RY100	R-2	TP6	B-2
✱D100	R-2	IC5	A-2	IC705	L-5	✱Q202	L-2	RY101	P-2	TP51	B-6
✱D101	P-1	IC6	B-2	IC706	J-5	Q203	L-2	RY200	N-2	TP100	R-2
✱D102	P-2	IC7	C-2	IC707	K-6	Q300	K-2	RY201	M-2	TP101	N-1
✱D103	P-2	IC8	C-3	IC708	H-6	✱Q301	J-2	RY300	K-2	TP200	N-2
✱D104	P-3	IC51	A-6	IC709	K-6	✱Q302	J-2	RY301	J-2	TP201	L-1
✱D105	P-3	IC52	A-5	IC710	J-6	Q303	J-2	RY400	H-2	TP300	K-2
✱D200	N-2	IC53	A-4	IC711	L-6	Q400	H-2	RY401	G-2	TP301	H-1
✱D201	M-1	IC54	C-6	IC712	L-7	✱Q401	F-2	RY502	P-7	TP400	H-2
✱D202	M-2	IC56	B-7	IC713	L-6	✱Q402	G-2	RY503	M-7	TP401	F-1
✱D203	L-2	IC57	A-5	IC714	J-6	Q403	G-2	RY702	K-7	TP500	P-5
✱D204	M-3	IC58	C-7	IC715	J-7	✱Q500	R-4	RY703	H-7	TP501	N-5
✱D205	M-3	IC59	F-7	IC716	K-6	✱Q501	M-5	RY900	G-5	TP700	L-5
✱D300	K-2	IC60	E-7	IC717	H-5	✱Q504	P-4	RY901	F-5	TP701	J-5
✱D301	K-1	IC100	P-2	IC718	H-5	✱Q505	M-5	RY902	F-7	TP900	G-5
✱D302	K-2	IC101	N-1	IC900	F-4	Q506	P-7	RY903	E-7	TP901	E-5
✱D303	J-2	IC102	P-2	IC901	D-5	Q507	N-7			TP902	D-5
✱D304	J-3	IC103	P-1	IC902	F-4	✱Q700	L-4	SL100	R-1	TP1300	B-4
✱D305	J-3	IC104	N-2	IC903	D-5	✱Q701	J-5	SL101	R-1	TP1301	B-4
✱D400	H-2	IC105	P-3	IC904	G-5	✱Q704	L-4	SL102	R-2	TP1302	C-4
✱D401	H-1	IC106	P-3	IC905	F-5	✱Q705	H-5	SL103	R-3		
✱D402	H-2	IC107	N-2	IC906	F-3	Q706	L-7	SL104	R-3	X50	A-5
✱D403	G-2	IC108	M-4	IC907	E-5	Q707	J-7	SL200	M-1		
✱D404	H-3	IC109	M-3	IC908	G-5	✱Q900	G-4	SL201	M-1		
✱D405	H-3	IC112	E-4	IC909	F-5	✱Q901	F-4	SL202	N-2		
✱D502	P-7	IC117	P-3	IC910	D-6	Q902	G-6	SL203	M-3		
✱D503	N-7	IC200	M-2	IC911	D-6	Q903	E-6	SL204	M-3		
✱D504	P-6	IC201	L-1	IC912	E-5	✱Q904	G-4	SL300	K-1		
✱D505	M-6	IC202	M-2	IC913	H-5	Q905	E-4	SL301	K-1		
✱D506	P-6	IC203	L-1	IC914	F-6	Q906	G-7	SL302	K-2		
✱D507	M-6	IC204	L-2	IC915	E-6	Q907	E-7	SL303	K-3		
✱D702	L-7	IC205	M-2	IC916	G-6	✱Q1100	D-2	SL304	K-3		
✱D703	J-7	IC206	L-3	IC917	E-6	✱Q1101	D-3	SL400	H-1		
✱D704	K-6	IC217	L-3	IC918	G-6	✱Q1103	D-2	SL401	H-1		
✱D705	H-6	IC300	K-2	IC919	G-7			SL402	H-2		
✱D706	K-6	IC301	J-1	IC920	H-6	R122	R-1	SL403	H-3		
✱D707	H-6	IC302	J-2	IC921	E-6	R222	N-1	SL404	H-3		
✱D900	D-5	IC303	J-1	IC922	E-7	R322	K-1	SL500	P-6		
✱D903	G-6	IC304	J-2	IC923	F-6	R422	H-1	SL501	P-6		
✱D904	F-6	IC305	K-2	IC1100	D-2	R531	P-6	SL502	P-5		
✱D905	G-7	IC306	K-3	IC1101	D-2	R532	M-6	SL503	M-6		
✱D906	E-7	IC307	H-2	IC1102	E-3	R731	K-6	SL504	M-6		
✱D907	F-6	IC308	J-4	IC1103	F-3	R732	J-6	SL505	M-5		
✱D908	E-6	IC309	J-3	IC1104	E-2	R1038	G-6	SL506	P-5		
✱D909	F-6	IC317	J-3	IC1105	E-2	R1039	E-6	SL507	P-5		
✱D910	E-6	IC400	G-2	IC1106	E-2			SL509	N-5		
✱D1100	E-2	IC401	F-1	IC1107	E-2	✱RB51	A-6	SL510	N-5		
✱D1101	E-1	IC402	G-2	IC1108	F-2	✱RB53	A-4	SL700	K-6		
✱D1102	E-2	IC403	G-1	IC1109	D-1	✱RB54	A-5	SL701	K-6		
✱D1103	E-2	IC404	F-2	IC1110	E-1	✱RB55	C-6	SL702	K-5		
✱D1104	E-2	IC405	G-2	IC1111	F-1			SL703	J-6		
✱D1105	E-1	IC406	G-3	IC1112	D-1	RV100	R-2	SL704	J-6		
✱D1106	E-2	IC417	F-3	IC1113	D-3	RV101	P-1	SL705	J-5		
✱D1107	E-2	IC500	P-4	IC1300	A-4	RV102	P-1	SL706	L-5		
✱D1108	F-1	IC501	N-4	IC1301	B-4	RV103	R-3	SL707	L-5		
✱D1109	F-2	IC502	P-5	IC1304	C-4	RV200	M-2	SL709	J-5		
		IC503	N-5	IC1306	A-7	RV201	L-1	SL710	J-5		
E1	A-2	IC504	M-3	IC1307	B-7	RV202	M-1	SL900	G-5		
E2	B-1	IC505	R-5	IC1308	C-5	RV203	M-3	SL901	E-5		
E50	A-5	IC506	N-5	IC1309	C-5	RV300	K-2	SL902	G-6		
E100	P-1	IC507	P-6			RV301	J-1	SL903	G-6		

✱ : B SIDE

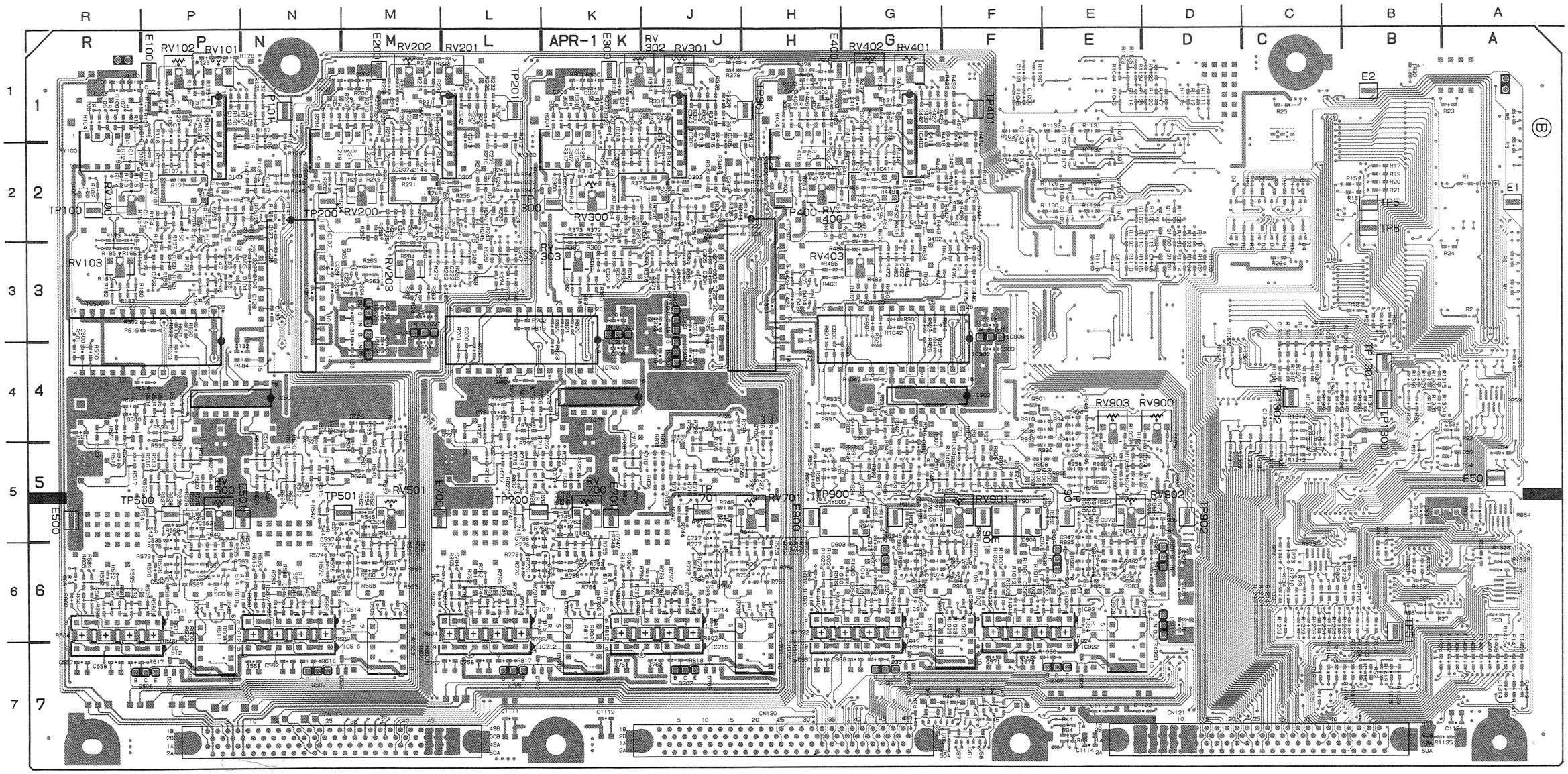
LOT NO. D-1



APR-1 BOARD -A SIDE-

1-648-534-11 (LOT No. 302 - 306)

DVW-A500(J)	; APR-1	MCB
DVW-A500(UC)	; APR-1	MCB
DVW-A500P(EK)	; APR-1P	MCB
DVW-A500P(UC)	; APR-1PG	MCB
DVW-500(J)	; APR-1	MCB
DVW-500(UC)	; APR-1	MCB
DVW-500P(EK)	; APR-1P	MCB



APR-1 BOARD -B SIDE-

1-648-534-11 (LOT No. 302 - 306)

DVW-A500(J)	; APR-1	MCB
DVW-A500(UC)	; APR-1	MCB
DVW-A500P(EK)	; APR-1P	MCB
DVW-A500P(UC)	; APR-1PG	MCB
DVW-500(J)	; APR-1	MCB
DVW-500(UC)	; APR-1	MCB
DVW-500P(EK)	; APR-1P	MCB

APR-1B ; Audio signal processor (without LAU interface), D/A, AES/EBU interface

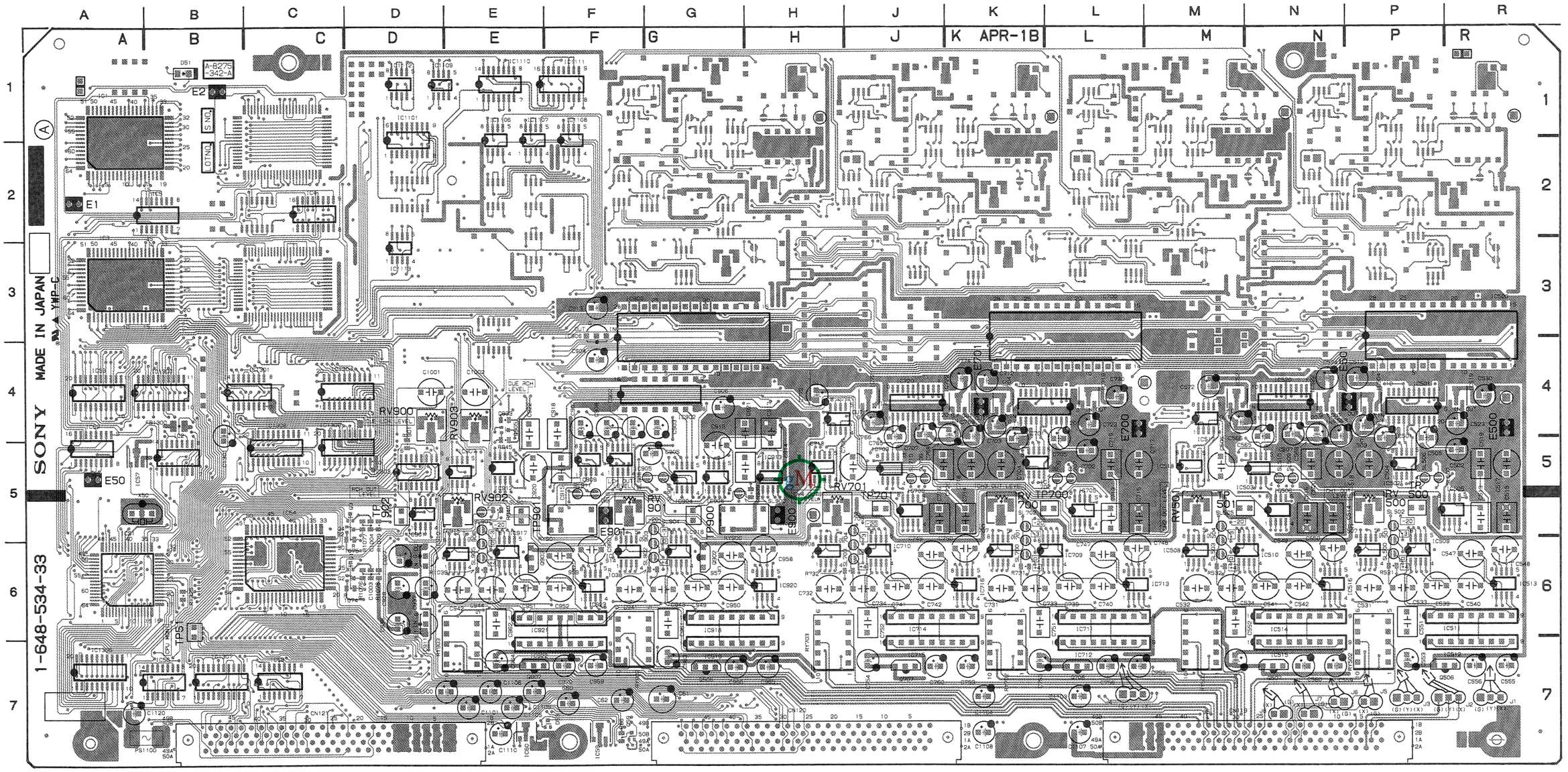
(Board's Lot No. 501 through 909)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)

APR-1B(1-648-534-33)

CN119	N-7	IC502	P-5	IC1113	D-3	SL507	P-5
CN120	H-7	IC503	N-5	IC1300	A-4	SL509	N-5
CN121	C-7	IC504	P-4	IC1301	B-4	SL510	N-5
		IC505	R-5	IC1304	C-4	SL700	K-6
✱D1	D-2	IC506	N-5	IC1306	A-7	SL701	K-6
✱D2	C-2	IC507	P-6	IC1307	B-7	SL702	K-5
✱D3	C-2	IC508	M-6	IC1308	C-5	SL703	J-6
✱D4	C-2	IC509	P-6	IC1309	C-5	SL704	J-6
✱D5	C-2	IC510	N-6			SL705	J-5
✱D6	C-2	IC511	P-6	PS1100	A-7	SL706	L-5
✱D7	C-2	IC512	P-7			SL707	L-5
✱D8	D-2	IC513	R-6	Q1	D-6	SL709	J-5
✱D50	A-5	IC514	N-6	Q2	D-6	SL710	J-5
D51	B-1	IC515	N-7	Q3	D-5	SL900	G-5
✱D52	F-7	IC516	N-6	Q4	D-5	SL901	E-5
D53	F-7	IC517	M-4	✱Q54	F-7	SL902	G-6
✱D500	P-4	IC518	M-5	✱Q55	F-7	SL903	G-6
✱D501	M-4	IC519	R-4	✱Q56	G-7	SL904	G-5
✱D502	P-7	IC520	N-4	✱Q57	F-7	SL905	E-6
✱D503	N-7	IC521	M-4	✱Q58	F-7	SL906	E-6
✱D504	P-6	IC522	N-4	Q59	F-7	SL907	E-5
✱D505	M-6	IC700	L-3	✱Q60	G-7	SL908	F-5
✱D506	P-6	IC701	K-4	✱Q61	F-7	SL909	G-5
✱D507	M-6	IC702	K-5	✱Q500	R-5	SL910	F-5
✱D700	K-4	IC703	J-5	✱Q501	N-5	SL911	F-5
✱D701	J-4	IC704	K-4	✱Q504	R-4		
✱D702	L-7	IC705	L-5	✱Q505	M-5	TP51	B-6
✱D703	J-7	IC706	J-5	Q506	P-7	TP500	P-5
✱D704	K-6	IC707	K-6	Q507	N-7	TP501	M-5
✱D705	H-6	IC708	H-6	✱Q700	L-5	TP700	L-5
✱D706	K-6	IC709	L-6	✱Q701	J-5	TP701	J-5
✱D707	H-6	IC710	J-6	✱Q704	L-4	TP900	G-5
✱D900	D-5	IC711	L-6	✱Q705	H-5	TP901	E-5
✱D903	G-6	IC712	L-7	Q706	L-7	TP902	D-5
✱D904	F-6	IC713	L-6	Q707	J-7		
✱D905	G-7	IC714	J-6	✱Q900	G-4	X50	A-5
✱D906	E-7	IC715	J-7	✱Q901	E-4		
✱D907	F-6	IC716	K-6	Q902	G-6		
✱D908	E-6	IC717	H-4	Q903	E-6		
✱D909	F-6	IC718	H-5	✱Q904	G-4		
✱D910	E-6	IC719	L-4	Q905	E-4		
✱D1101	E-1	IC720	J-4	Q906	G-7		
✱D1103	E-2	IC721	J-4	Q907	E-7		
✱D1105	E-1	IC722	K-4	✱Q1000	D-4		
✱D1107	E-2	IC900	F-3	✱Q1001	E-4		
✱D1108	F-1	IC901	D-5				
✱D1109	F-2	IC902	G-4	✱RB51	A-6		
		IC903	D-5	✱RB53	A-4		
E1	A-2	IC904	G-5	✱RB54	A-5		
E2	B-1	IC905	F-5	✱RB55	C-6		
E50	A-5	IC906	F-3				
E500	R-4	IC907	E-5	RV500	P-5		
E501	P-4	IC908	G-5	RV501	M-5		
E700	L-4	IC909	F-5	RV700	K-5		
E701	K-4	IC910	D-6	RV701	H-5		
E900	H-5	IC911	D-6	RV900	D-4		
E901	F-5	IC912	E-5	RV901	F-5		
		IC913	H-5	RV902	E-5		
FB1300	B-4	IC914	F-6	RV903	E-4		
		IC915	E-6				
IC1	A-1	IC916	G-6	RY502	P-7		
IC2	B-5	IC917	E-6	RY503	M-7		
IC3	A-3	IC918	G-6	RY702	K-7		
IC4	C-2	IC919	G-7	RY703	H-7		
IC5	B-2	IC920	H-6	RY900	G-5		
IC51	A-6	IC921	E-6	RY901	F-5		
IC52	A-5	IC922	E-7	RY902	F-7		
IC53	A-4	IC923	F-6	RY903	E-7		
IC54	C-6	IC1101	D-2				
IC56	B-7	IC1106	E-2	SL500	P-6		
IC57	A-5	IC1107	E-2	SL501	P-6		
IC58	C-7	IC1108	F-2	SL502	P-5		
IC59	F-7	IC1109	D-1	SL503	M-6		
IC60	E-7	IC1110	E-1	SL504	M-6		
IC500	R-3	IC1111	F-1	SL505	M-5		
IC501	P-4	IC1112	D-1	SL506	P-5		

✱ : B SIDE

LOT NO. B-2


APR-1B
SONY MADE IN JAPAN
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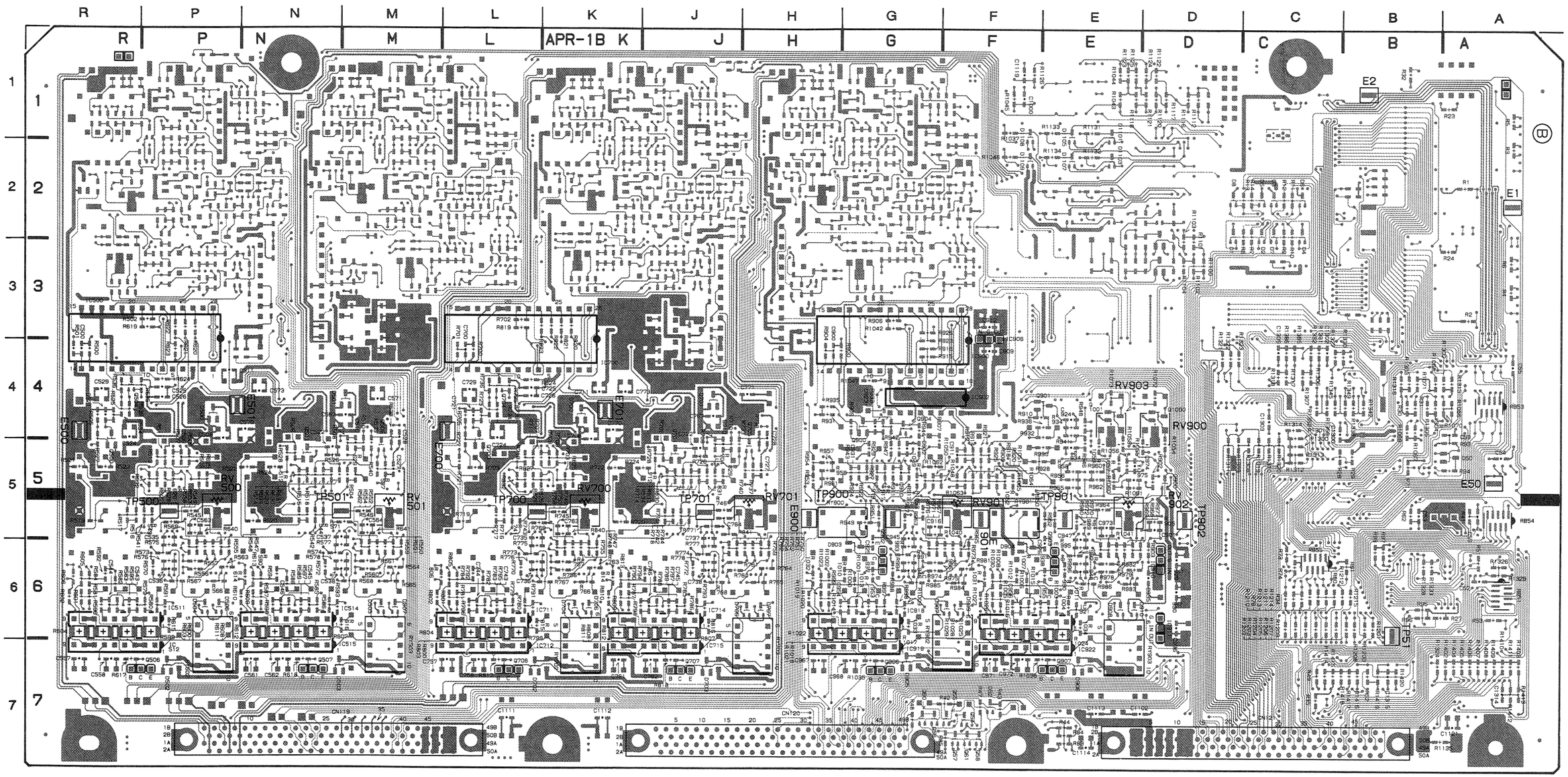


APR-1B BOARD -B SIDE-

1-648-534-33 (LOT No. 501 - 909)

DVW-510(J) ; APR-1B MCB
DVW-510(UC) ; APR-1B MCB
DVW-510P(EK) ; APR-1BP MCB

APR-1B ; Audio signal processor (without LAU interface), D/A, AES/EBU interface

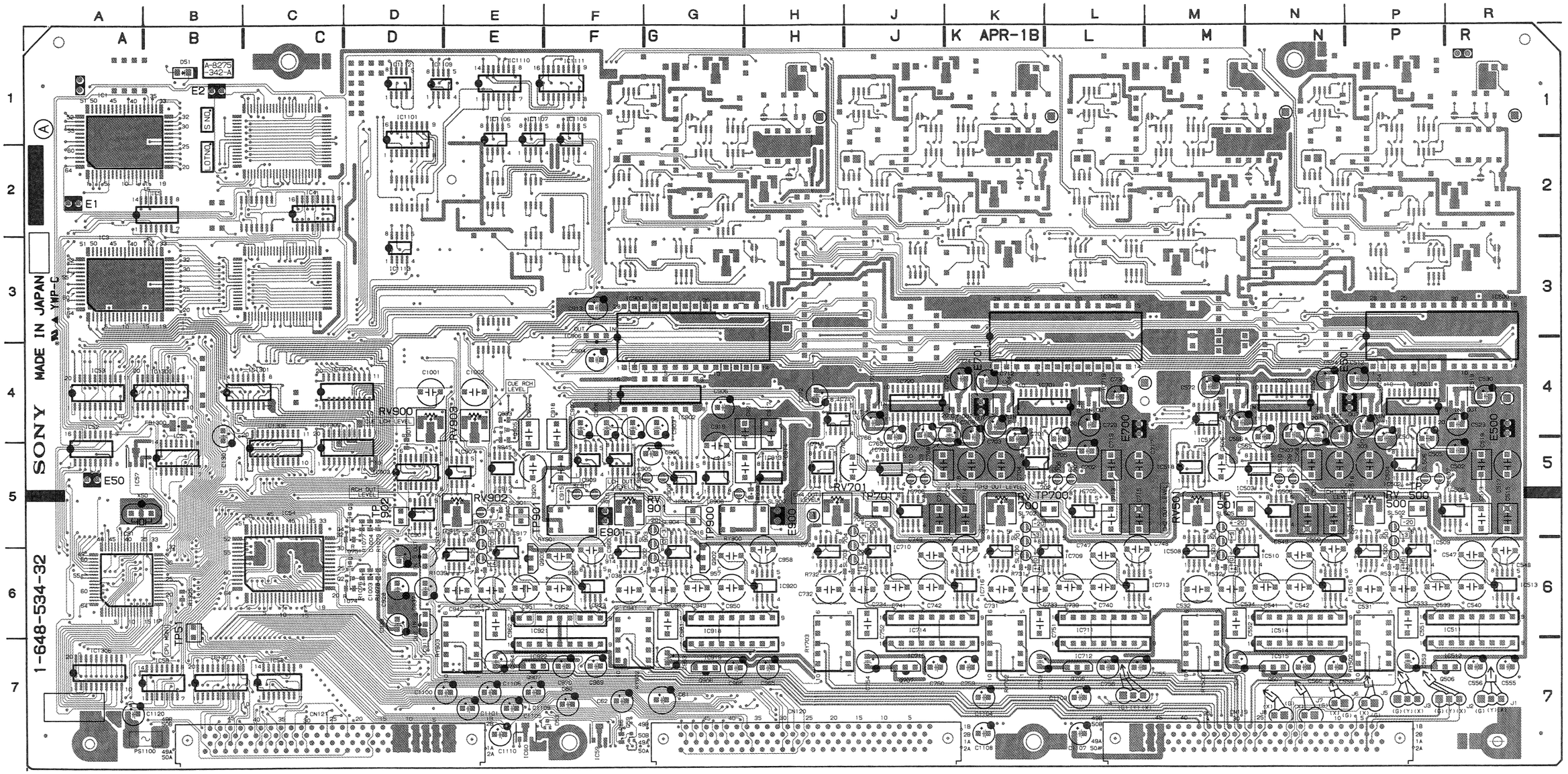
(Board's Lot No. 403 through 412)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)

APR-1B(1-648-534-32)

CN119	N-7	IC502	P-5	IC1113	D-3	SL507	P-5
CN120	H-7	IC503	N-5	IC1300	A-4	SL509	N-5
CN121	C-7	IC504	P-4	IC1301	B-4	SL510	N-5
		IC505	R-5	IC1304	C-4	SL700	K-6
✱D1	D-2	IC506	N-5	IC1306	A-7	SL701	K-6
✱D2	C-2	IC507	P-6	IC1307	B-7	SL702	K-5
✱D3	C-2	IC508	M-6	IC1308	C-5	SL703	J-6
✱D4	C-2	IC509	P-6	IC1309	C-5	SL704	J-6
✱D5	C-2	IC510	N-6			SL705	J-5
✱D6	C-2	IC511	P-6	PS1100	A-7	SL706	L-5
✱D7	C-2	IC512	P-7			SL707	L-5
✱D8	D-2	IC513	R-6	Q1	D-6	SL709	J-5
✱D50	A-5	IC514	N-6	Q2	D-6	SL710	J-5
D51	B-1	IC515	N-7	Q3	D-5	SL900	G-5
✱D52	F-7	IC516	N-6	Q4	D-5	SL901	E-5
D53	F-7	IC517	M-4	✱Q54	F-7	SL902	G-6
✱D500	P-4	IC518	M-5	✱Q55	F-7	SL903	G-6
✱D501	M-4	IC519	R-4	✱Q56	G-7	SL904	G-5
✱D502	P-7	IC520	N-4	✱Q57	F-7	SL905	E-6
✱D503	N-7	IC521	M-4	✱Q58	F-7	SL906	E-6
✱D504	P-6	IC522	N-4	Q59	F-7	SL907	E-5
✱D505	M-6	IC700	L-3	✱Q60	G-7	SL908	F-5
✱D506	P-6	IC701	K-4	✱Q61	F-7	SL909	G-5
✱D507	M-6	IC702	K-5	✱Q500	R-5	SL910	F-5
✱D700	K-4	IC703	J-5	✱Q501	N-5	SL911	F-5
✱D701	J-4	IC704	K-4	✱Q504	R-4		
✱D702	L-7	IC705	L-5	✱Q505	M-5	TP51	B-6
✱D703	J-7	IC706	J-5	Q506	P-7	TP500	P-5
✱D704	K-6	IC707	K-6	Q507	N-7	TP501	M-5
✱D705	H-6	IC708	H-6	✱Q700	L-5	TP700	L-5
✱D706	K-6	IC709	L-6	✱Q701	J-5	TP701	J-5
✱D707	H-6	IC710	J-6	✱Q704	L-4	TP900	G-5
✱D900	D-5	IC711	L-6	✱Q705	H-5	TP901	E-5
✱D903	G-6	IC712	L-7	Q706	L-7	TP902	D-5
✱D904	F-6	IC713	L-6	Q707	J-7		
✱D905	G-7	IC714	J-6	✱Q900	G-4	X50	A-5
✱D906	E-7	IC715	J-7	✱Q901	E-4		
✱D907	F-6	IC716	K-6	Q902	G-6		
✱D908	E-6	IC717	H-4	Q903	E-6		
✱D909	F-6	IC718	H-5	✱Q904	G-4		
✱D910	E-6	IC719	L-4	Q905	E-4		
✱D1101	E-1	IC720	J-4	Q906	G-7		
✱D1103	E-2	IC721	J-4	Q907	E-7		
✱D1105	E-1	IC722	K-4	✱Q1000	D-4		
✱D1107	E-2	IC900	F-3	✱Q1001	E-4		
✱D1108	F-1	IC901	D-5				
✱D1109	F-2	IC902	G-4	✱RB51	A-6		
		IC903	D-5	✱RB53	A-4		
E1	A-2	IC904	G-5	✱RB54	A-5		
E2	B-1	IC905	F-5	✱RB55	C-6		
E50	A-5	IC906	F-3				
E500	R-4	IC907	E-5	RV500	P-5		
E501	P-4	IC908	G-5	RV501	M-5		
E700	L-4	IC909	F-5	RV700	K-5		
E701	K-4	IC910	D-6	RV701	H-5		
E900	H-5	IC911	D-6	RV900	D-4		
E901	F-5	IC912	E-5	RV901	F-5		
		IC913	H-5	RV902	E-5		
FB1300	B-4	IC914	F-6	RV903	E-4		
		IC915	E-6				
IC1	A-1	IC916	G-6	RY502	P-7		
IC2	B-5	IC917	E-6	RY503	M-7		
IC3	A-3	IC918	G-6	RY702	K-7		
IC4	C-2	IC919	G-7	RY703	H-7		
IC5	B-2	IC920	H-6	RY900	G-5		
IC51	A-6	IC921	E-6	RY901	F-5		
IC52	A-5	IC922	E-7	RY902	F-7		
IC53	A-4	IC923	F-6	RY903	E-7		
IC54	C-6	IC1101	D-2				
IC56	B-7	IC1106	E-2	SL500	P-6		
IC57	A-5	IC1107	E-2	SL501	P-6		
IC58	C-7	IC1108	F-2	SL502	P-5		
IC59	F-7	IC1109	D-1	SL503	M-6		
IC60	E-7	IC1110	E-1	SL504	M-6		
IC500	R-3	IC1111	F-1	SL505	M-5		
IC501	P-4	IC1112	D-1	SL506	P-5		

✱ : B SIDE

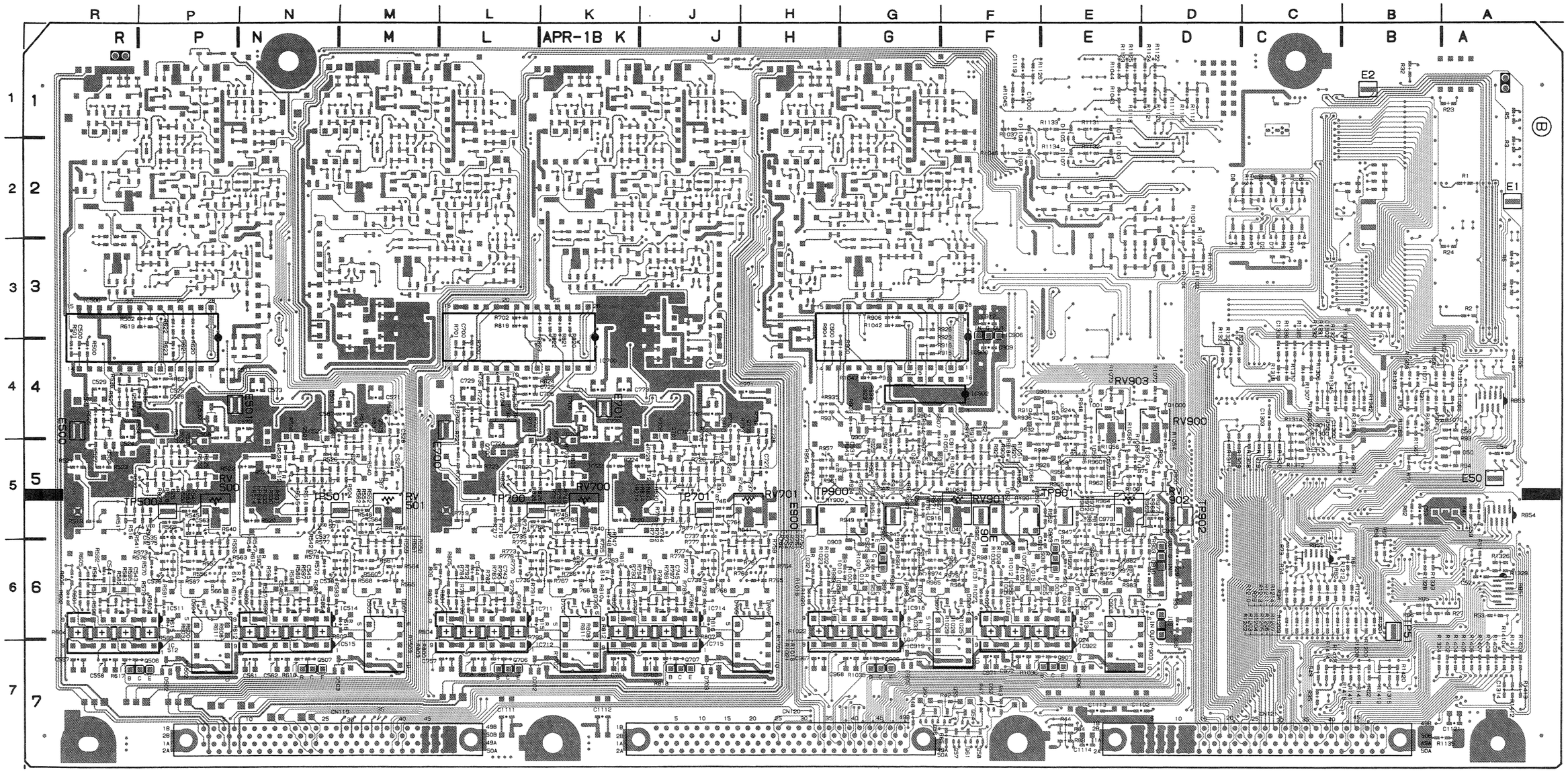
LOT NO. B-2



APR-1B BOARD **-A SIDE-**

1-648-534-32 (LOT No. 403 - 412)

DVW-510(J)	; APR-1B	MCB
DVW-510(UC)	; APR-1B	MCB
DVW-510P(EK)	; APR-1BP	MCB



APR-1B BOARD -B SIDE-

1-648-534-32 (LOT No. 403 - 412)

DVW-510(J) ; APR-1B MCB
DVW-510(UC) ; APR-1B MCB
DVW-510P(EK) ; APR-1BP MCB

APR-1B ; Audio signal processor(without LAU interface), D/A, AES/EBU interface

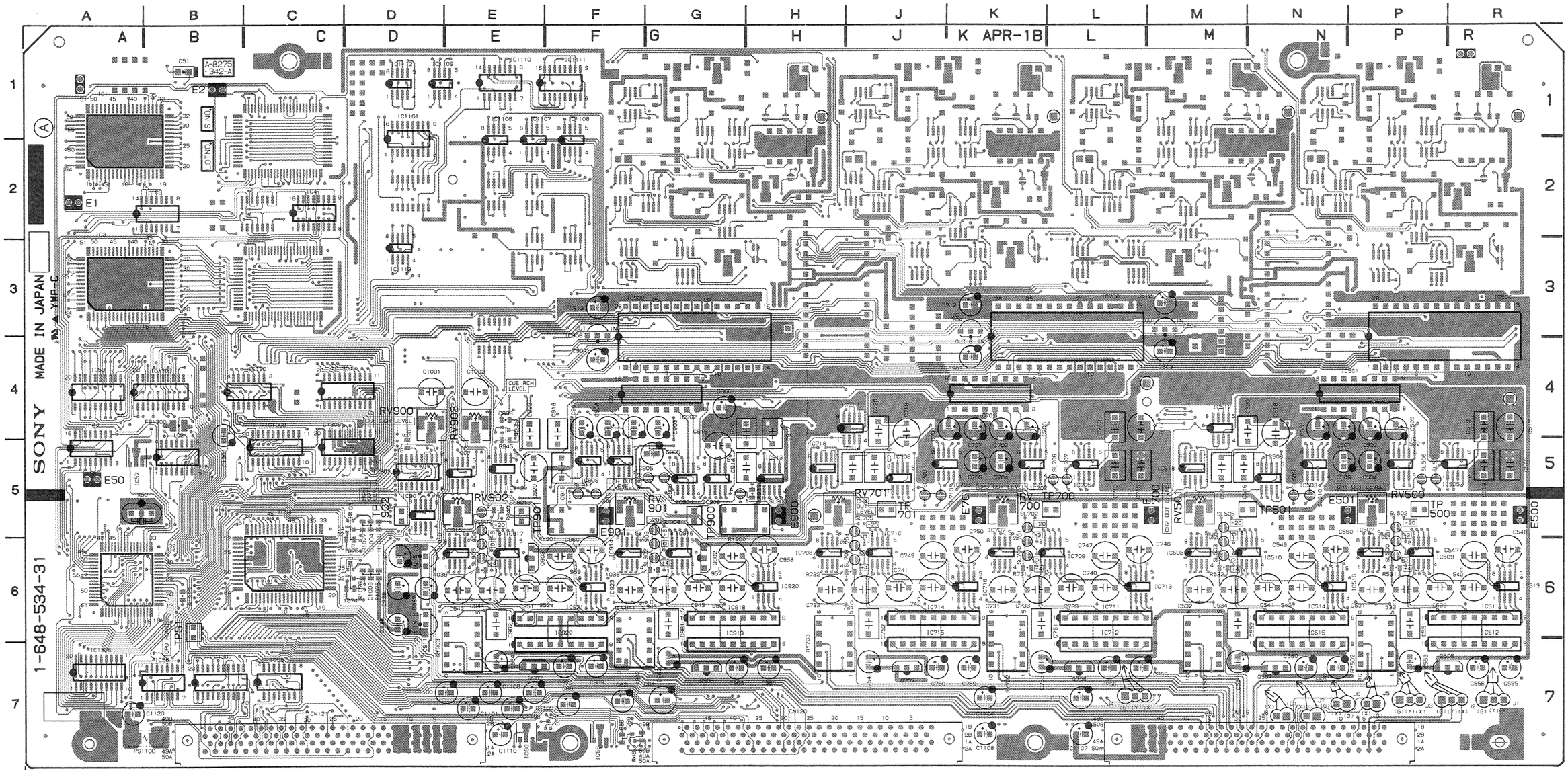
(Board's Lot No. 308 through 402)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)

APR-1B(1-648-534-31)

CN119	N-7	IC506	N-5	Q2	D-6	SL710	J-5
CN120	H-7	IC507	P-6	Q3	D-5	SL900	G-5
CN121	C-7	IC508	M-6	Q4	D-5	SL901	E-5
		IC509	P-6	✱Q54	F-7	SL902	G-6
✱D1	D-2	IC510	N-6	✱Q55	F-7	SL903	G-6
✱D2	C-2	IC511	P-6	✱Q56	G-7	SL904	G-5
✱D3	C-2	IC512	P-7	✱Q57	F-7	SL905	E-6
✱D4	C-2	IC513	R-6	✱Q58	F-7	SL906	E-6
✱D5	C-2	IC514	N-6	Q59	F-7	SL907	E-5
✱D6	C-2	IC515	N-7	✱Q60	G-7	SL908	F-5
✱D7	C-2	IC516	N-6	✱Q61	F-7	SL909	G-5
✱D8	D-2	IC517	M-4	✱Q500	R-4	SL910	F-5
✱D50	A-5	IC518	M-5	✱Q501	M-5	SL911	F-5
D51	B-1	IC700	L-3	✱Q504	P-4		
✱D52	F-7	IC701	K-4	✱Q505	M-5	TP51	B-6
D53	F-7	IC702	K-5	Q506	P-7	TP500	P-5
✱D502	P-7	IC703	J-5	Q507	N-7	TP501	N-5
✱D503	N-7	IC704	K-3	✱Q700	L-4	TP700	L-5
✱D504	P-6	IC705	L-5	✱Q701	J-5	TP701	J-5
✱D505	M-6	IC706	J-5	✱Q704	L-4	TP900	G-5
✱D506	P-6	IC707	K-6	✱Q705	H-5	TP901	E-5
✱D507	M-6	IC708	H-6	Q706	L-7	TP902	D-5
✱D702	L-7	IC709	K-6	Q707	J-7		
✱D703	J-7	IC710	J-6	✱Q900	G-4	X50	A-5
✱D704	K-6	IC711	L-6	✱Q901	F-4		
✱D705	H-6	IC712	L-7	Q902	G-6		
✱D706	K-6	IC713	L-6	Q903	E-6		
✱D707	H-6	IC714	J-6	✱Q904	G-4		
✱D900	D-5	IC715	J-7	Q905	E-4		
✱D903	G-6	IC716	K-6	Q906	G-7		
✱D904	F-6	IC717	H-4	Q907	E-7		
✱D905	G-7	IC718	H-5	✱Q1000	D-4		
✱D906	E-7	IC900	F-3	✱Q1001	E-4		
✱D907	F-6	IC901	D-5				
✱D908	E-6	IC902	G-4	✱RB51	A-6		
✱D909	F-6	IC903	D-5	✱RB53	A-4		
✱D910	E-6	IC904	G-5	✱RB54	A-5		
✱D1101	E-1	IC905	F-5	✱RB55	C-6		
✱D1103	E-2	IC906	F-3				
✱D1105	E-1	IC907	E-5	RV500	P-5		
✱D1107	E-2	IC908	G-5	RV501	M-5		
✱D1108	F-1	IC909	F-5	RV700	K-5		
✱D1109	F-2	IC910	D-6	RV701	H-5		
		IC911	D-6	RV900	D-4		
E1	A-2	IC912	E-5	RV901	F-5		
E2	B-1	IC913	H-5	RV902	E-5		
E50	A-5	IC914	F-6	RV903	E-4		
E500	R-5	IC915	E-6				
E501	P-5	IC916	G-6	RY502	P-7		
E700	M-5	IC917	E-6	RY503	M-7		
E701	K-5	IC918	G-6	RY702	K-7		
E900	H-5	IC919	G-7	RY703	H-7		
E901	F-5	IC920	H-6	RY900	G-5		
		IC921	E-6	RY901	F-5		
FB1300	B-4	IC922	E-7	RY902	F-7		
		IC923	F-6	RY903	E-7		
IC1	A-1	IC1101	D-2				
IC2	B-5	IC1106	E-2	SL500	P-6		
IC3	A-3	IC1107	E-2	SL501	P-6		
IC4	C-2	IC1108	F-2	SL502	P-5		
IC5	B-2	IC1109	D-1	SL503	M-6		
IC51	A-6	IC1110	E-1	SL504	M-6		
IC52	A-5	IC1111	F-1	SL505	M-5		
IC53	A-4	IC1112	D-1	SL506	P-5		
IC54	C-6	IC1113	D-3	SL507	P-5		
IC56	B-7	IC1300	A-4	SL509	N-5		
IC57	A-5	IC1301	B-4	SL510	N-5		
IC58	C-7	IC1304	C-4	SL700	K-6		
IC59	F-7	IC1306	A-7	SL701	K-6		
IC60	E-7	IC1307	B-7	SL702	K-5		
IC500	R-3	IC1308	C-5	SL703	J-6		
IC501	N-4	IC1309	C-5	SL704	J-6		
IC502	P-5			SL705	J-5		
IC503	N-5	PS1100	A-7	SL706	L-5		
IC504	M-3			SL707	L-5		
IC505	R-5	Q1	D-6	SL709	J-5		

✱ : B SIDE

LOT NO. B-2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SONY MADE IN JAPAN
1-648-534-31
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E500
E901
E800
RV900
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TP902
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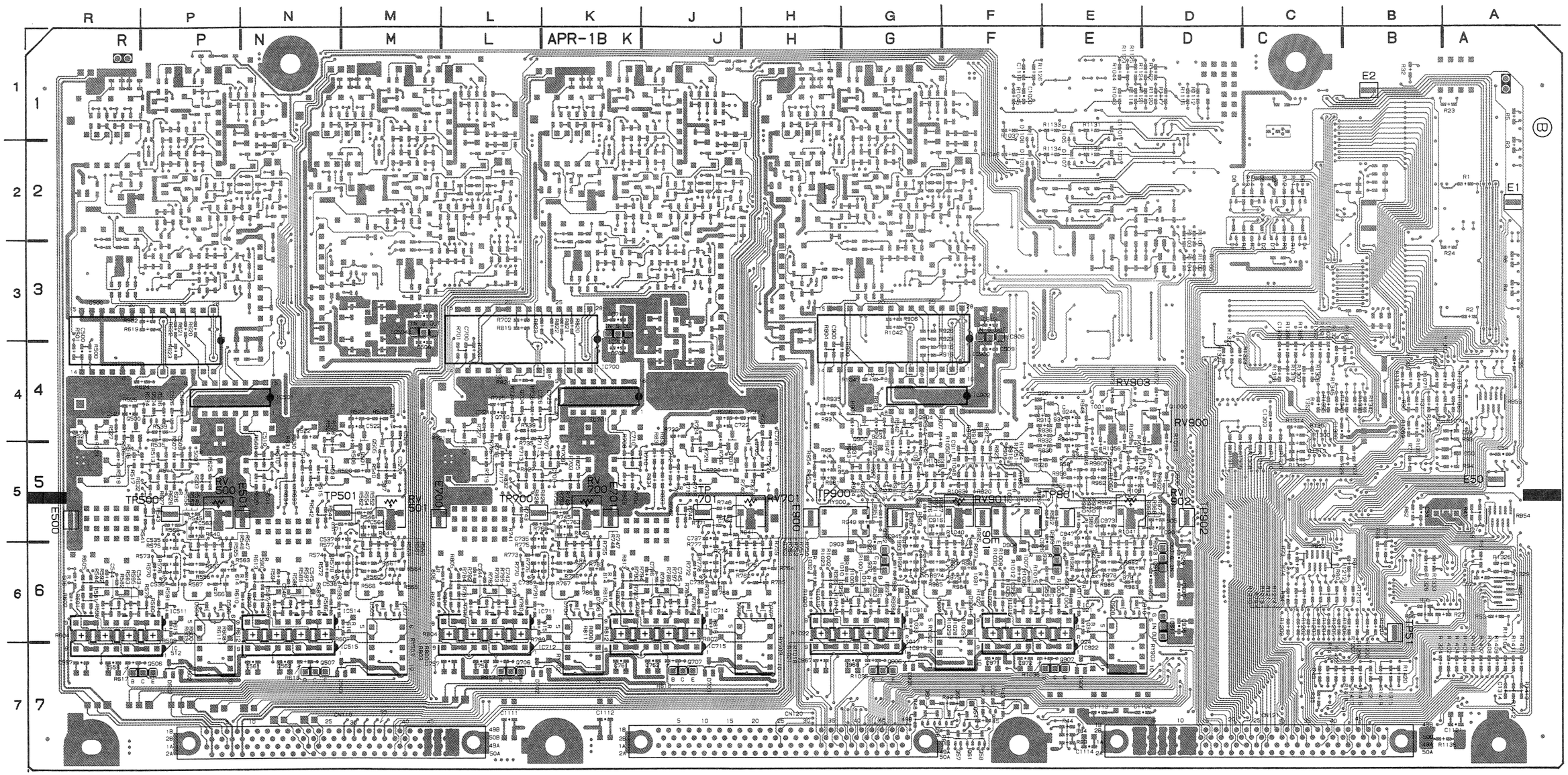


APR-1B BOARD -B SIDE-

1-648-534-31 (LOT No. 308 - 402)

DVW-510(J)	; APR-1B	MCB
DVW-510(UC)	; APR-1B	MCB
DVW-510P(EK)	; APR-1BP	MCB

APR-1BA ; Audio signal processor (with LAU interface), D/A, AES/EBU interface

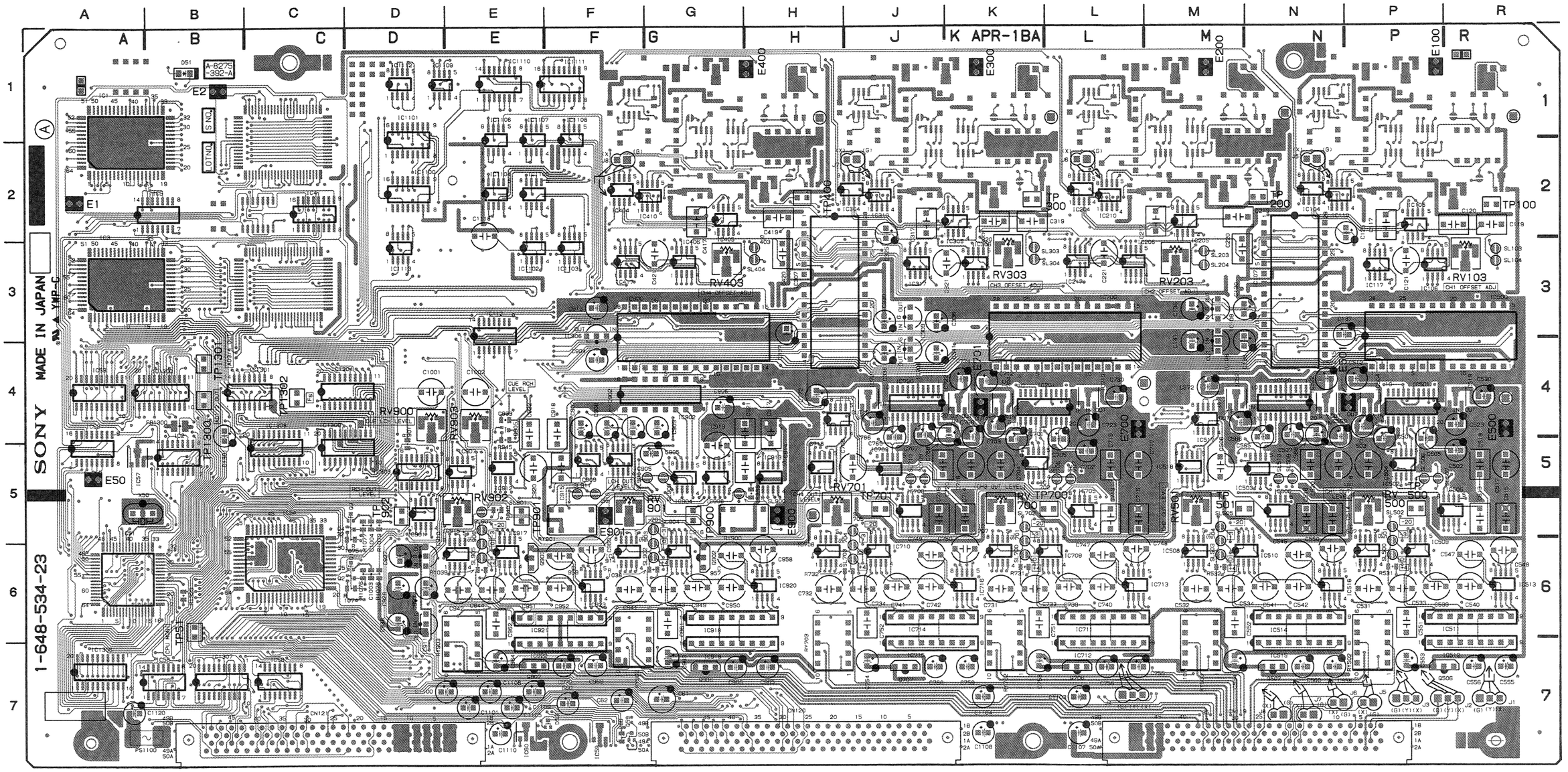
(Board's Lot No. 501 through 909)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(J)
DVW-CA510(UC)
DVW-CA510P(EK)

APR-1BA(1-648-534-23)

CN119	N-7	IC1	A-1	IC712	L-7	✱Q302	J-2	SL702	K-5
CN120	H-7	IC2	B-5	IC713	L-6	✱Q401	F-2	SL703	J-6
CN121	C-7	IC3	A-3	IC714	J-6	✱Q402	G-2	SL704	J-6
		IC4	C-2	IC715	J-7	✱Q500	R-5	SL705	J-5
✱D1	D-2	IC5	B-2	IC716	K-6	✱Q501	N-5	SL706	L-5
✱D2	C-2	IC51	A-6	IC717	H-4	✱Q504	R-4	SL707	L-5
✱D3	C-2	IC52	A-5	IC718	H-5	✱Q505	M-5	SL709	J-5
✱D4	C-2	IC53	A-4	IC719	L-4	Q506	P-7	SL710	J-5
✱D5	C-2	IC54	C-6	IC720	J-4	Q507	N-7	SL900	G-5
✱D6	C-2	IC56	B-7	IC721	J-4	✱Q700	L-5	SL901	E-5
✱D7	C-2	IC57	A-5	IC722	K-4	✱Q701	J-5	SL902	G-6
✱D8	D-2	IC58	C-7	IC900	F-3	✱Q704	L-4	SL903	G-6
✱D50	A-5	IC59	F-7	IC901	D-5	✱Q705	H-5	SL904	G-5
D51	B-1	IC60	E-7	IC902	G-4	Q706	L-7	SL905	E-6
✱D52	F-7	IC104	N-2	IC903	D-5	Q707	J-7	SL906	E-6
D53	F-7	IC105	P-2	IC904	G-5	✱Q900	G-4	SL907	E-5
✱D104	P-3	IC106	P-3	IC905	F-5	✱Q901	E-4	SL908	F-5
✱D105	P-3	IC107	N-3	IC906	F-3	Q902	G-6	SL909	G-5
✱D204	M-3	IC108	M-4	IC907	E-5	Q903	E-6	SL910	F-5
✱D205	M-3	IC109	M-3	IC908	G-5	✱Q904	G-4	SL911	F-5
✱D304	J-3	IC110	N-2	IC909	F-5	Q905	E-4		
✱D305	J-3	IC112	E-3	IC910	D-6	Q906	G-7	TP51	B-6
✱D404	H-3	IC117	P-3	IC911	D-6	Q907	E-7	TP100	R-2
✱D405	H-3	IC204	L-2	IC912	E-5	✱Q1000	D-4	TP200	N-2
✱D500	P-4	IC205	M-2	IC913	H-5	✱Q1001	E-4	TP300	K-2
✱D501	M-4	IC206	L-3	IC914	F-6	✱Q1100	D-2	TP400	H-2
✱D502	P-7	IC210	L-2	IC915	E-6	✱Q1101	D-3	TP500	P-5
✱D503	N-7	IC217	L-3	IC916	G-6	✱Q1103	D-2	TP501	M-5
✱D504	P-6	IC304	J-2	IC917	E-6			TP700	L-5
✱D505	M-6	IC305	K-2	IC918	G-6	✱RB51	A-6	TP701	J-5
✱D506	P-6	IC306	K-3	IC919	G-7	✱RB53	A-4	TP900	G-5
✱D507	M-6	IC307	H-3	IC920	H-6	✱RB54	A-5	TP901	E-5
✱D700	K-4	IC308	J-4	IC921	E-6	✱RB55	C-6	TP902	D-5
✱D701	J-4	IC309	J-3	IC922	E-7			TP1300	B-4
✱D702	L-7	IC310	J-2	IC923	F-6	RV103	R-3	TP1301	B-4
✱D703	J-7	IC317	J-3	IC1100	D-2	RV203	M-3	TP1302	C-4
✱D704	K-6	IC404	F-2	IC1101	D-2	RV303	K-3		
✱D705	H-6	IC405	G-2	IC1102	E-3	RV403	G-3	X50	A-5
✱D706	K-6	IC406	G-3	IC1103	F-3	RV500	P-5		
✱D707	H-6	IC410	F-2	IC1104	E-2	RV501	M-5		
✱D900	D-5	IC417	F-3	IC1105	E-2	RV700	K-5		
✱D903	G-6	IC500	R-3	IC1106	E-2	RV701	H-5		
✱D904	F-6	IC501	P-4	IC1107	E-2	RV900	D-4		
✱D905	G-7	IC502	P-5	IC1108	F-2	RV901	F-5		
✱D906	E-7	IC503	N-5	IC1109	D-1	RV902	E-5		
✱D907	F-6	IC504	P-4	IC1110	E-1	RV903	E-4		
✱D908	E-6	IC505	R-5	IC1111	F-1				
✱D909	F-6	IC506	N-5	IC1112	D-1	RY502	P-7		
✱D910	E-6	IC507	P-6	IC1113	D-3	RY503	M-7		
✱D1100	E-2	IC508	M-6	IC1300	A-4	RY702	K-7		
✱D1101	E-1	IC509	P-6	IC1301	B-4	RY703	H-7		
✱D1102	E-2	IC510	N-6	IC1304	C-4	RY900	G-5		
✱D1103	E-2	IC511	P-6	IC1306	A-7	RY901	F-5		
✱D1104	E-2	IC512	P-7	IC1307	B-7	RY902	F-7		
✱D1105	E-1	IC513	R-6	IC1308	C-5	RY903	E-7		
✱D1106	E-2	IC514	N-6	IC1309	C-5				
✱D1107	E-2	IC515	N-7			SL103	R-3		
✱D1108	F-1	IC516	N-6	PS1100	A-7	SL104	R-3		
✱D1109	F-2	IC517	M-4			SL203	M-3		
		IC518	M-5	Q1	D-6	SL204	M-3		
E1	A-2	IC519	R-4	Q2	D-6	SL303	K-3		
E2	B-1	IC520	N-4	Q3	D-5	SL304	K-3		
E50	A-5	IC521	M-4	Q4	D-5	SL403	H-3		
E100	P-1	IC522	N-4	✱Q54	F-7	SL404	H-3		
E200	M-1	IC700	L-3	✱Q55	F-7	SL500	P-6		
E300	K-1	IC701	K-4	✱Q56	G-7	SL501	P-6		
E400	H-1	IC702	K-5	✱Q57	F-7	SL502	P-5		
E500	R-4	IC703	J-5	✱Q58	F-7	SL503	M-6		
E501	P-4	IC704	K-3	Q59	F-7	SL504	M-6		
E700	L-4	IC705	L-5	✱Q60	G-7	SL505	M-5		
E701	K-4	IC706	J-5	✱Q61	F-7	SL506	P-5		
E900	H-5	IC707	K-6	✱Q101	N-2	SL507	P-5		
E901	F-5	IC708	H-6	✱Q102	P-2	SL509	N-5		
		IC709	K-6	✱Q201	L-2	SL510	N-5		
FB1300	B-4	IC710	J-6	✱Q202	L-2	SL700	K-6		
		IC711	L-6	✱Q301	J-2	SL701	K-6		

✱ : B SIDE

LOT NO. B-2


SONY MADE IN JAPAN
1-648-534-23
APR-1BA
E1
E2
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E90
E100
E200
E300
E400
E700
E900
TP100
TP200
TP300
TP500
TP700
TP900
RV103
RV203
RV303
RV403
RV701
RV902
RV900
RV500
RV501
RV90
CH1 OFFSET ADJ
CH2 OFFSET ADJ
CH3 OFFSET ADJ
CH4 OFFSET ADJ
CUE RCH LEVEL
CUE LCH LEVEL
CH1 OUT LEVEL
CH2 OUT LEVEL
CH3 OUT LEVEL
CH4 OUT LEVEL
CN120
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CN1301
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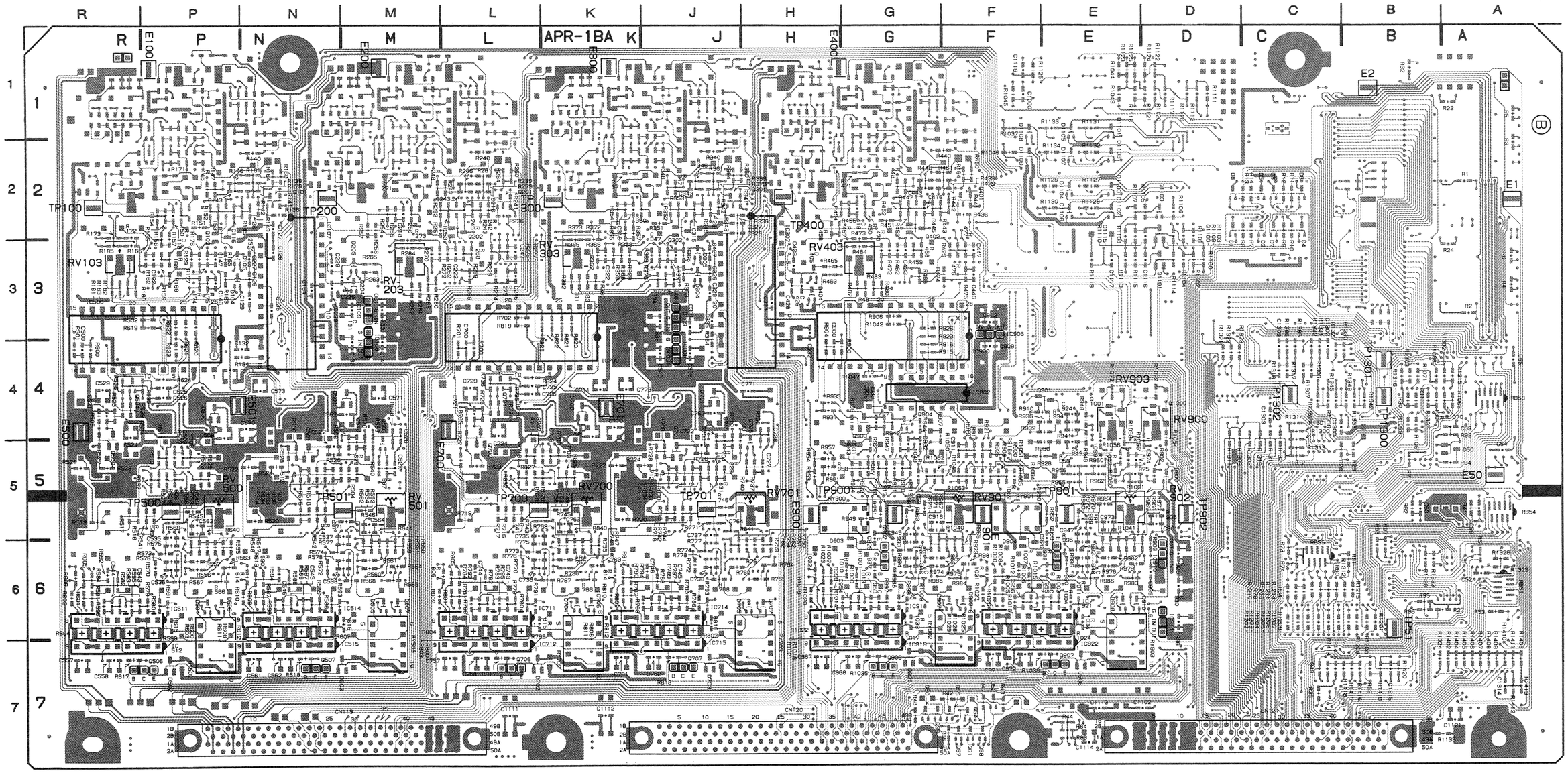


APR-1BA BOARD -B SIDE-

1-648-534-23 (LOT No. 501 - 909)

DVW-A510(J)	; APR-1BA	MCB
DVW-A510(UC)	; APR-1BA	MCB
DVW-A510P(EK)	; APR-1BAP	MCB
DVW-CA510(J)	; APR-1BA	MCB
DVW-CA510(UC)	; APR-1BA	MCB
DVW-CA510P(EK)	; APR-1BAP	MCB

APR-1BA ; Audio signal processor (with LAU interface), D/A, AES/EBU interface

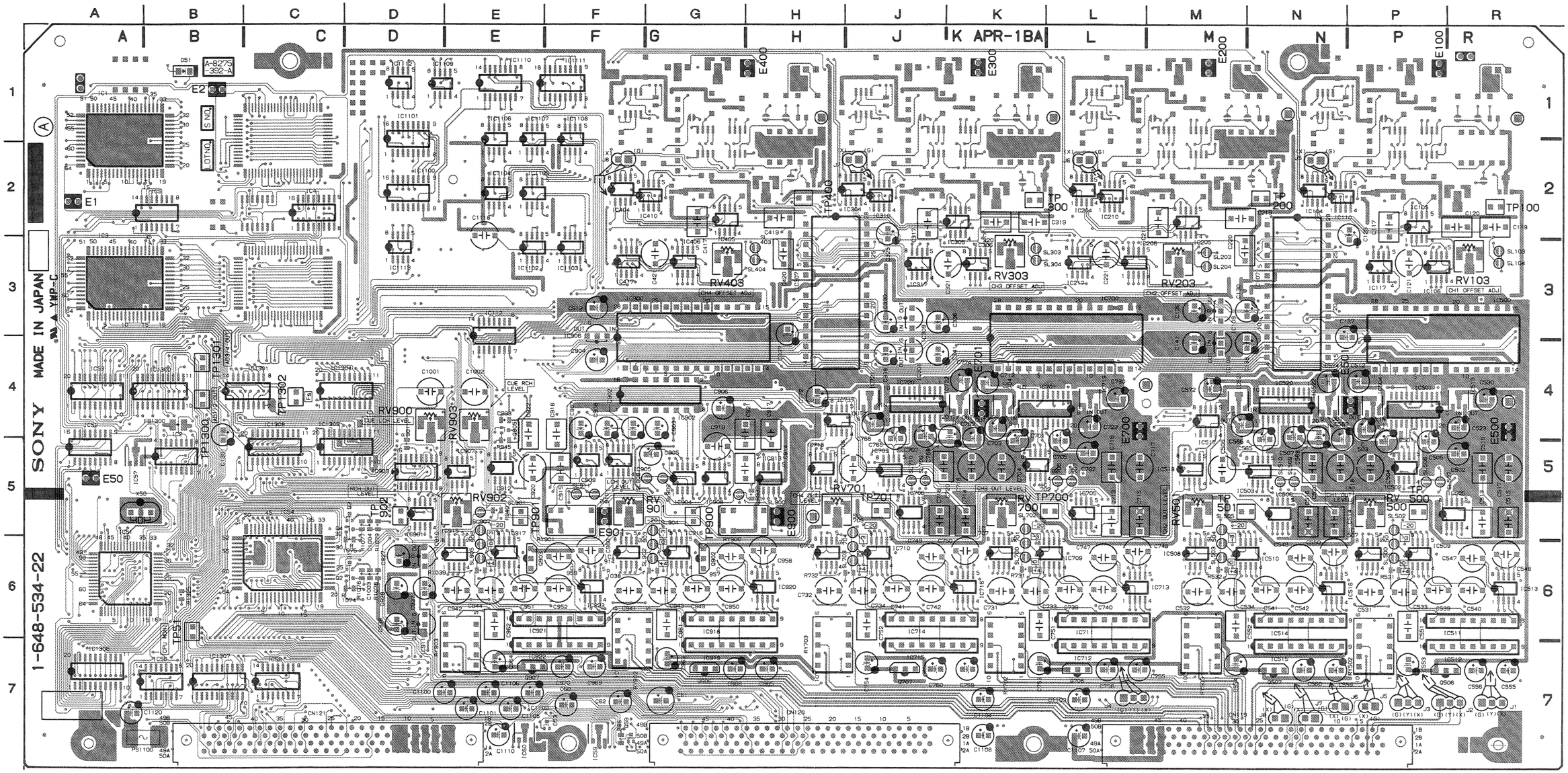
(Board's Lot No. 403 through 412)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

APR-1BA(1-648-534-22)

CN119	N-7	IC1	A-1	IC712	L-7	✱Q302	J-2	SL702	K-5
CN120	H-7	IC2	B-5	IC713	L-6	✱Q401	F-2	SL703	J-6
CN121	C-7	IC3	A-3	IC714	J-6	✱Q402	G-2	SL704	J-6
		IC4	C-2	IC715	J-7	✱Q500	R-5	SL705	J-5
✱D1	D-2	IC5	B-2	IC716	K-6	✱Q501	N-5	SL706	L-5
✱D2	C-2	IC51	A-6	IC717	H-4	✱Q504	R-4	SL707	L-5
✱D3	C-2	IC52	A-5	IC718	H-5	✱Q505	M-5	SL709	J-5
✱D4	C-2	IC53	A-4	IC719	L-4	Q506	P-7	SL710	J-5
✱D5	C-2	IC54	C-6	IC720	J-4	Q507	N-7	SL900	G-5
✱D6	C-2	IC56	B-7	IC721	J-4	✱Q700	L-5	SL901	E-5
✱D7	C-2	IC57	A-5	IC722	K-4	✱Q701	J-5	SL902	G-6
✱D8	D-2	IC58	C-7	IC900	F-3	✱Q704	L-4	SL903	G-6
✱D50	A-5	IC59	F-7	IC901	D-5	✱Q705	H-5	SL904	G-5
D51	B-1	IC60	E-7	IC902	G-4	Q706	L-7	SL905	E-6
✱D52	F-7	IC104	N-2	IC903	D-5	Q707	J-7	SL906	E-6
D53	F-7	IC105	P-2	IC904	G-5	✱Q900	G-4	SL907	E-5
✱D104	P-3	IC106	P-3	IC905	F-5	✱Q901	E-4	SL908	F-5
✱D105	P-3	IC107	N-3	IC906	F-3	Q902	G-6	SL909	G-5
✱D204	M-3	IC108	M-4	IC907	E-5	Q903	E-6	SL910	F-5
✱D205	M-3	IC109	M-3	IC908	G-5	✱Q904	G-4	SL911	F-5
✱D304	J-3	IC110	N-2	IC909	F-5	Q905	E-4		
✱D305	J-3	IC112	E-3	IC910	D-6	Q906	G-7	TP51	B-6
✱D404	H-3	IC117	P-3	IC911	D-6	Q907	E-7	TP100	R-2
✱D405	H-3	IC204	L-2	IC912	E-5	✱Q1000	D-4	TP200	N-2
✱D500	P-4	IC205	M-2	IC913	H-5	✱Q1001	E-4	TP300	K-2
✱D501	M-4	IC206	L-3	IC914	F-6	✱Q1100	D-2	TP400	H-2
✱D502	P-7	IC210	L-2	IC915	E-6	✱Q1101	D-3	TP500	P-5
✱D503	N-7	IC217	L-3	IC916	G-6	✱Q1103	D-2	TP501	M-5
✱D504	P-6	IC304	J-2	IC917	E-6			TP700	L-5
✱D505	M-6	IC305	K-2	IC918	G-6	✱RB51	A-6	TP701	J-5
✱D506	P-6	IC306	K-3	IC919	G-7	✱RB53	A-4	TP900	G-5
✱D507	M-6	IC307	H-3	IC920	H-6	✱RB54	A-5	TP901	E-5
✱D700	K-4	IC308	J-4	IC921	E-6	✱RB55	C-6	TP902	D-5
✱D701	J-4	IC309	J-3	IC922	E-7			TP1300	B-4
✱D702	L-7	IC310	J-2	IC923	F-6	RV103	R-3	TP1301	B-4
✱D703	J-7	IC317	J-3	IC1100	D-2	RV203	M-3	TP1302	C-4
✱D704	K-6	IC404	F-2	IC1101	D-2	RV303	K-3		
✱D705	H-6	IC405	G-2	IC1102	E-3	RV403	G-3	X50	A-5
✱D706	K-6	IC406	G-3	IC1103	F-3	RV500	P-5		
✱D707	H-6	IC410	F-2	IC1104	E-2	RV501	M-5		
✱D900	D-5	IC417	F-3	IC1105	E-2	RV700	K-5		
✱D903	G-6	IC500	R-3	IC1106	E-2	RV701	H-5		
✱D904	F-6	IC501	P-4	IC1107	E-2	RV900	D-4		
✱D905	G-7	IC502	P-5	IC1108	F-2	RV901	F-5		
✱D906	E-7	IC503	N-5	IC1109	D-1	RV902	E-5		
✱D907	F-6	IC504	P-4	IC1110	E-1	RV903	E-4		
✱D908	E-6	IC505	R-5	IC1111	F-1				
✱D909	F-6	IC506	N-5	IC1112	D-1	RY502	P-7		
✱D910	E-6	IC507	P-6	IC1113	D-3	RY503	M-7		
✱D1100	E-2	IC508	M-6	IC1300	A-4	RY702	K-7		
✱D1101	E-1	IC509	P-6	IC1301	B-4	RY703	H-7		
✱D1102	E-2	IC510	N-6	IC1304	C-4	RY900	G-5		
✱D1103	E-2	IC511	P-6	IC1306	A-7	RY901	F-5		
✱D1104	E-2	IC512	P-7	IC1307	B-7	RY902	F-7		
✱D1105	E-1	IC513	R-6	IC1308	C-5	RY903	E-7		
✱D1106	E-2	IC514	N-6	IC1309	C-5				
✱D1107	E-2	IC515	N-7			SL103	R-3		
✱D1108	F-1	IC516	N-6	PS1100	A-7	SL104	R-3		
✱D1109	F-2	IC517	M-4			SL203	M-3		
		IC518	M-5	Q1	D-6	SL204	M-3		
E1	A-2	IC519	R-4	Q2	D-6	SL303	K-3		
E2	B-1	IC520	N-4	Q3	D-5	SL304	K-3		
E50	A-5	IC521	M-4	Q4	D-5	SL403	H-3		
E100	P-1	IC522	N-4	✱Q54	F-7	SL404	H-3		
E200	M-1	IC700	L-3	✱Q55	F-7	SL500	P-6		
E300	K-1	IC701	K-4	✱Q56	G-7	SL501	P-6		
E400	H-1	IC702	K-5	✱Q57	F-7	SL502	P-5		
E500	R-4	IC703	J-5	✱Q58	F-7	SL503	M-6		
E501	P-4	IC704	K-3	Q59	F-7	SL504	M-6		
E700	L-4	IC705	L-5	✱Q60	G-7	SL505	M-5		
E701	K-4	IC706	J-5	✱Q61	F-7	SL506	P-5		
E900	H-5	IC707	K-6	✱Q101	N-2	SL507	P-5		
E901	F-5	IC708	H-6	✱Q102	P-2	SL509	N-5		
		IC709	K-6	✱Q201	L-2	SL510	N-5		
FB1300	B-4	IC710	J-6	✱Q202	L-2	SL700	K-6		
		IC711	L-6	✱Q301	J-2	SL701	K-6		

✱ : B SIDE

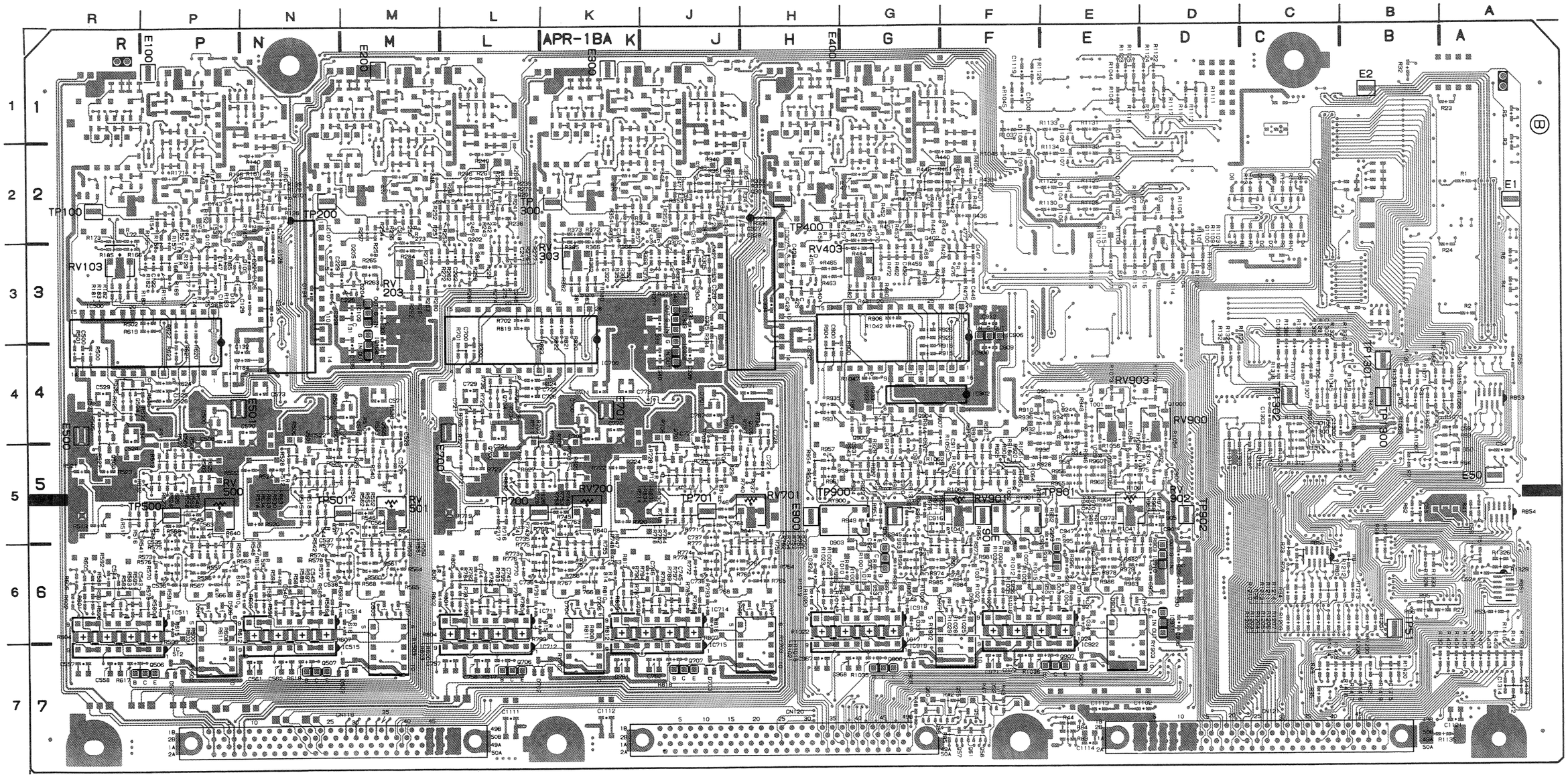
LOT NO. B-2



APR-1BA BOARD -A SIDE-

1-648-534-22 (LOT No. 403 - 412)

DVW-A510(J)	; APR-1BA	MCB
DVW-A510(UC)	; APR-1BA	MCB
DVW-A510P(EK)	; APR-1BAP	MCB
DVW-CA510(UC)	; APR-1BA	MCB
DVW-CA510P(EK)	; APR-1BAP	MCB



APR-1BA BOARD -B SIDE-

1-648-534-22 (LOT No. 403 - 412)

DVW-A510(J)	; APR-1BA	MCB
DVW-A510(UC)	; APR-1BA	MCB
DVW-A510P(EK)	; APR-1BAP	MCB
DVW-CA510(UC)	; APR-1BA	MCB
DVW-CA510P(EK)	; APR-1BAP	MCB

APR-1BA ; Audio signal processor(with LAU interface), D/A, AES/EBU interface

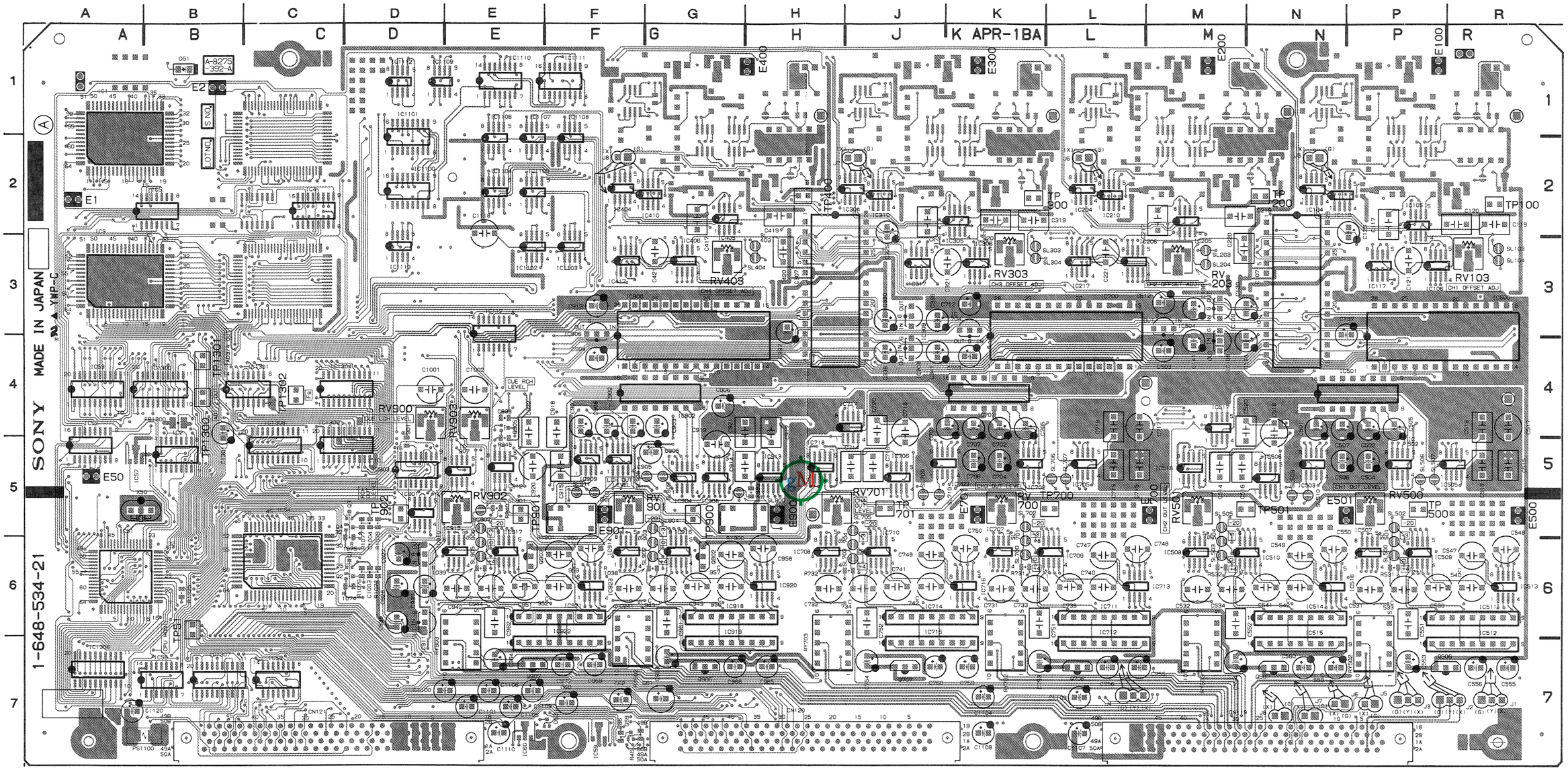
(Board's Lot No. 307 through 402)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

APR-1BA(1-648-534-21)

CN119	N-7	IC5	B-2	IC901	D-5	✱Q705	H-5	SL904	G-5
CN120	H-7	IC51	A-6	IC902	F-4	Q706	L-7	SL905	E-6
CN121	C-7	IC52	A-5	IC903	D-5	Q707	J-7	SL906	E-6
		IC53	A-4	IC904	G-5	✱Q900	G-4	SL907	E-5
✱D1	D-2	IC54	C-6	IC905	F-5	✱Q901	F-4	SL908	F-5
✱D2	C-2	IC56	B-7	IC906	F-3	Q902	G-6	SL909	G-5
✱D3	C-2	IC57	A-5	IC907	E-5	Q903	E-6	SL910	F-5
✱D4	C-2	IC58	C-7	IC908	G-5	✱Q904	G-4	SL911	F-5
✱D5	C-2	IC59	F-7	IC909	F-5	Q905	E-4		
✱D6	C-2	IC60	E-7	IC910	D-6	Q906	G-7	TP51	B-6
✱D7	C-2	IC104	N-2	IC911	D-6	Q907	E-7	TP100	R-2
✱D8	D-2	IC105	P-2	IC912	E-5	✱Q1000	D-4	TP200	N-2
✱D50	A-5	IC106	P-3	IC913	H-5	✱Q1001	E-4	TP300	K-2
D51	B-1	IC107	N-3	IC914	F-6	✱Q1100	D-2	TP400	H-2
✱D52	F-7	IC108	M-4	IC915	E-6	✱Q1101	D-3	TP500	P-5
D53	F-7	IC109	M-3	IC916	G-6	✱Q1103	D-2	TP501	N-5
✱D104	P-3	IC110	N-2	IC917	E-6			TP700	L-5
✱D105	P-3	IC112	E-3	IC918	G-6	✱RB51	A-6	TP701	J-5
✱D204	M-3	IC117	P-3	IC919	G-7	✱RB53	A-4	TP900	G-5
✱D205	M-3	IC204	L-2	IC920	H-6	✱RB54	A-5	TP901	E-5
✱D304	J-3	IC205	M-2	IC921	E-6	✱RB55	C-6	TP902	D-5
✱D305	J-3	IC206	L-3	IC922	E-7			TP1300	B-4
✱D404	H-3	IC210	L-2	IC923	F-6	RV103	R-3	TP1301	B-4
✱D405	H-3	IC217	L-3	IC1100	D-2	RV203	M-3	TP1302	C-4
✱D502	P-7	IC304	J-2	IC1101	D-2	RV303	K-3		
✱D503	N-7	IC305	K-2	IC1102	E-3	RV403	G-3	X50	A-5
✱D504	P-6	IC306	K-3	IC1103	F-3	RV500	P-5		
✱D505	M-6	IC307	H-3	IC1104	E-2	RV501	M-5		
✱D506	P-6	IC308	J-4	IC1105	E-2	RV700	K-5		
✱D507	M-6	IC309	J-3	IC1106	E-2	RV701	H-5		
✱D702	L-7	IC310	J-2	IC1107	E-2	RV900	D-4		
✱D703	J-7	IC317	J-3	IC1108	F-2	RV901	F-5		
✱D704	K-6	IC404	F-2	IC1109	D-1	RV902	E-5		
✱D705	H-6	IC405	G-2	IC1110	E-1	RV903	E-4		
✱D706	K-6	IC406	G-3	IC1111	F-1				
✱D707	H-6	IC410	F-2	IC1112	D-1	RY502	P-7		
✱D900	D-5	IC417	F-3	IC1113	D-3	RY503	M-7		
✱D903	G-6	IC500	R-3	IC1300	A-4	RY702	K-7		
✱D904	F-6	IC501	N-4	IC1301	B-4	RY703	H-7		
✱D905	G-7	IC502	P-5	IC1304	C-4	RY900	G-5		
✱D906	E-7	IC503	N-5	IC1306	A-7	RY901	F-5		
✱D907	F-6	IC504	M-3	IC1307	B-7	RY902	F-7		
✱D908	E-6	IC505	R-5	IC1308	C-5	RY903	E-7		
✱D909	F-6	IC506	N-5	IC1309	C-5				
✱D910	E-6	IC507	P-6			SL103	R-3		
✱D1100	E-2	IC508	M-6	PS1100	A-7	SL104	R-3		
✱D1101	E-1	IC509	P-6			SL203	M-3		
✱D1102	E-2	IC510	N-6	Q1	D-6	SL204	M-3		
✱D1103	E-2	IC511	P-6	Q2	D-6	SL303	K-3		
✱D1104	E-2	IC512	P-7	Q3	D-5	SL304	K-3		
✱D1105	E-1	IC513	R-6	Q4	D-5	SL403	H-3		
✱D1106	E-2	IC514	N-6	✱Q54	F-7	SL404	H-3		
✱D1107	E-2	IC515	N-7	✱Q55	F-7	SL500	P-6		
✱D1108	F-1	IC516	N-6	✱Q56	G-7	SL501	P-6		
✱D1109	F-2	IC517	M-4	✱Q57	F-7	SL502	P-5		
		IC518	M-5	✱Q58	F-7	SL503	M-6		
E1	A-2	IC700	L-3	Q59	F-7	SL504	M-6		
E2	B-1	IC701	K-4	✱Q60	G-7	SL505	M-5		
E50	A-5	IC702	K-5	✱Q61	F-7	SL506	P-5		
E100	P-1	IC703	J-5	✱Q101	N-2	SL507	P-5		
E200	M-1	IC704	K-3	✱Q102	P-2	SL509	N-5		
E300	K-1	IC705	L-5	✱Q201	L-2	SL510	N-5		
E400	H-1	IC706	J-5	✱Q202	L-2	SL700	K-6		
E500	R-5	IC707	K-6	✱Q301	J-2	SL701	K-6		
E501	P-5	IC708	H-6	✱Q302	J-2	SL702	K-5		
E700	M-5	IC709	K-6	✱Q401	F-2	SL703	J-6		
E701	K-5	IC710	J-6	✱Q402	G-2	SL704	J-6		
E900	H-5	IC711	L-6	✱Q500	R-4	SL705	J-5		
E901	F-5	IC712	L-7	✱Q501	M-5	SL706	L-5		
		IC713	L-6	✱Q504	P-4	SL707	L-5		
FB1300	B-4	IC714	J-6	✱Q505	M-5	SL709	J-5		
		IC715	J-7	Q506	P-7	SL710	J-5		
IC1	A-1	IC716	K-6	Q507	N-7	SL900	G-5		
IC2	B-5	IC717	H-4	✱Q700	L-4	SL901	E-5		
IC3	A-3	IC718	H-5	✱Q701	J-5	SL902	G-6		
IC4	C-2	IC900	F-3	✱Q704	L-4	SL903	G-6		

✱ : B SIDE

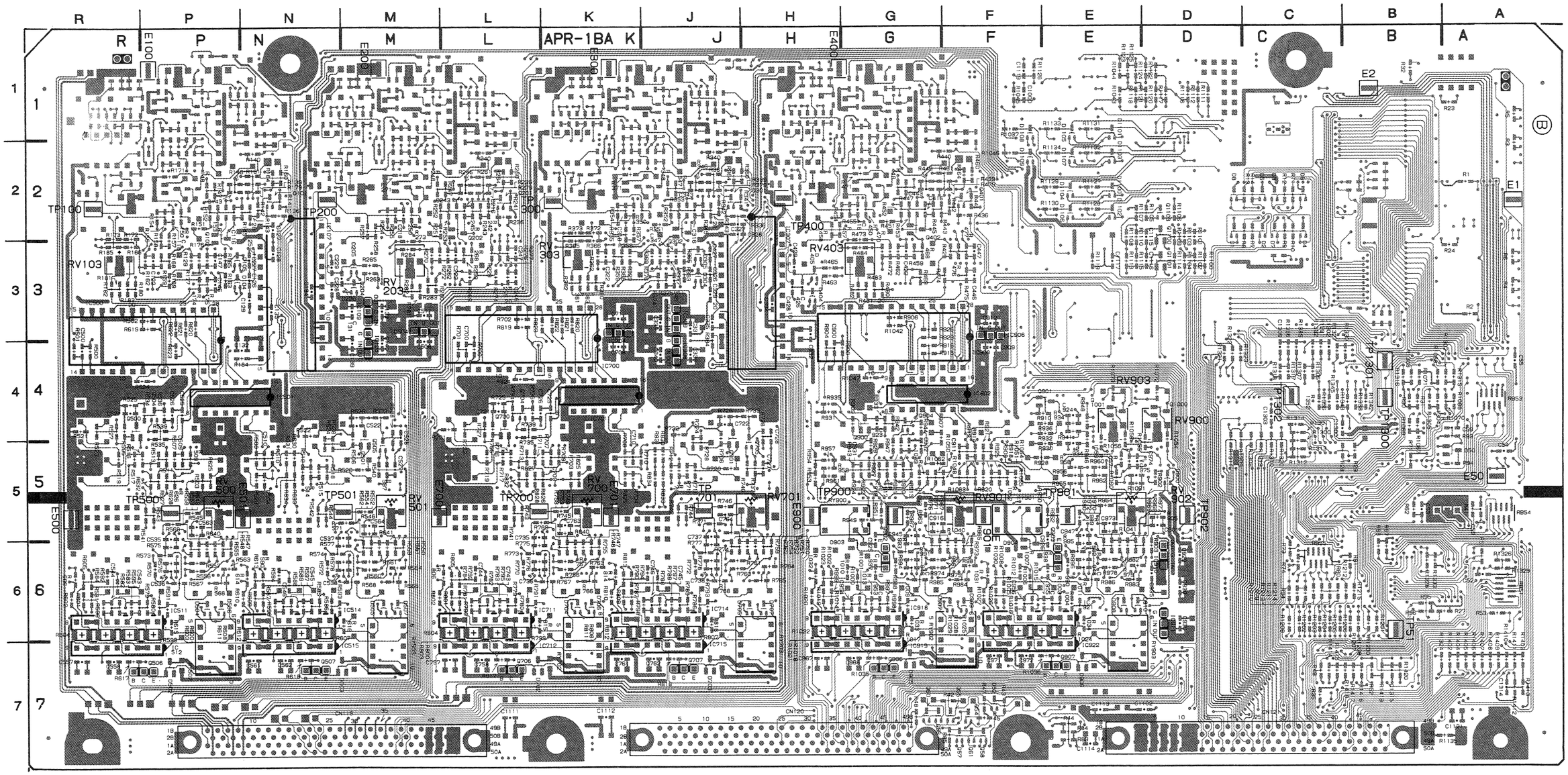
LOT NO. B-2



APR-1BA BOARD -A SIDE-

1-648-534-21 (LOT No. 307 - 402)

DVW-A510(J)	; APR-1BA	MCB
DVW-A510(UC)	; APR-1BA	MCB
DVW-A510P(EK)	; APR-1BAP	MCB
DVW-CA510(UC)	; APR-1BA	MCB
DVW-CA510P(EK)	; APR-1BAP	MCB



APR-1BA BOARD -B SIDE-

1-648-534-21 (LOT No. 307 - 402)

DVW-A510(J)	; APR-1BA	MCB
DVW-A510(UC)	; APR-1BA	MCB
DVW-A510P(EK)	; APR-1BAP	MCB
DVW-CA510(UC)	; APR-1BA	MCB
DVW-CA510P(EK)	; APR-1BAP	MCB

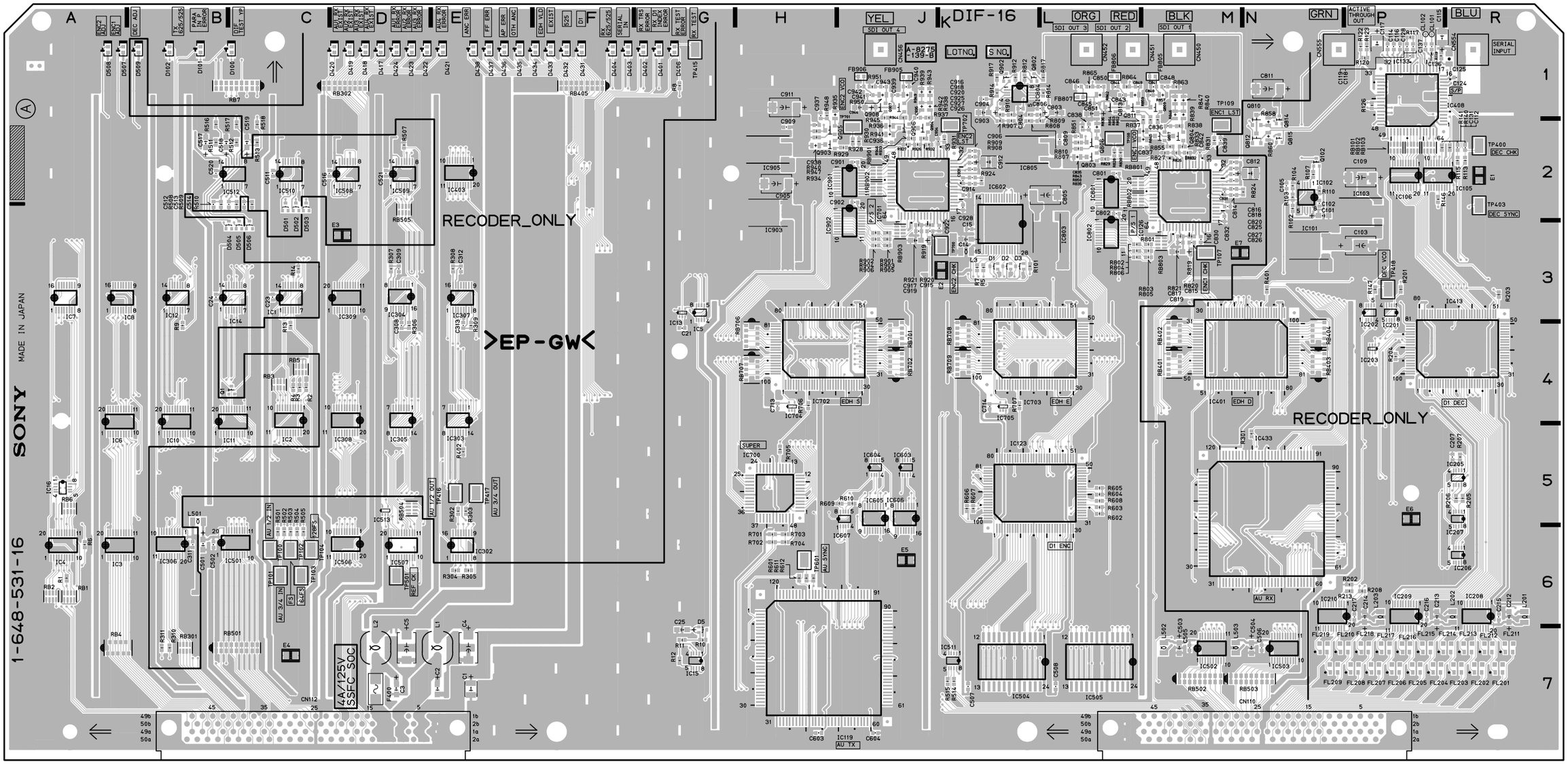
DIF-16 ; 4 : 2 : 2 component serial digital I/O interface with Embedded audio

(Board's Lot No. 907 and higher)
All DVWs

DIF-16 (1-648-531-16)

CL101	P1	FL207	P7	IC905	H2
CL102	P1	FL208	P7		
		FL209	N7	Q1	C4
CN110	N7	FL210	P7	Q102	N2
CN112	C7	FL211	R7	Q103	*P2
CN450	M1	FL212	R7	Q104	*P1
CN451	L1	FL213	R7	Q105	*N2
CN452	L1	FL214	R7	Q106	*N1
CN456	J1	FL215	P7	Q802	K1
CN554	R1	FL216	P7	Q803	L2
CN555	N1	FL217	P7	Q804	M2
		FL218	P7	Q805	*M2
D1	K3	FL219	N7	Q806	L2
D2	K3			Q807	M2
D3	K3	IC1	C3	Q808	*M2
D5	G7	IC2	C4	Q809	M1
D6	*C3	IC3	A6	Q810	N2
D100	C1	IC4	A6	Q811	L1
D101	B1	IC5	G3	Q812	N2
D102	B1	IC6	A5	Q813	L1
D401	G1	IC7	A3	Q814	N2
D402	G1	IC8	A3	Q815	N2
D403	F1	IC10	B5	Q902	K1
D404	F1	IC11	B5	Q903	H2
D406	G1	IC12	B3	Q904	J2
D417	D1	IC13	G3	Q905	H2
D418	D1	IC14	B3	Q906	J2
D419	D1	IC15	G7	Q907	J1
D420	D1	IC16	A5	Q908	J1
D421	E1	IC101	N3		
D422	D1	IC102	N2	RB1	A6
D423	D1	IC103	P2	RB2	A6
D424	D1	IC105	R2	RB3	C4
D431	F1	IC106	P2	RB4	A7
D432	F1	IC119	H7	RB5	C4
D433	F1	IC123	K5	RB6	A5
D434	F1	IC126	M2	RB7	C1
D435	E1	IC201	P3	RB101	P2
D436	E1	IC202	P3	RB102	P2
D437	E1	IC203	P4	RB103	P2
D438	E1	IC205	R5	RB301	B7
D501	C2	IC206	R6	RB302	D1
D502	C2	IC207	R5	RB401	M4
D503	C2	IC208	R6	RB402	M4
D504	C3	IC209	P6	RB403	N4
D505	C3	IC210	P6	RB404	N4
D506	C3	IC302	E6	RB405	F1
D507	A1	IC303	E4	RB501	C7
D508	A1	IC304	D3	RB502	M7
D509	B1	IC305	D4	RB503	N7
		IC306	B6	RB504	D5
E1	R2	IC307	E3	RB505	D2
E2	K3	IC308	D4	RB701	J4
E3	D3	IC309	D3	RB702	J4
E4	C7	IC401	N4	RB703	*J4
E5	J6	IC403	E2	RB704	*H4
E6	P5	IC408	P1	RB705	*H4
E7	M3	IC413	R4	RB706	H4
E8	*R2	IC433	N5	RB707	H4
E9	*F4	IC501	B6	RB708	K4
E10	*A7	IC502	M7	RB709	K4
E11	*R7	IC503	N7	RB710	*L4
E12	*A1	IC504	L7	RB711	*K4
		IC505	L7	RB712	*K4
F400	D7	IC506	D6	RB801	L2
		IC507	D6	RB802	L2
FB101	*N2	IC508	D2	RB803	M3
FB102	*P1	IC509	D2	RB901	J2
FB103	*P1	IC510	C2	RB902	J2
FB104	*P1	IC511	K7	RB903	J3
FB105	*N2	IC512	B2		
FB106	*N2	IC513	D5	TP100	C6
FB107	*N1	IC602	K2	TP101	C6
FB801	*L1	IC603	J5	TP102	C6
FB802	*M2	IC604	J5	TP103	C6
FB803	*M2	IC605	J5	TP104	C6
FB804	*L1	IC606	J5	TP107	M3
FB805	M1	IC607	J5	TP108	L2
FB806	L1	IC700	H5	TP109	M2
FB807	L1	IC701	J2	TP400	R2
FB901	*K1	IC702	H4	TP403	R2
FB902	*J2	IC703	K4	TP415	G1
FB903	*J2	IC704	H4	TP416	E5
FB904	*J1	IC705	K4	TP417	E5
FB905	J1	IC801	L2	TP418	P3
FB906	J1	IC802	L3	TP501	D6
FL201	R7	IC803	L3	TP601	H6
FL202	R7	IC804	K1	TP700	K3
FL203	R7	IC805	K2	TP701	J2
FL204	P7	IC901	J2	TP702	K2
FL205	P7	IC902	J2		
FL206	P7	IC903	H2	*:B SIDE	

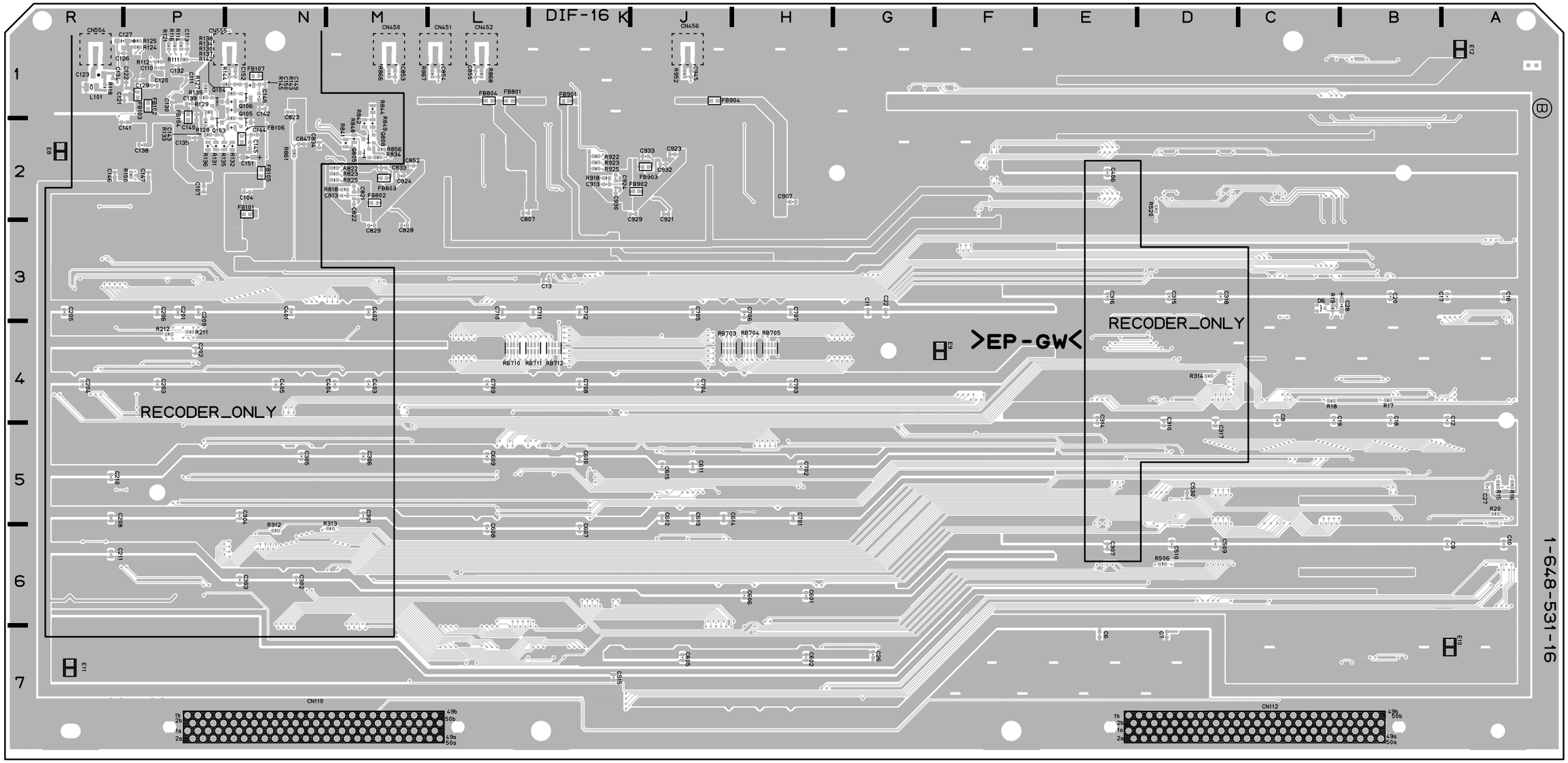
1-25 (d)



DIF-16 BOARD -A SIDE-

1-648-531-16 (LOT No. 907 -)

DVW-A500(J)	; DIF-16	MCB
DVW-A500(UC)	; DIF-16	MCB
DVW-A500P(EK)	; DIF-16	MCB
DVW-A500P(UC)	; DIF-16	MCB
DVW-500(J)	; DIF-16	MCB
DVW-500(UC)	; DIF-16	MCB
DVW-500P(EK)	; DIF-16	MCB
DVW-500P(UC)	; DIF-16	MCB
DVW-A510(J)	; DIF-16B	MCB
DVW-A510(UC)	; DIF-16B	MCB
DVW-A510P(EK)	; DIF-16B	MCB
DVW-510(J)	; DIF-16B	MCB
DVW-510(UC)	; DIF-16B	MCB
DVW-510P(EK)	; DIF-16B	MCB
DVW-CA510(J)	; DIF-16B	MCB
DVW-CA510(UC)	; DIF-16B	MCB
DVW-CA510P(EK)	; DIF-16B	MCB


DIF-16
RECODER_ONLY
RECODER_ONLY
>EP-GW<
CN110
CN112
1-648-531-16

DIF-16 ; 4 : 2 : 2 component serial digital I/O interface with Embedded audio

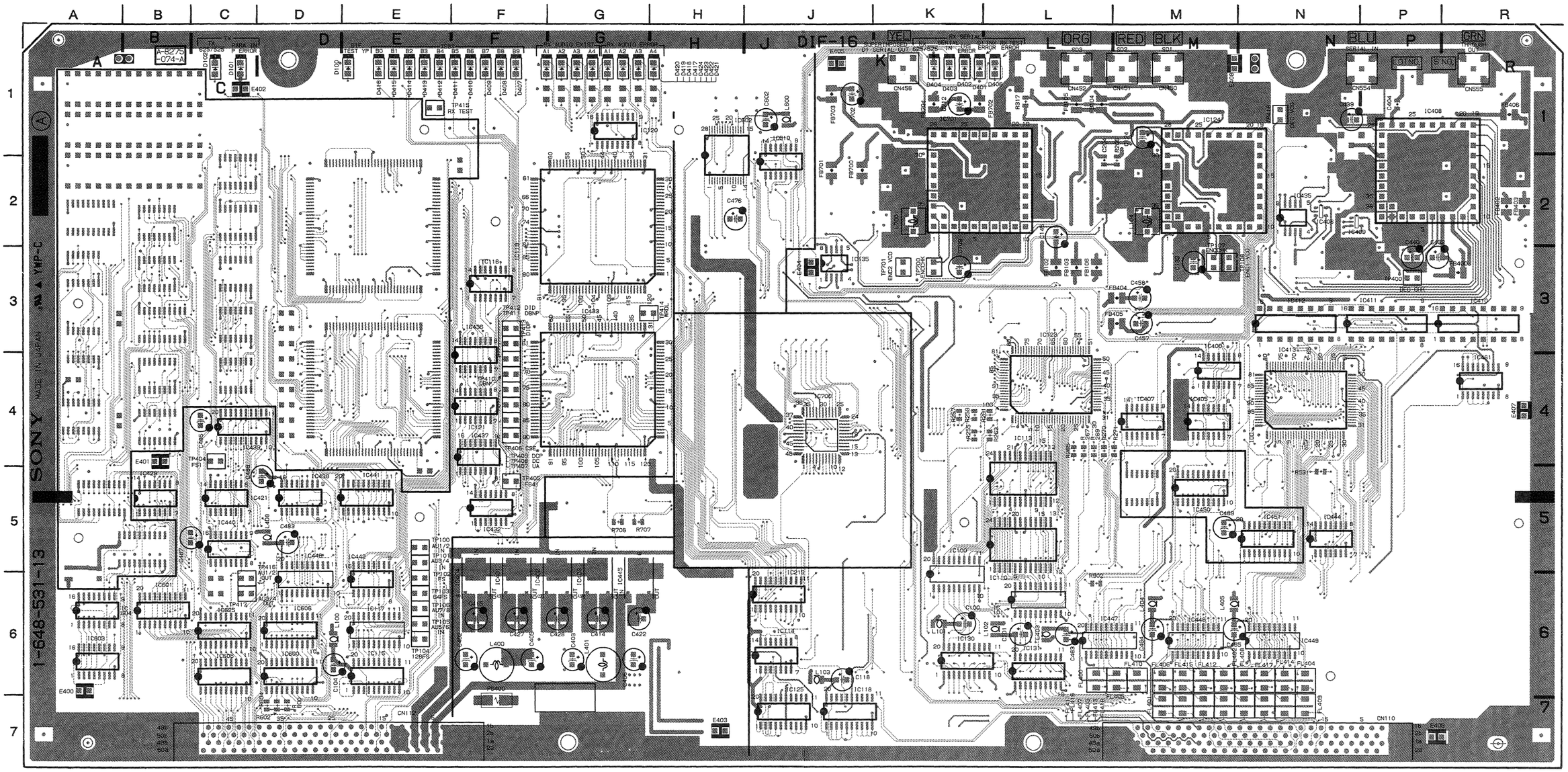
(Board's Lot No. 411 through 906)
All recorder models

DIF-16(1-648-531-13)

CN1	J-5	FB703	J-1	IC446	D-6	TP107	M-3
CN2	J-3	FB704	K-1	IC447	L-6	TP108	M-3
CN3	H-2			IC448	M-6	TP400	P-3
CN110	N-7	FL400	L-6	IC449	N-6	TP404	C-4
CN112	D-7	FL401	M-7	IC450	M-5	TP405	F-5
CN450	M-1	FL402	M-6	IC451	N-5	TP406	F-4
CN451	M-1	FL403	N-7	IC461	R-4	TP407	F-4
CN452	L-1	FL404	N-6	IC600	D-6	TP408	F-4
CN456	K-1	FL405	M-6	IC601	B-6	TP409	F-4
CN554	P-1	FL406	M-6	IC602	H-2	TP410	F-4
CN555	R-1	FL407	M-7	IC603	A-6	TP411	F-2
		FL408	N-6	IC604	A-6	TP412	F-3
D100	E-1	FL409	N-7	IC605	C-6	TP413	F-3
D101	C-1	FL410	M-6	IC606	D-6	TP414	H-2
D102	C-1	FL411	M-7	IC610	J-2	TP415	E-1
✱D103	M-1	FL412	M-6	IC625	C-6	TP416	C-6
✱D400	R-3	FL413	N-7	IC700	J-4	TP417	C-6
D401	K-1	FL414	N-6	IC701	K-2	TP418	N-1
D402	K-1	FL415	M-6			TP700	K-3
D403	K-1	FL416	M-7	PS400	F-7	TP701	K-3
D404	K-1	FL417	N-6				
✱D405	H-2	FL418	N-7	✱Q100	M-1		
D406	L-1			✱Q101	M-2		
D407	F-1	IC100	K-6	✱Q102	L-2		
D408	F-1	IC101	L-6	✱Q103	M-2		
D409	F-1	IC110	L-5	✱Q104	M-2		
D410	F-1	IC113	L-5	✱Q105	M-3		
D411	F-1	IC114	J-6	✱Q106	M-3		
D412	E-1	IC115	E-6	✱Q107	M-1		
D413	E-1	IC116	F-3	✱Q108	L-1		
D414	E-1	IC117	E-6	✱Q109	M-1		
D415	E-1	IC118	J-7	✱Q110	M-1		
D416	E-1	IC119	G-2	✱Q111	L-1		
D417	G-1	IC120	G-1	✱Q112	L-1		
D418	G-1	IC121	F-4	✱Q114	L-1		
D419	G-1	IC123	L-4	✱Q115	N-3		
D420	G-1	IC124	M-2	✱Q116	N-3		
D421	H-1	IC125	J-7	✱Q118	L-3		
D422	G-1	IC130	K-6	✱Q119	L-3		
D423	G-1	IC131	L-6	✱Q300	N-3		
D424	G-1	IC135	J-3	✱Q400	N-2		
✱D600	J-1	IC215	J-6	✱Q401	P-3		
✱D601	H-1	IC400	M-4	✱Q402	P-3		
✱D602	H-1	IC401	F-6	✱Q403	P-1		
✱D700	K-1	IC402	G-6	✱Q404	N-1		
		IC403	G-6	✱Q405	N-2		
E400	A-6	IC404	F-6	✱Q406	N-2		
E401	B-4	IC405	M-4	✱Q407	R-1		
E402	C-1	IC406	N-2	✱Q408	R-1		
E403	H-7	IC407	M-4	✱Q409	R-1		
E404	J-3	IC408	P-2	✱Q411	F-1		
E405	J-1	IC409	N-2	✱Q412	F-1		
E406	P-7	IC410	R-3	✱Q413	F-1		
E407	R-4	IC411	N-3	✱Q700	K-2		
E408	M-1	IC412	N-3	✱Q701	K-2		
		IC413	N-4	✱Q702	K-2		
FB102	L-3	IC421	C-5	✱Q703	K-2		
FB103	L-3	IC429	B-5	✱Q704	K-1		
FB104	L-1	IC432	F-5	✱Q705	K-3		
FB105	L-1	IC433	G-4	✱Q706	J-1		
FB106	L-3	IC435	N-2	✱Q707	K-1		
FB400	R-3	IC436	F-4	✱Q708	K-3		
FB402	R-2	IC437	F-5				
FB403	R-2	IC438	D-5	TP100	E-5		
FB404	M-3	IC439	C-4	TP101	E-5		
FB405	M-3	IC440	C-5	TP102	E-6		
FB406	R-1	IC441	E-5	TP103	E-6		
FB700	J-2	IC442	E-6	TP104	E-6		
FB701	J-2	IC444	N-5	TP105	E-6		
FB702	K-1	IC445	G-6	TP106	E-6		

✱ : B SIDE

LOT NO. P-1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A-8275
-074-A
1-648-531-13
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YEL
ORG
RED
BLK
BLU
GRN
CN458
CN452
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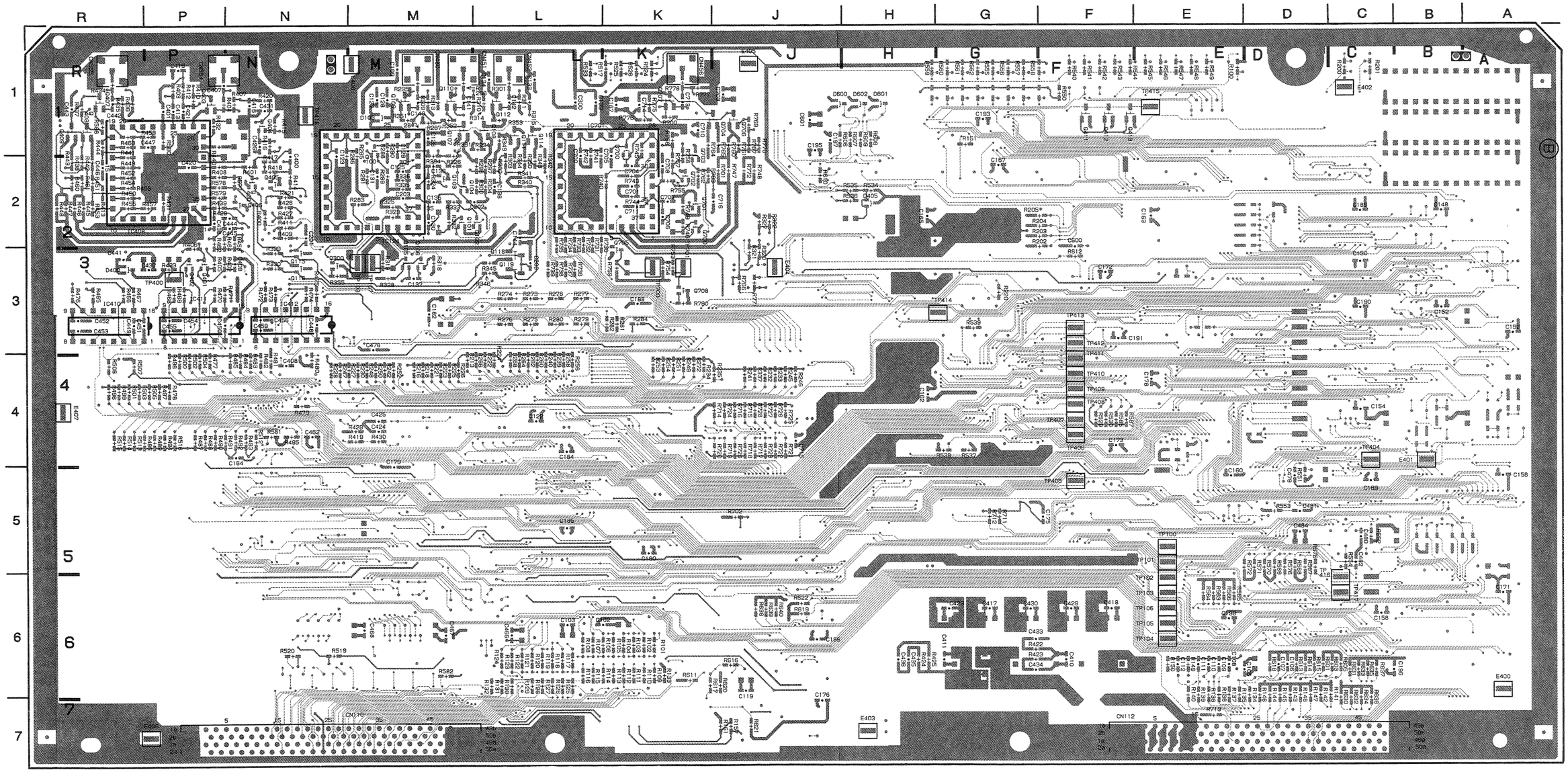


DIF-16 BOARD -B SIDE-

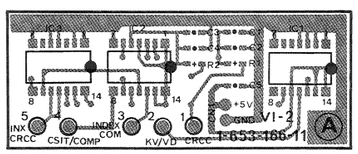
1-648-531-13 (LOT No. 411 - 906)

DVW-A500(J)	; DIF-16	MCB
DVW-A500(UC)	; DIF-16	MCB
DVW-A500P(EK)	; DIF-16P	MCB
DVW-A500P(UC)	; DIF-16PG	MCB
DVW-500(J)	; DIF-16	MCB
DVW-500(UC)	; DIF-16	MCB
DVW-500P(EK)	; DIF-16P	MCB
DVW-500P(UC)	; DIF-16PG	MCB

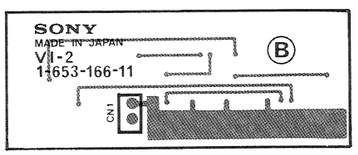
DIF-16, VI-2

DIF-16 ; 4 : 2 : 2 component serial digital I/O interface with Embedded audio
VI-2

(Board's Lot No. 307 through 410)
All recorder models



VI-2 BOARD -A SIDE-
1-653-166-11
for DIF-16 (1-648-531-12) of LOT No. 311 - 410



VI-2 BOARD -B SIDE-
1-653-166-11
for DIF-16 (1-648-531-12) of LOT No. 311 - 410

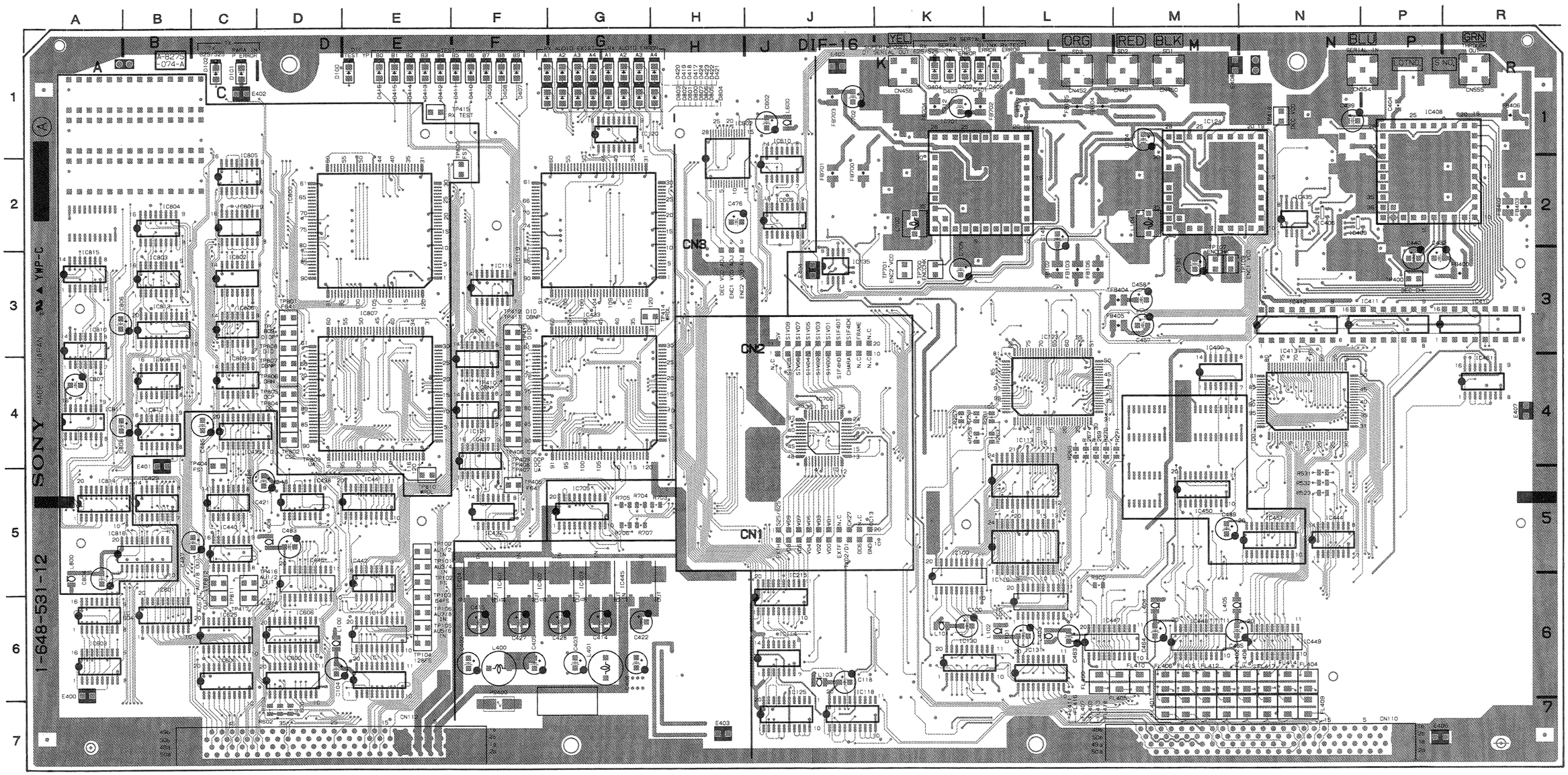
DIF-16(1-648-531-12)

CN1	J-5	FB703	J-1	IC448	M-6	TP106	E-6
CN2	J-3	FB704	K-1	IC449	N-6	TP107	M-3
CN3	H-2			IC450	M-5	TP108	M-3
CN110	N-7	FL400	L-6	IC451	N-5	TP400	P-3
CN112	D-7	FL401	M-7	IC461	R-4	TP404	C-4
CN450	M-1	FL402	M-6	IC600	D-6	TP405	F-5
CN451	M-1	FL403	N-7	IC601	B-6	TP406	F-4
CN452	L-1	FL404	N-6	IC602	H-2	TP407	F-4
CN456	K-1	FL405	M-6	IC603	A-6	TP408	F-4
CN554	P-1	FL406	M-6	IC604	A-6	TP409	F-4
CN555	R-1	FL407	M-7	IC605	C-6	TP410	F-4
		FL408	N-6	IC606	D-6	TP411	F-2
D100	E-1	FL409	N-7	IC609	J-2	TP412	F-3
D101	C-1	FL410	M-6	IC610	J-2	TP413	F-3
D102	C-1	FL411	M-7	IC625	C-6	TP414	H-2
✱D103	M-1	FL412	M-6	IC700	J-4	TP415	E-1
✱D400	R-3	FL413	N-7	IC701	K-2	TP416	C-6
D401	K-1	FL414	N-6	IC705	G-5	TP417	C-6
D402	K-1	FL415	M-6			TP418	N-1
D403	K-1	FL416	M-7	PS400	F-7	TP700	K-3
D404	K-1	FL417	N-6			TP701	K-3
✱D405	H-2	FL418	N-7	✱Q100	M-1		
D406	L-1			✱Q101	M-2		
D407	F-1	IC100	K-6	✱Q102	L-2		
D408	F-1	IC101	L-6	✱Q103	M-2		
D409	F-1	IC110	L-5	✱Q104	M-2		
D410	F-1	IC113	L-5	✱Q105	M-3		
D411	F-1	IC114	J-6	✱Q106	M-3		
D412	E-1	IC115	E-6	✱Q107	M-1		
D413	E-1	IC116	F-3	✱Q108	L-1		
D414	E-1	IC117	E-6	✱Q109	M-1		
D415	E-1	IC118	J-7	✱Q110	M-1		
D416	E-1	IC119	G-2	✱Q111	L-1		
D417	G-1	IC120	G-1	✱Q112	L-1		
D418	G-1	IC121	F-4	✱Q113	L-1		
D419	G-1	IC123	L-4	✱Q114	L-1		
D420	G-1	IC124	M-2	✱Q115	N-3		
D421	H-1	IC125	J-7	✱Q116	N-3		
D422	G-1	IC130	K-6	✱Q118	L-3		
D423	G-1	IC131	L-6	✱Q119	L-3		
D424	G-1	IC135	J-3	✱Q300	N-3		
✱D600	J-1	IC215	J-6	✱Q400	N-2		
✱D601	H-1	IC400	M-4	✱Q401	P-3		
✱D602	H-1	IC401	F-6	✱Q402	P-3		
✱D700	K-1	IC402	G-6	✱Q403	P-1		
		IC403	G-6	✱Q404	N-1		
E400	A-6	IC404	F-6	✱Q405	N-2		
E401	B-4	IC406	N-2	✱Q406	N-2		
E402	C-1	IC408	P-2	✱Q407	R-1		
E403	H-7	IC409	N-2	✱Q408	R-1		
E404	J-3	IC410	R-3	✱Q409	R-1		
E405	J-1	IC411	N-3	✱Q411	F-1		
E406	P-7	IC412	N-3	✱Q412	F-1		
E407	R-4	IC413	N-4	✱Q413	F-1		
E408	M-1	IC421	C-5	✱Q700	K-2		
		IC429	B-5	✱Q701	K-2		
FB102	L-3	IC432	F-5	✱Q702	K-2		
FB103	L-3	IC433	G-4	✱Q703	K-2		
FB104	L-1	IC435	N-2	✱Q704	K-1		
FB105	L-1	IC436	F-4	✱Q705	K-3		
FB106	L-3	IC437	F-5	✱Q706	J-1		
FB400	R-3	IC438	D-5	✱Q707	K-1		
FB402	R-2	IC439	C-4	✱Q708	K-3		
FB403	R-2	IC440	C-5				
FB404	M-3	IC441	E-5	TP100	E-5		
FB405	M-3	IC442	E-6	TP101	E-5		
FB406	R-1	IC444	N-5	TP102	E-6		
FB700	J-2	IC445	G-6	TP103	E-6		
FB701	J-2	IC446	D-6	TP104	E-6		
FB702	K-1	IC447	L-6	TP105	E-6		

✱ : B SIDE

LOT NO. P-1

1-25 (b)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A-8275
-074-A
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CN2
CN3
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ORG
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BLU
GRN
SERIAL IN
SERIAL OUT
THROUGH OUT
CN555
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CN456
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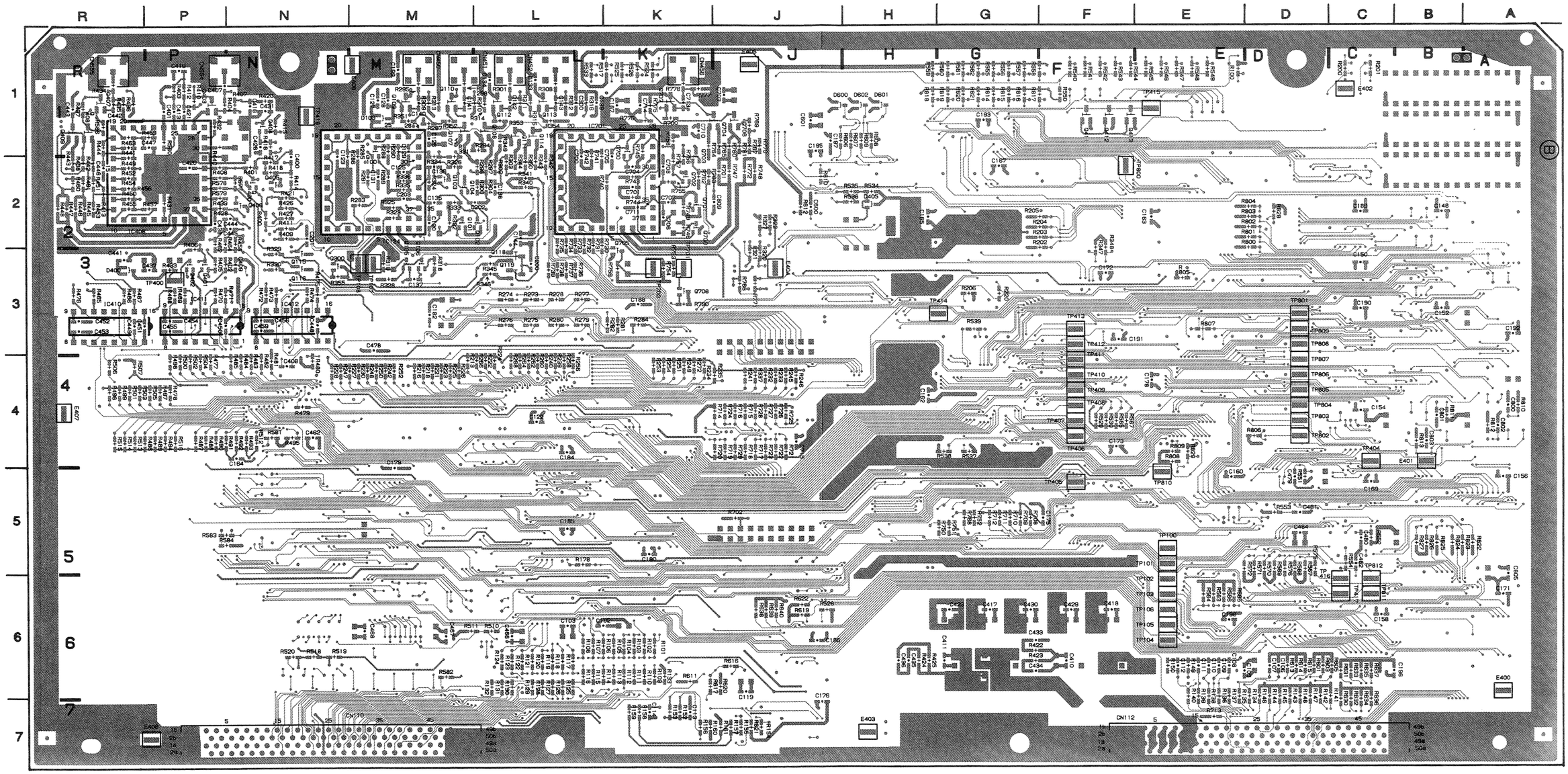


DIF-16 BOARD -B SIDE-

1-648-531-12 (LOT No. 307 - 410)

DVW-A500(J)	; DIF-16	MCB
DVW-A500(UC)	; DIF-16	MCB
DVW-A500P(EK)	; DIF-16P	MCB
DVW-A500P(UC)	; DIF-16PG	MCB
DVW-500(J)	; DIF-16	MCB
DVW-500(UC)	; DIF-16	MCB
DVW-500P(EK)	; DIF-16P	MCB
DVW-500P(UC)	; DIF-16PG	MCB

DIF-16 ; 4 : 2 : 2 component serial digital I/O interface with Embedded audio

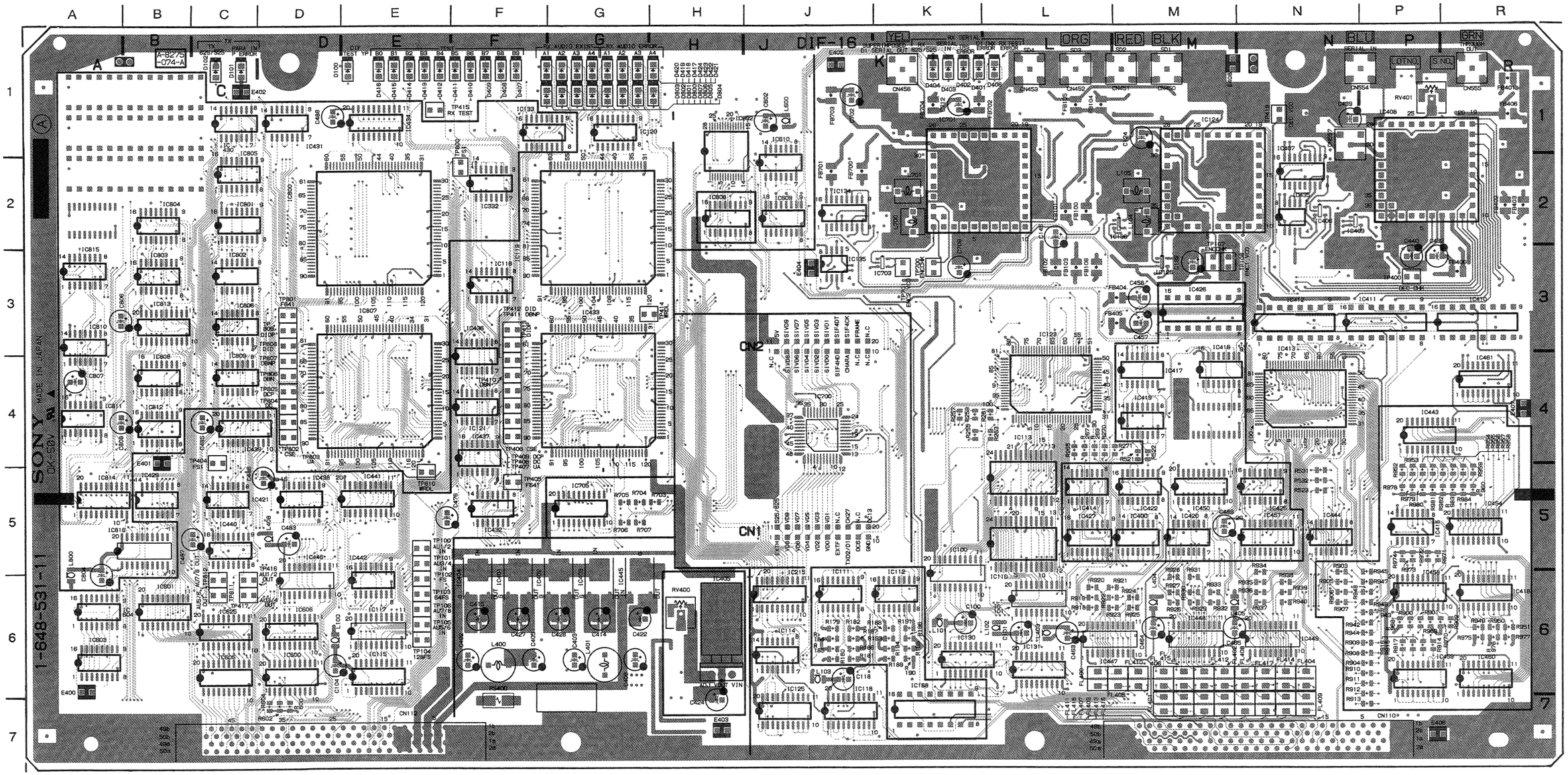
(Board's Lot No. 302 through 306)
DVW-A500(J)
DVW-A500(UC)
DVW-A500P(EK)
DVW-A500P(UC)
DVW-500(J)
DVW-500(UC)
DVW-500P(EK)

DIF-16(1-648-531-11)

CN1	J-5	FB406	R-1	IC438	D-5	✱Q705	K-3
CN2	J-3	FB700	J-2	IC439	C-4	✱Q706	J-1
CN110	N-7	FB701	J-2	IC440	C-5	✱Q707	K-1
CN112	D-7	FB702	K-1	IC441	E-5	✱Q708	K-3
CN450	M-1	FB703	J-1	IC442	E-6		
CN451	M-1	FB704	K-1	IC444	N-5	RV400	H-6
CN452	L-1			IC445	G-6	RV401	P-1
CN453	L-1	FL400	L-6	IC446	D-6		
CN456	K-1	FL401	M-7	IC447	L-6	TP100	E-5
CN554	P-1	FL402	M-6	IC448	M-6	TP101	E-5
CN555	R-1	FL403	N-7	IC449	N-6	TP102	E-6
CN557	N-1	FL404	N-6	IC450	M-5	TP103	E-6
		FL405	M-6	IC451	N-5	TP104	E-6
D100	E-1	FL406	M-6	IC461	R-4	TP105	E-6
D101	C-1	FL407	M-7	IC600	D-6	TP106	E-6
D102	C-1	FL408	N-6	IC601	B-6	TP107	M-3
✱D103	M-1	FL409	N-7	IC602	H-2	TP108	M-3
✱D400	R-3	FL410	M-6	IC603	A-6	TP400	P-3
D401	K-1	FL411	M-7	IC604	A-6	TP404	C-4
D402	K-1	FL412	M-6	IC605	C-6	TP405	F-5
D403	K-1	FL413	N-7	IC606	D-6	TP406	F-4
D404	K-1	FL414	N-6	IC608	H-2	TP407	F-4
✱D405	F-5	FL415	M-6	IC609	J-2	TP408	F-4
D406	L-1	FL416	M-7	IC610	J-2	TP409	F-4
D407	F-1	FL417	N-6	IC625	C-6	TP410	F-4
D408	F-1	FL418	N-7	IC700	J-4	TP411	F-2
D409	F-1			IC701	K-2	TP412	F-3
D410	F-1	IC100	K-6	IC703	K-3	TP413	F-3
D411	F-1	IC101	L-6	IC705	G-5	TP414	H-2
D412	E-1	IC110	L-5			TP415	E-1
D413	E-1	IC113	L-5	PS400	F-7	TP416	C-6
D414	E-1	IC114	J-6			TP417	C-6
D415	E-1	IC115	E-6	✱Q100	M-1	TP418	N-1
D416	E-1	IC116	F-3	✱Q101	M-2	TP700	K-3
D417	G-1	IC117	E-6	✱Q102	L-2	TP701	K-3
D418	G-1	IC118	J-7	✱Q103	M-2		
D419	G-1	IC119	G-2	✱Q104	M-2		
D420	G-1	IC120	G-1	✱Q105	M-3		
D421	H-1	IC121	F-4	✱Q106	M-3		
D422	G-1	IC123	L-4	✱Q107	M-1		
D423	G-1	IC124	M-2	✱Q108	L-1		
D424	G-1	IC125	J-7	✱Q109	M-1		
✱D600	J-1	IC126	M-3	✱Q110	M-1		
✱D601	H-1	IC130	K-6	✱Q111	L-1		
✱D602	H-1	IC131	L-6	✱Q112	L-1		
✱D700	K-1	IC134	J-2	✱Q113	L-1		
		IC135	J-3	✱Q114	L-1		
E400	A-6	IC136	M-2	✱Q115	N-3		
E401	B-4	IC215	J-6	✱Q116	N-3		
E402	C-1	IC400	M-5	✱Q118	L-3		
E403	H-7	IC401	F-6	✱Q119	L-3		
E404	J-3	IC402	G-6	✱Q300	N-3		
E405	J-1	IC403	G-6	✱Q400	N-2		
E406	P-7	IC404	F-6	✱Q401	P-3		
E407	R-4	IC405	H-6	✱Q402	P-3		
E408	M-1	IC406	N-2	✱Q403	P-1		
		IC407	N-2	✱Q404	N-1		
FB100	L-2	IC408	P-2	✱Q405	N-2		
FB101	L-2	IC409	N-2	✱Q406	N-2		
FB102	L-3	IC410	R-3	✱Q407	R-1		
FB103	L-3	IC411	N-3	✱Q408	R-1		
FB104	L-1	IC412	N-3	✱Q409	R-1		
FB105	L-1	IC413	N-4	✱Q411	F-1		
FB106	L-3	IC421	C-5	✱Q412	F-1		
FB400	R-3	IC429	B-5	✱Q413	F-1		
FB401	R-1	IC432	F-5	✱Q700	K-2		
FB402	R-2	IC433	G-4	✱Q701	K-2		
FB403	R-2	IC435	N-2	✱Q702	K-2		
FB404	M-3	IC436	F-4	✱Q703	K-2		
FB405	M-3	IC437	F-5	✱Q704	K-1		

✱ : B SIDE

LOT NO. P-1


DIF-16
A-8275-074-A
1-648-531-11
SONY
MADE IN JAPAN
CN1
CN2
CN110
CN111
CN112
CN113
CN114
CN115
CN116
CN117
CN118
CN119
CN120
CN121
CN122
CN123
CN124
CN125
CN126
CN127
CN128
CN129
CN130
CN131
CN132
CN133
CN134
CN135
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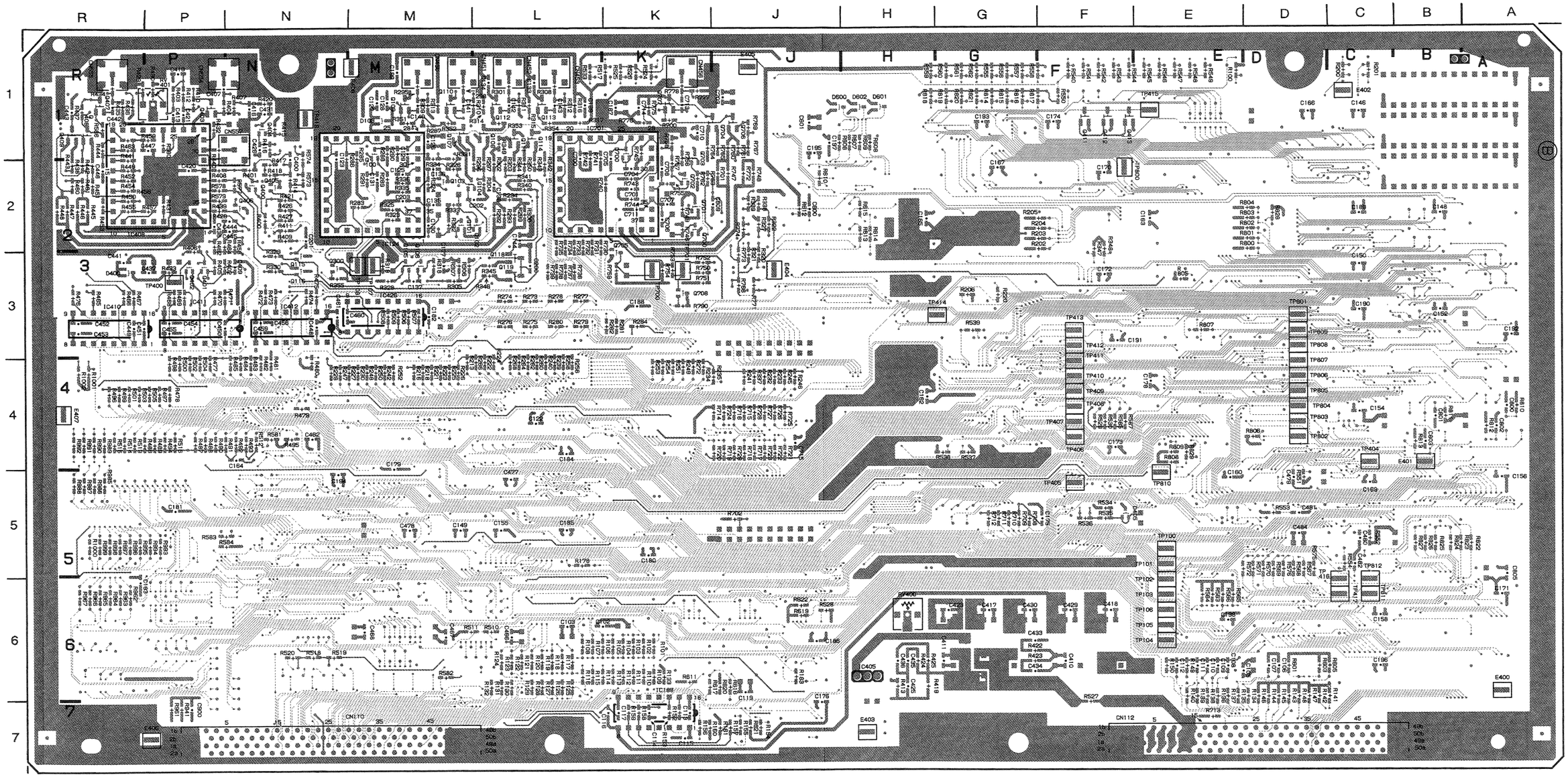
CN141
CN142
CN143
CN144
CN145
CN146
CN147
CN148
CN149



DIF-16 BOARD -B SIDE-

1-648-531-11 (LOT No. 302 - 306)

DVW-A500(J)	; DIF-16	MCB
DVW-A500(UC)	; DIF-16	MCB
DVW-A500P(EK)	; DIF-16P	MCB
DVW-A500P(UC)	; DIF-16PG	MCB
DVW-500(J)	; DIF-16	MCB
DVW-500(UC)	; DIF-16	MCB
DVW-500P(EK)	; DIF-16P	MCB

DIF-16B ; 4 : 2 : 2 component serial digital output interface with Embedded audio

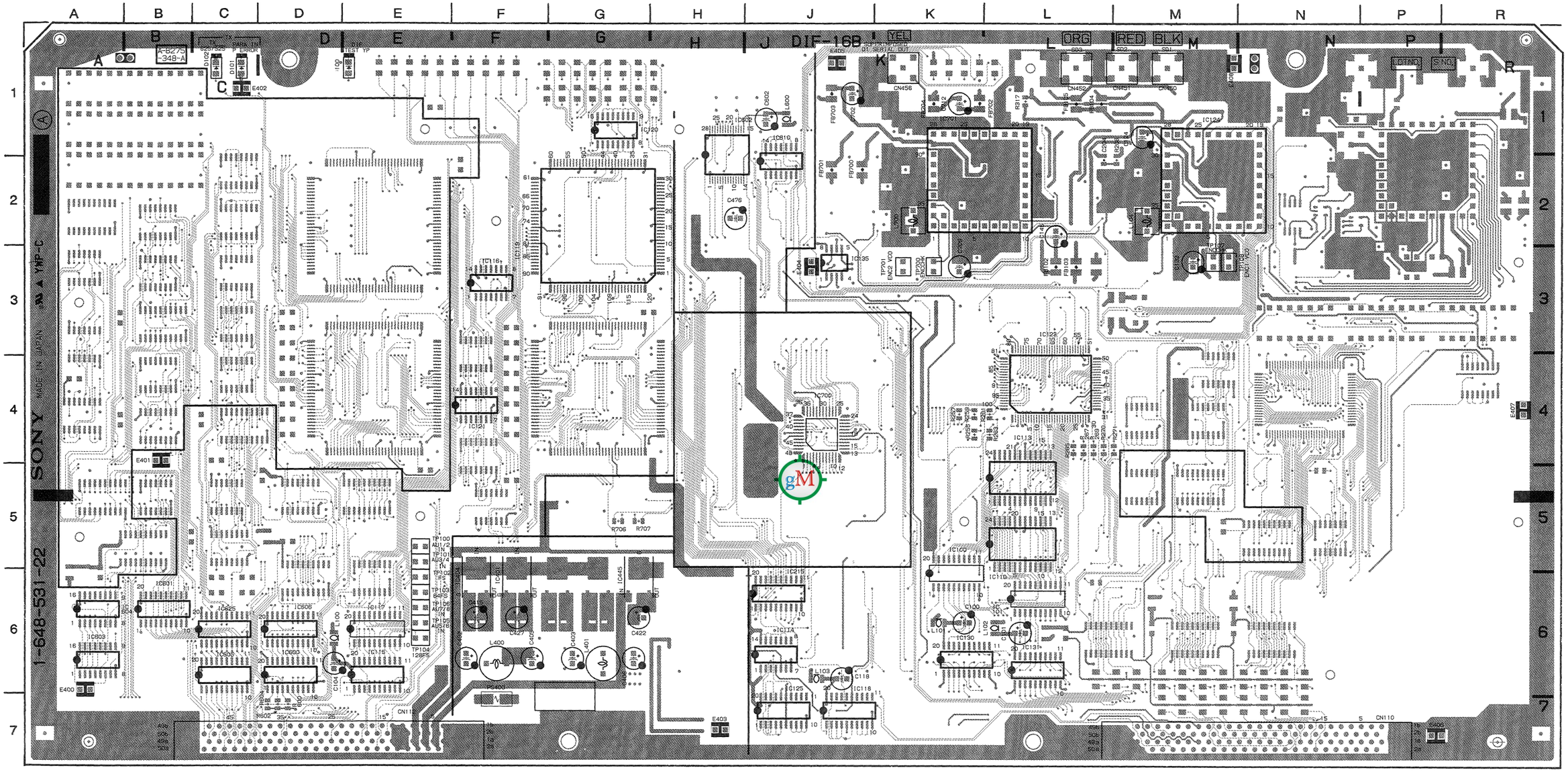
(Board's Lot No. 411 through 906)
All player models

DIF-16B(1-648-531-22)

CN1	J-5	IC404	F-6
CN2	J-3	IC445	G-6
CN3	H-2	IC600	D-6
CN110	N-7	IC601	B-6
CN112	D-7	IC602	H-2
CN450	M-1	IC603	A-6
CN451	M-1	IC604	A-6
CN452	L-1	IC605	C-6
CN456	K-1	IC606	D-6
		IC610	J-2
D100	E-1	IC625	C-6
D101	C-1	IC700	J-4
D102	C-1	IC701	K-2
✱D103	M-1		
✱D405	H-2	PS400	F-7
✱D600	J-1		
✱D601	H-1	✱Q100	M-1
✱D602	H-1	✱Q101	M-2
✱D700	K-1	✱Q102	L-2
		✱Q103	M-2
E400	A-6	✱Q104	M-2
E401	B-4	✱Q105	M-3
E402	C-1	✱Q106	M-3
E403	H-7	✱Q107	M-1
E404	J-3	✱Q108	L-1
E405	J-1	✱Q109	M-1
E406	P-7	✱Q110	M-1
E407	R-4	✱Q112	L-1
E408	M-1	✱Q300	N-3
		✱Q700	K-2
FB100	L-2	✱Q701	K-2
FB101	L-2	✱Q702	K-2
FB102	L-3	✱Q703	K-2
FB103	L-3	✱Q704	K-1
FB104	L-1	✱Q705	K-3
FB105	L-1	✱Q707	K-1
FB106	L-3	✱Q708	K-3
FB400	R-3		
FB401	R-1	RV400	H-6
FB402	R-2		
FB403	R-2	TP100	E-5
FB404	M-3	TP101	E-5
FB405	M-3	TP102	E-6
FB406	R-1	TP103	E-6
FB700	J-2	TP104	E-6
FB701	J-2	TP105	E-6
FB702	K-1	TP106	E-6
FB703	J-1	TP107	M-3
FB704	K-1	TP108	M-3
		TP700	K-3
IC100	K-6	TP701	K-3
IC101	L-6		
IC110	L-5		
IC113	L-5		
IC114	J-6		
IC115	E-6		
IC116	F-3		
IC117	E-6		
IC118	J-7		
IC119	G-2		
IC120	G-1		
IC121	F-4		
IC123	L-4		
IC124	M-2		
IC125	J-7		
IC130	K-6		
IC131	L-6		
IC135	J-3		
IC215	J-6		
IC401	F-6		

✱ : B SIDE

LOT NO. P-1


DIF-16B
A-8275-348-A
1-648-531-22
SONY MADE IN JAPAN VNP-3
YEL
ORG
RED
BLK
LOT NO.
S. NO.
CN456
CN452
CN451
CN450
CN110
CN111
IC116
IC123
IC113
IC109
IC110
IC215
IC114
IC130
IC131
IC125
IC118
IC135
IC120
IC803
IC804
IC805
IC806
IC807
IC808
IC809
IC810
IC811
IC812
IC813
IC814
IC815
IC816
IC817
IC818
IC819
IC820
IC821
IC822
IC823
IC824
IC825
IC826
IC827
IC828
IC829
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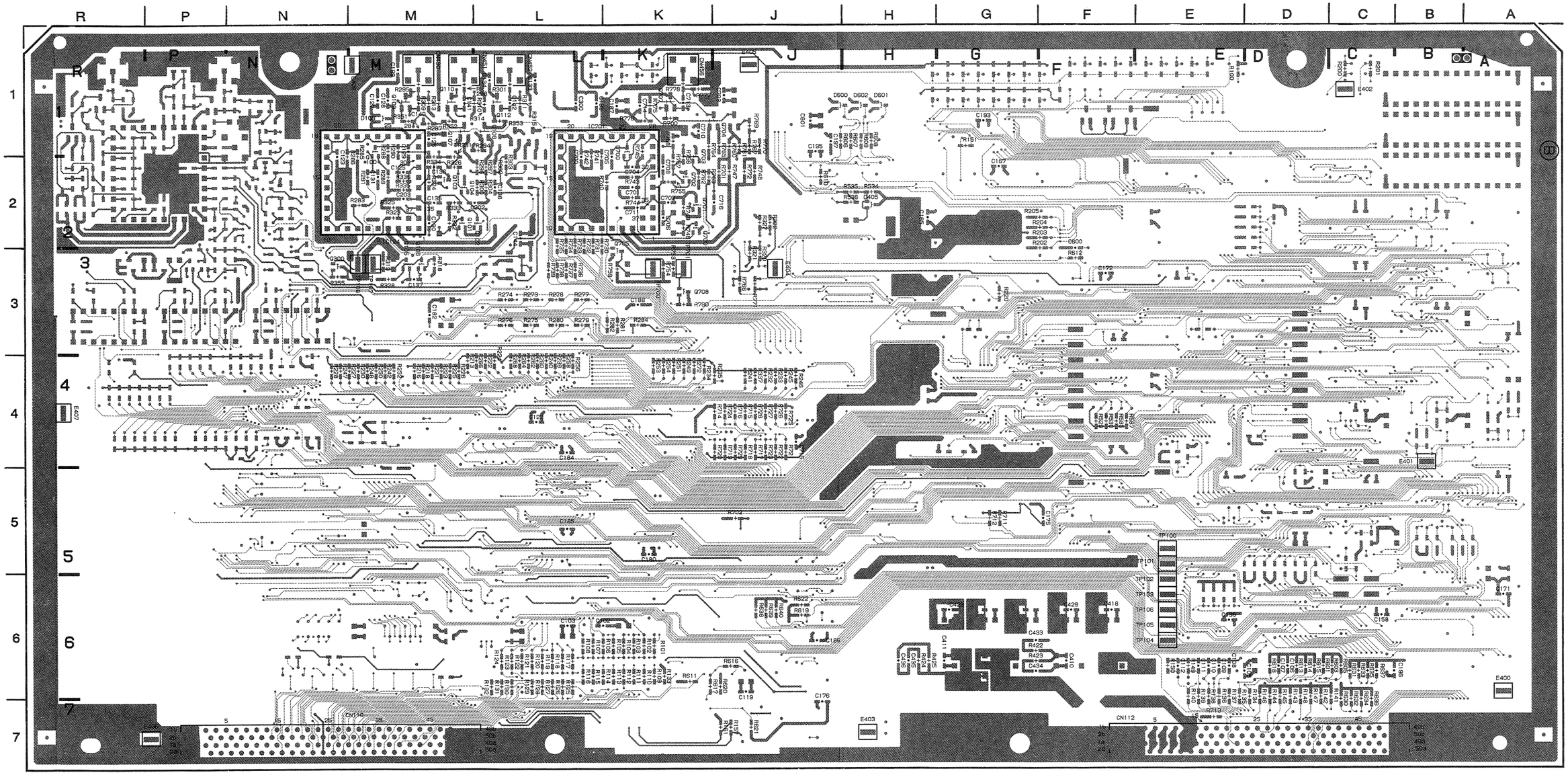
IC839
IC840
IC841
IC842



DIF-16B BOARD -B SIDE-

1-648-531-22 (LOT No. 411 - 906)

DVW-A510(J)	; DIF-16B	MCB
DVW-A510(UC)	; DIF-16B	MCB
DVW-A510P(EK)	; DIF-16BP	MCB
DVW-510(J)	; DIF-16B	MCB
DVW-510(UC)	; DIF-16B	MCB
DVW-510P(EK)	; DIF-16BP	MCB
DVW-CA510(J)	; DIF-16B	MCB
DVW-CA510(UC)	; DIF-16B	MCB
DVW-CA510P(EK)	; DIF-16BP	MCB

DIF-16B ; 4 : 2 : 2 component serial digital output interface with Embedded audio

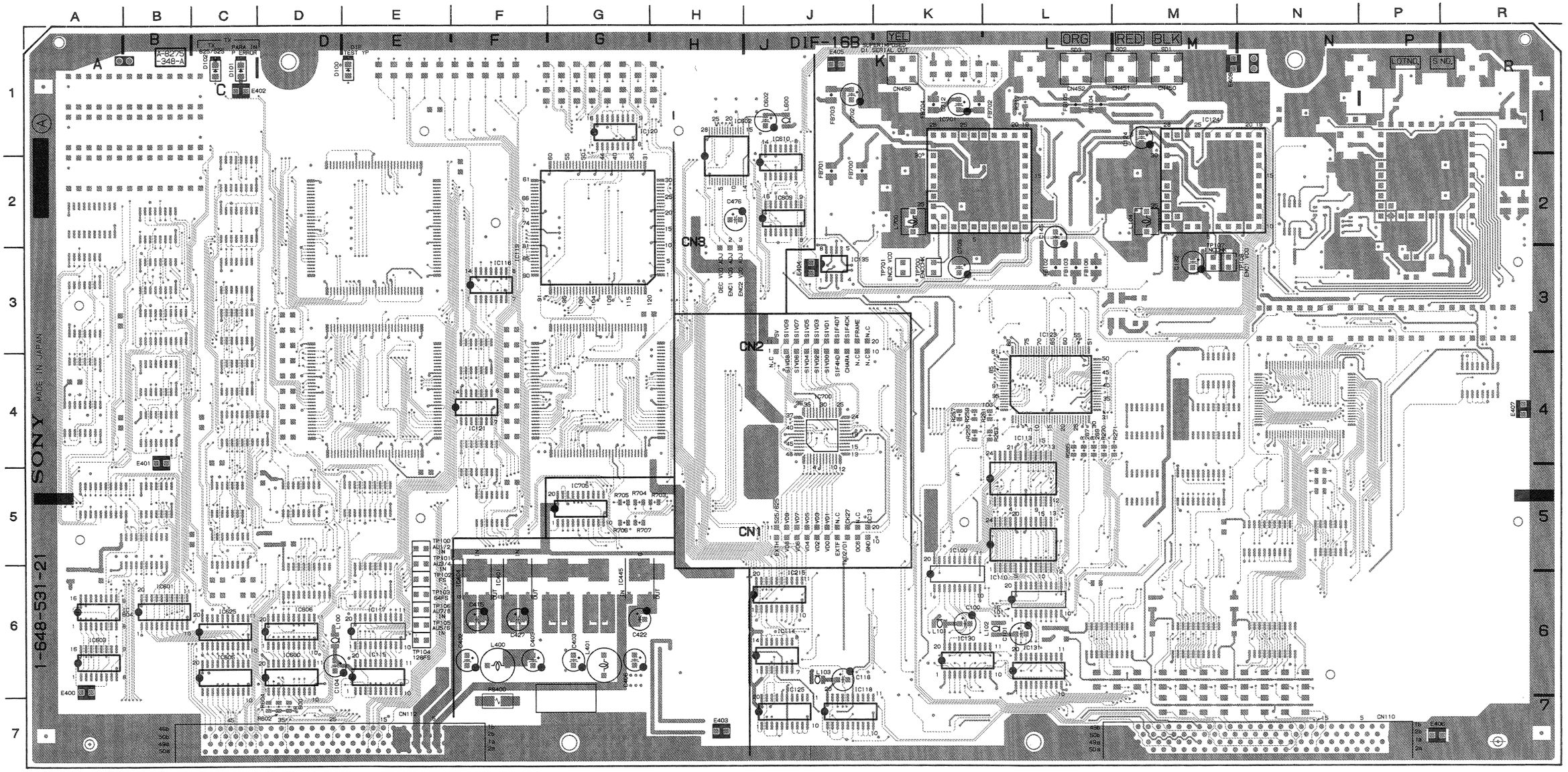
(Board's Lot No. 307 through 410)
DVW-A510(J)
DVW-A510(UC)
DVW-A510P(EK)
DVW-510(J)
DVW-510(UC)
DVW-510P(EK)
DVW-CA510(UC)
DVW-CA510P(EK)

DIF-16B(1-648-531-21)

CN1	J-5	IC404	F-6
CN2	J-3	IC445	G-6
CN3	H-2	IC600	D-6
CN110	N-7	IC601	B-6
CN112	D-7	IC602	H-2
CN450	M-1	IC603	A-6
CN451	M-1	IC604	A-6
CN452	L-1	IC605	C-6
CN456	K-1	IC606	D-6
		IC609	J-2
D100	E-1	IC610	J-2
D101	C-1	IC625	C-6
D102	C-1	IC700	J-4
✱D103	M-1	IC701	K-2
✱D405	H-2	IC705	G-5
✱D600	J-1		
✱D601	H-1	PS400	F-7
✱D602	H-1		
✱D700	K-1	✱Q100	M-1
		✱Q101	M-2
E400	A-6	✱Q102	L-2
E401	B-4		
E402	C-1	✱Q103	M-2
E403	H-7	✱Q104	M-2
E404	J-3	✱Q105	M-3
E405	J-1	✱Q106	M-3
E406	P-7	✱Q107	M-1
E407	R-4	✱Q108	L-1
E408	M-1	✱Q109	M-1
		✱Q110	M-1
FB100	L-2	✱Q111	L-1
FB101	L-2	✱Q112	L-1
FB102	L-3	✱Q113	L-1
FB103	L-3	✱Q114	L-1
FB104	L-1	✱Q115	N-3
FB105	L-1	✱Q116	N-3
FB106	L-3	✱Q118	L-3
FB400	R-3	✱Q119	L-3
FB401	R-1	✱Q300	N-3
FB402	R-2	✱Q700	K-2
FB403	R-2	✱Q701	K-2
FB404	M-3	✱Q702	K-2
FB405	M-3	✱Q703	K-2
FB406	R-1	✱Q704	K-1
FB700	J-2	✱Q705	K-3
FB701	J-2	✱Q706	J-1
FB702	K-1	✱Q707	K-1
FB703	J-1	✱Q708	K-3
FB704	K-1		
		RV400	H-6
IC100	K-6		
IC101	L-6	TP100	E-5
IC110	L-5	TP101	E-5
IC113	L-5	TP102	E-6
IC114	J-6	TP103	E-6
IC115	E-6	TP104	E-6
IC116	F-3	TP105	E-6
IC117	E-6	TP106	E-6
IC118	J-7	TP107	M-3
IC119	G-2	TP108	M-3
IC120	G-1	TP700	K-3
IC121	F-4	TP701	K-3
IC123	L-4		
IC124	M-2		
IC125	J-7		
IC130	K-6		
IC131	L-6		
IC135	J-3		
IC215	J-6		
IC401	F-6		

✱ : B SIDE

LOT NO. P-1


DIF-16B
1-648-531-21
SONY MADE IN JAPAN
CN1
CN2
CN3
CN110
CN112
CN452
CN453
CN454
CN455
CN456
IC700
IC705
IC121
IC120
IC123
IC124
IC100
IC130
IC131
IC125
IC118
IC114
IC215
IC801
IC625
IC606
IC609
IC605
IC680
IC117
IC115
IC104
IC445
IC402
IC403
IC404
IC405
IC406
IC407
IC408
IC409
IC410
IC411
IC412
IC413
IC414
IC415
IC416
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IC425
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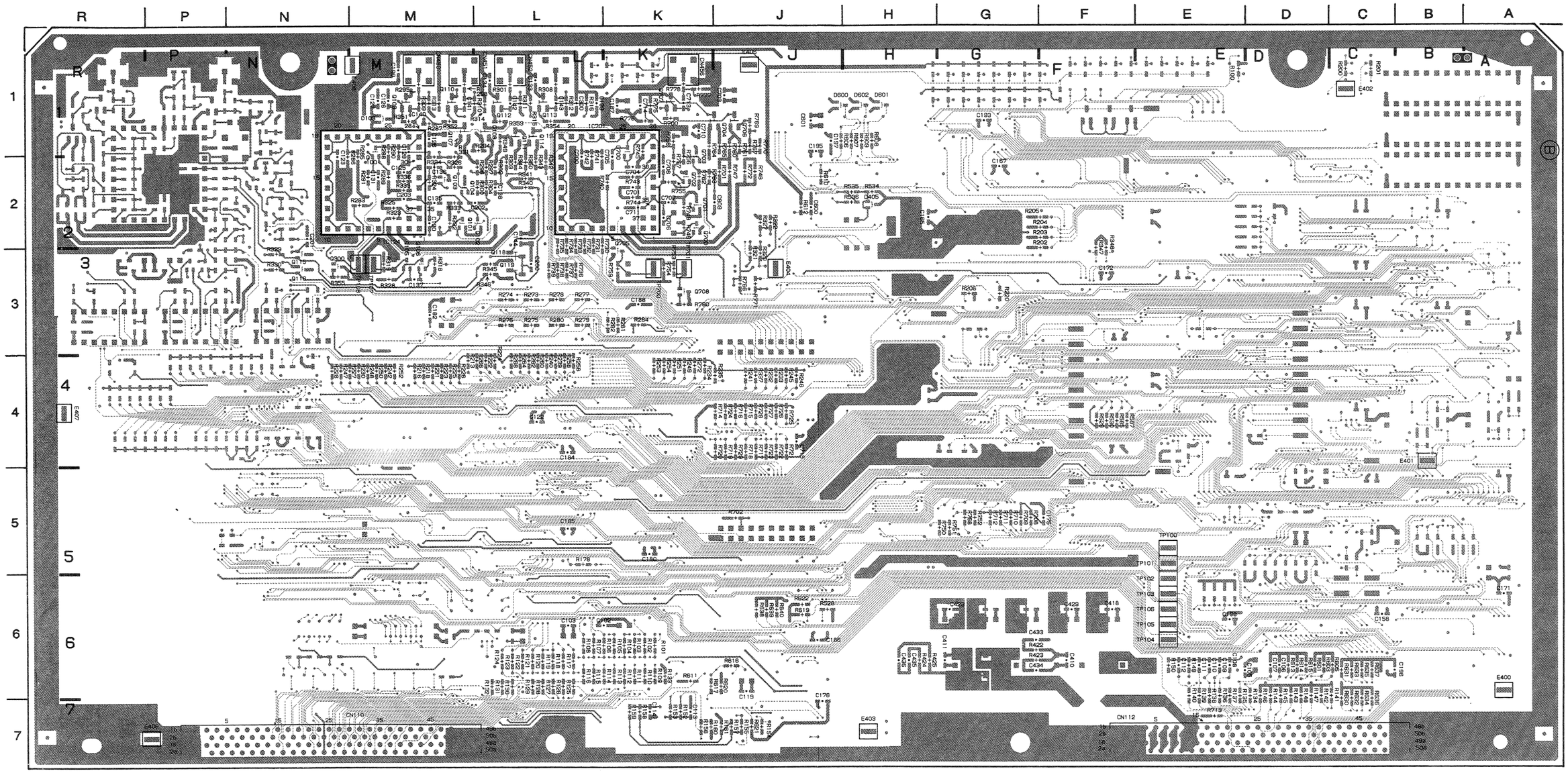
IC440
IC441



DIF-16B BOARD -B SIDE-

1-648-531-21 (LOT No. 307 - 410)

DVW-A510(J)	; DIF-16B	MCB
DVW-A510(UC)	; DIF-16B	MCB
DVW-A510P(EK)	; DIF-16BP	MCB
DVW-510(J)	; DIF-16B	MCB
DVW-510(UC)	; DIF-16B	MCB
DVW-510P(EK)	; DIF-16BP	MCB
DVW-CA510(UC)	; DIF-16B	MCB
DVW-CA510P(EK)	; DIF-16BP	MCB

Section 2
Schematic Diagrams – Frame Wiring –

Index

RECORDER **PAGE**

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FRAME (3/3) — for J model 2-8

PLAYER

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FRAME (1/3) — for DVW-510/510P 2-11
FRAME (2/3) — for DVW-A510/510/A510P/510P 2-12
FRAME (2/3) — for DVW-CA510/CA510P 2-14
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FRAME (3/3) — for J model 2-18

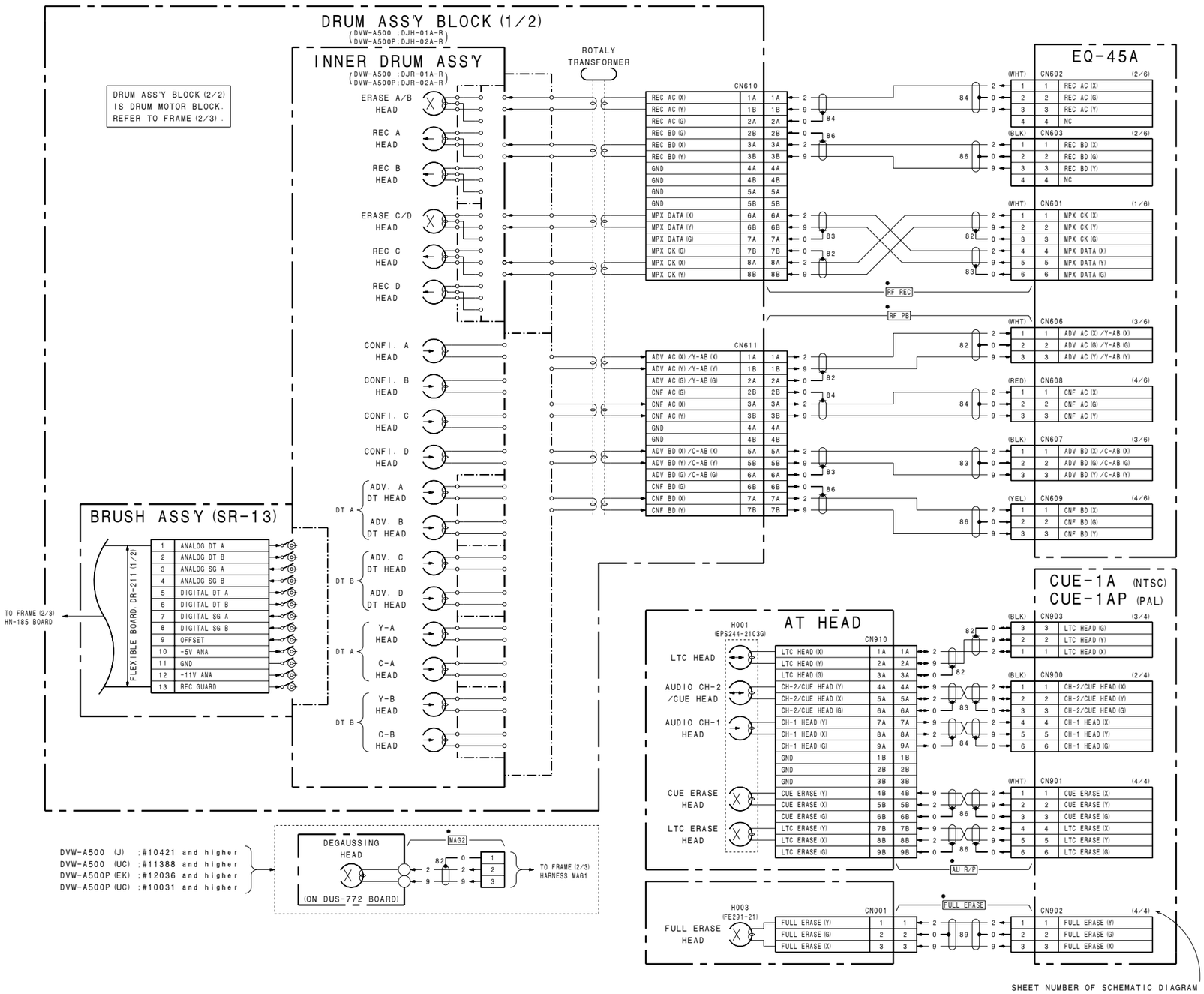
Note

The ⚠-marked components are critical to safety.
Replace only with same components as specified.

注意

⚠印の部品は安全性を維持するために重要な部品です。
従って交換するときは必ず指定の部品を使ってください。

Frame Wiring (1/3) Recorder DVW-A500/A500P

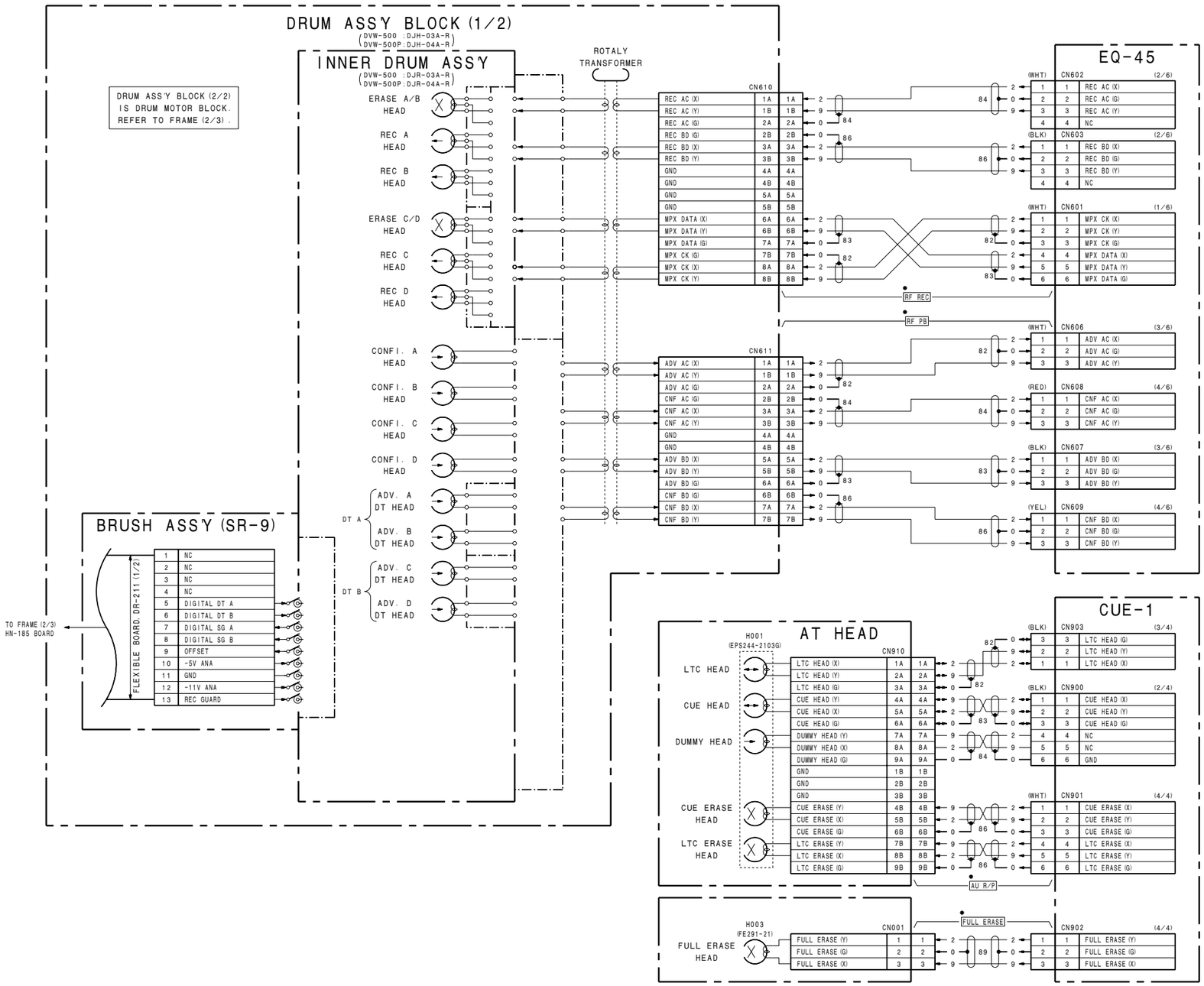


Drum, Heads (Except CTL Head)

Frame Wiring (1/3)

DVW-A500 (J, UC)
DVW-A500P (EK, UC)
DVW-FRAME-ALL-REC-S/M-06

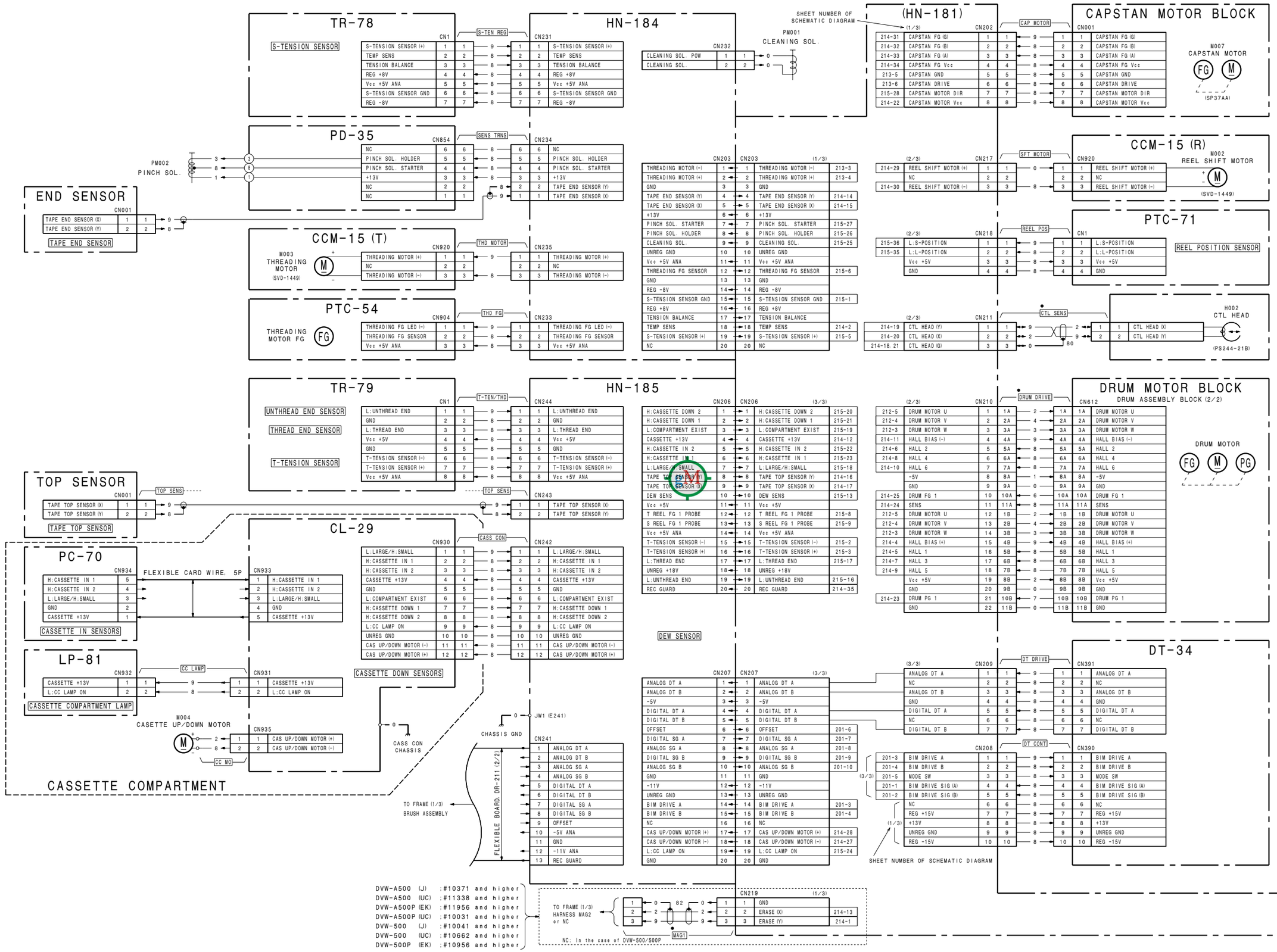
Frame Wiring (1/3) Recorder DVW-500/500P

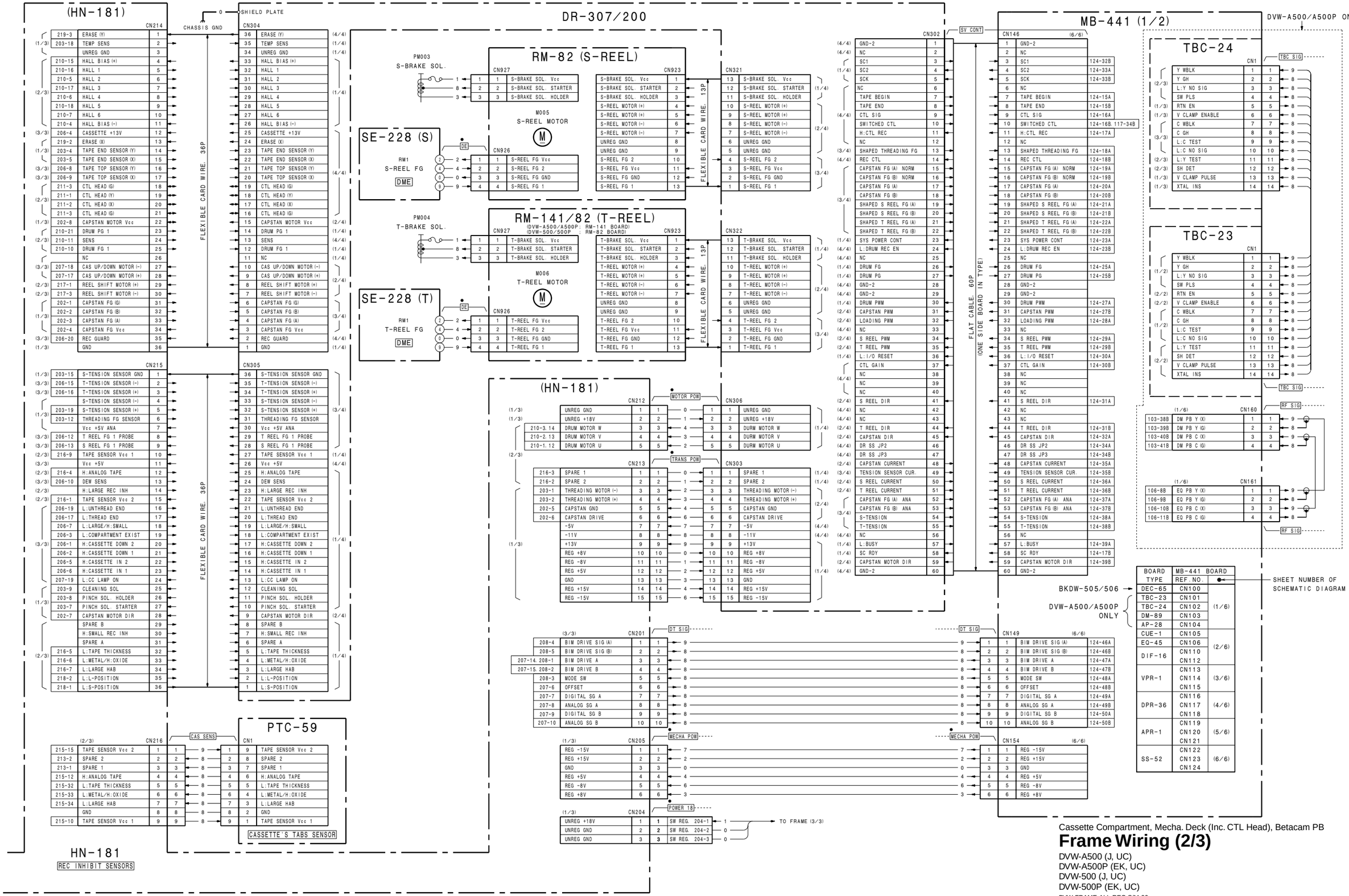


Drum, Heads (Except CTL Head)

Frame Wiring (1/3)

DVW-500 (J, UC)
DVW-500P (EK, UC)
DVW-FRAME-ALL-REC-S/M-06


TR-78
S-TENSION SENSOR
CN1
S-TEN REG
CN231
S-TENSION SENSOR (+)
TEMP SENS
TENSION BALANCE
REG +8V
Vcc +5V ANA
S-TENSION SENSOR GND
REG -8V
HN-184
CN232
CLEANING SOL. POW
CLEANING SOL.
PM001
CLEANING SOL.
SHEET NUMBER OF SCHEMATIC DIAGRAM
(HN-181)
(1/3)
CN202
CAP MOTOR
CAPSTAN MOTOR BLOCK
CN001
CAPSTAN FG (G)
CAPSTAN FG (B)
CAPSTAN FG (A)
CAPSTAN FG Vcc
CAPSTAN GND
CAPSTAN DRIVE
CAPSTAN MOTOR DIR
CAPSTAN MOTOR Vcc
M007
CAPSTAN MOTOR
FG
M
(SP37AA)
PD-35
CN854
SENS TRNS
CN234
NC
PINCH SOL. HOLDER
PINCH SOL. STARTER
+13V
TAPE END SENSOR (Y)
TAPE END SENSOR (X)
PM002
PINCH SOL.
END SENSOR
CN001
TAPE END SENSOR (X)
TAPE END SENSOR (Y)
TAPE END SENSOR
CCM-15 (T)
M003
THREADING MOTOR
(SVD-1449)
CN920
THD MOTOR
CN235
THREADING MOTOR (+)
THREADING MOTOR (-)
PTC-54
THREADING MOTOR FG
CN904
THD FG
CN233
THREADING FG LED (-)
THREADING FG SENSOR
Vcc +5V ANA
CN203
CN203
(1/3)
THREADING MOTOR (-)
THREADING MOTOR (+)
GND
TAPE END SENSOR (Y)
TAPE END SENSOR (X)
+13V
PINCH SOL. STARTER
PINCH SOL. HOLDER
CLEANING SOL.
UNREG GND
Vcc +5V ANA
THREADING FG SENSOR
REG -8V
S-TENSION SENSOR GND
REG +8V
TENSION BALANCE
TEMP SENS
S-TENSION SENSOR (+)
NC
(2/3)
CN217
SFT MOTOR
CCM-15 (R)
M002
REEL SHIFT MOTOR
REEL SHIFT MOTOR (+)
NC
REEL SHIFT MOTOR (-)
(SVD-1449)
(2/3)
CN218
REEL POS
PTC-71
CN1
L:S-POSITION
L:L-POSITION
Vcc +5V
GND
REEL POSITION SENSOR
(2/3)
CN211
CTL SENS
H002
CTL HEAD
CTL HEAD (X)
CTL HEAD (Y)
CTL HEAD (G)
(PS244-21B)
TR-79
UNTHREAD END SENSOR
THREAD END SENSOR
T-TENSION SENSOR
CN1
T-TEN/THD
CN244
L:UNTHREAD END
GND
L:THREAD END
Vcc +5V
T-TENSION SENSOR (-)
T-TENSION SENSOR (+)
HN-185
CN206
CN206
(3/3)
H:CASSETTE DOWN 2
H:CASSETTE DOWN 1
L:COMPARTMENT EXIST
CASSETTE +13V
H:CASSETTE IN 2
H:CASSETTE IN 1
L:LARGE/H:SMALL
TAPE TOP SENSOR (Y)
TAPE TOP SENSOR (X)
DEW SENS
Vcc +5V
T REEL FG 1 PROBE
S REEL FG 1 PROBE
Vcc +5V ANA
T-TENSION SENSOR (-)
T-TENSION SENSOR (+)
L:THREAD END
UNREG +18V
L:UNTHREAD END
REC GUARD
(2/3)
CN210
DRUM DRIVE
DRUM MOTOR BLOCK
DRUM ASSEMBLY BLOCK (2/2)
CN612
DRUM MOTOR U
DRUM MOTOR V
DRUM MOTOR W
HALL BIAS (-)
HALL 2
HALL 4
HALL 6
-5V
GND
DRUM FG 1
SENS
DRUM MOTOR
FG
M
PG
TOP SENSOR
CN001
TAPE TOP SENSOR (X)
TAPE TOP SENSOR (Y)
TAPE TOP SENSOR
TOP SENS
CN243
CL-29
CASS CON
CN930
CN242
L:LARGE/H:SMALL
H:CASSETTE IN 1
H:CASSETTE IN 2
CASSETTE +13V
GND
L:COMPARTMENT EXIST
H:CASSETTE DOWN 1
H:CASSETTE DOWN 2
L:CC LAMP ON
UNREG GND
CAS UP/DOWN MOTOR (-)
CAS UP/DOWN MOTOR (+)
CASSETTE DOWN SENSORS
PC-70
CN934
CN933
FLEXIBLE CARD WIRE, 5P
CASSETTE IN SENSORS
LP-81
CN932
CC LAMP
CN931
CASSETTE +13V
L:CC LAMP ON
CASSETTE COMPARTMENT LAMP
M004
CASETTE UP/DOWN MOTOR
CN935
CC MO
CASS CON
CHASSIS
JW1 (E241)
CHASSIS GND
CN241
ANALOG DT A
ANALOG DT B
ANALOG SG A
ANALOG SG B
DIGITAL DT A
DIGITAL DT B
DIGITAL SG A
DIGITAL SG B
OFFSET
-5V ANA
GND
-11V ANA
REC GUARD
FLEXIBLE BOARD, DR-211 (2/2)
TO FRAME (1/3)
BRUSH ASSEMBLY
DEW SENSOR
CN207
CN207
(3/3)
ANALOG DT A
ANALOG DT B
-5V
DIGITAL DT A
DIGITAL DT B
OFFSET
DIGITAL SG A
ANALOG SG A
DIGITAL SG B
ANALOG SG B
GND
-11V
UNREG GND
BIM DRIVE A
BIM DRIVE B
NC
CAS UP/DOWN MOTOR (+)
CAS UP/DOWN MOTOR (-)
L:CC LAMP ON
GND
(3/3)
CN209
DT DRIVE
DT-34
CN391
ANALOG DT A
NC
ANALOG DT B
GND
DIGITAL DT A
NC
DIGITAL DT B
(2/3)
CN208
DT CONT
CN390
BIM DRIVE A
BIM DRIVE B
MODE SW
BIM DRIVE SIG (A)
BIM DRIVE SIG (B)
NC
REG +15V
+13V
UNREG GND
REG -15V
(1/3)
SHEET NUMBER OF SCHEMATIC DIAGRAM
CN219
(1/3)
GND
ERASE (X)
ERASE (Y)
TO FRAME (1/3)
HARNESS MAG2
or NC
MAG1
NC: In the case of DVW-500/500P
DVW-A500 (J) ;#10371 and higher
DVW-A500 (UC) ;#11338 and higher
DVW-A500P (EK) ;#11956 and higher
DVW-A500P (UC) ;#10031 and higher
DVW-500 (J) ;#10041 and higher
DVW-500 (UC) ;#10662 and higher
DVW-500P (EK) ;#10956 and higher
CASSETTE COMPARTMENT



BOARD TYPE	MB-441 BOARD REF. NO.	
DEC-65	CN100	
TBC-23	CN101	
TBC-24	CN102	(1/6)
DM-89	CN103	
AP-28	CN104	
CUE-1	CN105	
EQ-45	CN106	(2/6)
DIF-16	CN110 CN112	
VPR-1	CN113 CN114 CN115	(3/6)
DPR-36	CN116 CN117 CN118	(4/6)
APR-1	CN119 CN120 CN121	(5/6)
SS-52	CN122 CN123 CN124	(6/6)

Cassette Compartment, Mecha. Deck (Inc. CTL Head), Betacam PB

Frame Wiring (2/3)

DVW-A500 (J, UC)
DVW-A500P (EK, UC)
DVW-500 (J, UC)
DVW-500P (EK, UC)

DVW-FRAME-ALL-REC-S/M-06

Frame Wiring (3/3) Recorder (UC/EK) Model

FL1004 and FL1005 are equipped in following models.
:DVW-A500P (EK) :#10100 and higher
:DVW-500P (EK) :#10010 and higher

SWC-17

CN560 — FRONT SW2 — FLAT CABLE, 26P (ONE SIDE BOARD IN TYPE) — UPPER CONTROL PANEL

GND-2	1
GND-2	2
REG +8V-2	3
REG +8V-2	4
KEY IN 0	5
KEY IN 1	6
KEY IN 2	7
KEY IN 3	8
KEY IN 4	9
KEY IN 5	10
KEY IN 6	11
KEY IN 7	12
LED OUT 0	13
LED OUT 1	14
LED OUT 2	15
LED OUT 3	16
LED OUT 4	17
LED OUT 5	18
LED OUT 6	19
LED OUT 7	20
SCAN 0	21
SCAN 1	22
SCAN 2	23
SCAN 3	24
SCAN 4	25
REG +5V-2	26

SWC-18

CN570 — FRONT SW1 — FLAT CABLE, 34P (ONE SIDE BOARD IN TYPE) — SUB CONTROL PANEL

GND-2	1
GND-2	2
REG +5V-2	3
REG +5V-2	4
KEY IN 0	5
KEY IN 1	6
KEY IN 2	7
KEY IN 3	8
KEY IN 4	9
KEY IN 5	10
KEY IN 6	11
KEY IN 7	12
SCAN 4	13
SCAN 5	14
ADC0	15
ADC1	16
ADC2	17
NC	18
AD CONT0	19
AD CONT1	20
H:LOCAL/L:REMOTE	21
NC	22
REM VIDEO LEVEL	23
REM CHROMA LEVEL	24
REM SET-UP LEVEL	25
REM Y/C DELAY	26
REM CHROMA PHASE	27
REM SYNC PHASE	28
REM SC PHASE	29
NC	30
REF +12V	31
REF +12V	32
A GND	33
A GND	34

FL INDICATE MODULE

CN1 — DISPLAY — AUDIO LEVEL METERS

+15V	1
A GND	2
+5V	3
GND	4
L:CS	5
SCK	6
RES	7
CMD	8
RDY	9
SW	10

CN505

1	REG +15V-2
2	A GND
3	REG +5V-2
4	GND-2
5	L:FL CS
6	FL SCK
7	FL RES
8	FL CMD
9	FL RDY
10	SW

FP-58

CN501

1	GND-2
2	GND-2
3	REG +8V-2
4	REG +8V-2
5	KEY IN 0
6	KEY IN 1
7	KEY IN 2
8	KEY IN 3
9	KEY IN 4
10	KEY IN 5
11	KEY IN 6
12	KEY IN 7
13	LED OUT 0
14	LED OUT 1
15	LED OUT 2
16	LED OUT 3
17	LED OUT 4
18	LED OUT 5
19	LED OUT 6
20	LED OUT 7
21	SCAN 0
22	SCAN 1
23	SCAN 2
24	SCAN 3
25	SCAN 4
26	REG +5V-2

CN502

1	GND-2
2	GND-2
3	REG +5V-2
4	REG +5V-2
5	KEY IN 0
6	KEY IN 1
7	KEY IN 2
8	KEY IN 3
9	KEY IN 4
10	KEY IN 5
11	KEY IN 6
12	KEY IN 7
13	SCAN 4
14	SCAN 5
15	ADC0
16	ADC1
17	ADC2
18	NC
19	AD CONT0
20	AD CONT1
21	H:LOCAL/L:REMOTE
22	NC
23	REM VIDEO LEVEL
24	REM CHROMA LEVEL
25	REM SET-UP LEVEL
26	REM Y/C DELAY
27	REM CHROMA PHASE
28	REM SYNC PHASE
29	REM SC PHASE
30	NC
31	REF +12V
32	REF +12V
33	A GND
34	A GND

VR-153

AUDIO PB LEVEL — RV1 CH-1, RV2 CH-2, RV3 CH-3, RV4 CH-4, RV5 CUE

CN503 — CN520

GND-2	1	1	GND-2
REG +5V-2	2	2	REG +5V-2
KEY IN 0	3	3	KEY IN 0
KEY IN 1	4	4	KEY IN 1
KEY IN 2	5	5	KEY IN 2
KEY IN 3	6	6	KEY IN 3
KEY IN 4	7	7	KEY IN 4
KEY IN 5	8	8	KEY IN 5
KEY IN 6	9	9	KEY IN 6
KEY IN 7	10	10	KEY IN 7
SCAN 3	11	11	SCAN 3
SW	12	12	SW
A GND	13	13	A GND
A GND	14	14	A GND
REG +15V-2	15	15	REG +15V-2
REG -15V-2	16	16	REG -15V-2
CH-1 PB GAIN	17	17	CH-1 PB GAIN
CH-2 PB GAIN	18	18	CH-2 PB GAIN
CH-3 PB GAIN	19	19	CH-3 PB GAIN
CH-4 PB GAIN	20	20	CH-4 PB GAIN
CUE PB GAIN	21	21	CUE PB GAIN
PB GAIN GND	22	22	PB GAIN GND
CH-1 REC GAIN	23	23	CH-1 REC GAIN
CH-2 REC GAIN	24	24	CH-2 REC GAIN
CH-3 REC GAIN	25	25	CH-3 REC GAIN
CH-4 REC GAIN	26	26	CH-4 REC GAIN
CUE REC GAIN	27	27	CUE REC GAIN
REC GAIN GND	28	28	REC GAIN GND
REF +5V	29	29	REF +5V
L:POWER ON MUTE	30	30	L:POWER ON MUTE

CN500 — FP CONT — FLAT CABLE, 40P (ONE SIDE BOARD IN TYPE)

GND-2	40
GND-2	39
REG +8V-2	38
REG +8V-2	37
REG +5V-2	36
REG +5V-2	35
SYIF3 RDY	34
SYIF3 SCK	33
SYIF3 CMD	32
SYIF3 RES	31
L:SYS RESET	30
L:FP CS	29
FL RDY	28
FL CMD	27
FL RES	26
FL SCK	25
L:FL CS	24
L:POWER ON MUTE	23
NC	22
SC CONT (REM)	21
SYNC CONT (REM)	20
CHROMA PHASE CONT (REM)	19
Y/C DELAY CONT (REM)	18
SET-UP CONT (REM)	17
CHROMA LEVEL CONT (REM)	16
VIDEO LEVEL CONT (REM)	15
CUE REC GAIN	14
CUE PB GAIN	13
CUE GAIN GND	12
REC GAIN GND	11
CH-4 REC GAIN	10
CH-3 REC GAIN	9
CH-2 REC GAIN	8
CH-1 REC GAIN	7
REG -15V-2	6
REG -15V-2	5
REG +15V-2	4
REG +15V-2	3
A GND	2
A GND	1

VR-152

AUDIO REC LEVEL — RV1 CH-1, RV2 CH-2, RV3 CH-3, RV4 CH-4, RV5 CUE

J1 PHONE — RV6 PHONE LEVEL — JW1 — CHASSIS GND

CN512 — MONI L/R — CN145 (5/6) ← SHEET NUMBER OF SCHEMATIC DIAGRAM

MONI L (X)	1	1	1	MONI L (X)	120-28A
MONI L (G)	2	2	2	MONI L (G)	120-28B
MONI L VAR (X)	3	3	3	MONI L VAR (X)	120-29B
MONI L VAR (G)	4	4	4	MONI L VAR (G)	120-29A
MONI R (X)	5	5	5	MONI R (X)	120-30A
MONI R (G)	6	6	6	MONI R (G)	120-30B
MONI R VAR (X)	7	7	7	MONI R VAR (X)	120-31B
MONI R VAR (G)	8	8	8	MONI R VAR (G)	120-31A

FL1004 / FL1005

FP CONT — CN147 (5/6) — FLAT CABLE, 40P (ONE SIDE BOARD IN TYPE)

40	GND-2		
39	GND-2		
38	REG +8V-2		
37	REG +8V-2		
36	REG +5V-2		
35	REG +5V-2		
34	SYIF3 RDY	122-8A. 148-16. 121-45A. 137-30	
33	SYIF3 SCK	122-9B. 148-17. 121-42A. 137-33	
32	SYIF3 CMD	122-9A. 148-19. 121-43A. 137-32	
31	SYIF3 RES	122-8B. 148-18. 121-44A. 137-31	
30	L:SYS RESET	101-44B. 103-53B. 122-35A. 121-22B. 137-29	
29	L:FP CS	122-10A	
28	FL RDY	121-37A	
27	FL CMD	121-40A	
26	FL RES	121-39A	
25	FL SCK	121-38A	
24	L:FL CS	121-36A	
23	L:POWER ON MUTE	120-50A. 105-43A	
22	NC		
21	SC CONT (REM)	131-3	
20	SYNC CONT (REM)	131-1	
19	CHROMA PHASE CONT (REM)	131-2	
18	Y/C DELAY CONT (REM)	131-13	
17	SET-UP CONT (REM)	131-5	
16	CHROMA LEVEL CONT (REM)	131-6	
15	VIDEO LEVEL CONT (REM)	131-4	
14	CUE REC GAIN	105-23B	
13	CUE PB GAIN	105-23A	
12	CUE GAIN GND	105-24A. 24B	
11	REC GAIN GND	120-35A. 35B	
10	CH-4 REC GAIN	120-34B	
9	CH-3 REC GAIN	120-34A	
8	CH-2 REC GAIN	120-33B	
7	CH-1 REC GAIN	120-33A	
6	REG -15V-2		
5	REG -15V-2		
4	REG +15V-2		
3	REG +15V-2		
2	GND-2		
1	GND-2		

CN137 (5/6) — AES/EBU — FLAT CABLE, 34P (ONE SIDE BOARD IN TYPE)

122-11A	L:REM CS	34	
122-9B. 148-17. 121-42A. 147-33	SYIF3 SCK	33	
122-9A. 148-19. 121-43A. 147-32	SYIF3 CMD	32	
122-8B. 148-18. 121-44A. 147-31	SYIF3 RES	31	
122-8A. 148-16. 121-45A. 147-34	SYIF3 RDY	30	
101-44B. 103-53B. 122-35A. 121-22B. 137-29	L:SYS RESET	29	
	REG +5V	28	
	GND	27	
	GND	26	
	REG +15V	25	
	NC	24	
121-21A	AES O 3/4 (G)	23	
121-20B	AES O 3/4 (Y)	22	
121-20A	AES O 3/4 (X)	21	
121-19A	AES O 1/2 (G)	20	
121-18B	AES O 1/2 (Y)	19	
121-18A	AES O 1/2 (X)	18	
121-17A	AES I 3/4 (G)	17	
121-16B	AES I 3/4 (Y)	16	
121-16A	AES I 3/4 (X)	15	
121-15A	AES I 1/2 (G)	14	
121-14B	AES I 1/2 (Y)	13	
121-14A	AES I 1/2 (X)	12	
105-16A. 16B	EXT LTC OUT (G)	11	
105-15B	EXT LTC OUT (Y)	10	
105-15A	EXT LTC OUT (X)	9	
105-13A. 13B	EXT LTC IN (G)	8	
105-12B	EXT LTC IN (Y)	7	
105-12A	EXT LTC IN (X)	6	
105-44B	CUE MIC ON/OFF	5	
119-39B	CH-4 MIC ON/OFF	4	
119-39A	CH-3 MIC ON/OFF	3	
119-38B	CH-2 MIC ON/OFF	2	
119-38A	CH-1 MIC ON/OFF	1	

CN140 (2/6) — CUE IN/OUT

105-26A	CUE IN (X)	1	1
106-26B	CUE IN (Y)	2	2
105-27A. 27B	CUE IN (G)	3	3
105-30A	CUE OUT (X)	4	4
105-30B	CUE OUT (Y)	5	5
105-31A. 31B	CUE OUT (G)	6	6

(MB-441)

SHEET NUMBER OF SCHEMATIC DIAGRAM

BOARD TYPE	MB-441 BOARD REF.NO.	
BKDW-505/506 DEC-65	CN100	
TBC-23	CN101	
DVW-A500/A500P ONLY TBC-24	CN102	(1/6)
DM-89	CN103	
AP-28	CN104	
CUE-1	CN105	
EQ-45	CN106	(2/6)
DIF-16	CN110 CN112	
VPR-1	CN113 CN114 CN115	(3/6)
DPR-36	CN116 CN117 CN118	(4/6)
APR-1	CN119 CN120 CN121	(5/6)
SS-52	CN122 CN123 CN124	(6/6)

CN144 (5/6) — MONI OUT

119-34A	MONITOR L OUT (X)	1	1
119-34B	MONITOR L OUT (Y)	2	2
119-35A. 35B	MONITOR L OUT (G)	3	3
119-36A	MONITOR R OUT (X)	4	4
119-36B	MONITOR R OUT (Y)	5	5
119-37A. 37B	MONITOR R OUT (G)	6	6
	NC	7	7

CN143 (5/6) — AU OUT

119-26A	CH-1 OUT (X)	1	1
119-26B	CH-1 OUT (Y)	2	2
119-27A. 27B	CH-1 OUT (G)	3	3
119-28A	CH-2 OUT (X)	4	4
119-28B	CH-2 OUT (Y)	5	5
119-29A. 29B	CH-2 OUT (G)	6	6
119-30A	CH-3 OUT (X)	7	7
119-30B	CH-3 OUT (Y)	8	8
119-31A. 31B	CH-3 OUT (G)	9	9
119-32A	CH-4 OUT (X)	10	10
119-32B	CH-4 OUT (Y)	11	11
119-33A. 33B	CH-4 OUT (G)	12	12

CN142 (5/6) — AU IN

119-8A. 8B	CH-4 IN (G)	13	13
119-7B	CH-4 IN (Y)	12	12
119-7A	CH-4 IN (X)	11	11
119-6A. 6B	CH-3 IN (G)	10	10
119-5B	CH-3 IN (Y)	9	9
119-5A	CH-3 IN (X)	8	8
119-4A. 4B	CH-2 IN (G)	7	7
119-3B	CH-2 IN (Y)	6	6
119-3A	CH-2 IN (X)	5	5
119-2A. 2B	CH-1 IN (G)	4	4
119-1B	CH-1 IN (Y)	3	3
119-1A	CH-1 IN (X)	2	2
	NC	1	1

(WHT)

DP-176

CN591

SEGMENT G	1
SEGMENT F	2
SEGMENT E	3
SEGMENT D	4
SEGMENT C	5
SEGMENT B	6
SEGMENT A	7
DIGIT 10H	8
DIGIT 1H	9
DIGIT 10M	10
DIGIT 1M	11
DIGIT 10S	12
DIGIT 1S	13
DIGIT 10F	14
DIGIT 1F	15
NC	16
NC	17
RESET SW	18
RESET SCAN	19
NC	20
NC	21
NC	22
NC	23

FLAT JUMPER WIRE, 23P — TIME COUNTER DISPLAY

KY-231

CN591

1	SEGMENT G
2	SEGMENT F
3	SEGMENT E
4	SEGMENT D
5	SEGMENT C
6	SEGMENT B
7	SEGMENT A
8	DIGIT 10H
9	DIGIT 1H
10	DIGIT 10M
11	DIGIT 1M
12	DIGIT 10S
13	DIGIT 1S
14	DIGIT 10F
15	DIGIT 1F
16	NC
17	NC
18	RESET SW
19	RESET SCAN
20	NC
21	NC
22	NC
23	NC

CN590 — KEY CONT — FLAT CABLE, 16P (ONE SIDE BOARD IN TYPE) — LOWER CONTROL PANEL

GND-2	1
GND-2	2
GND-2	3
REG +8V-2	4
REG +8V-2	5
REG +8V-2	6
KY COMMAND (X)	7
KY STATUS (X)	8
KY STATUS (Y)	9
KY COMMAND (Y)	10
KY ADDRESS	11
KY TEST	12
NC	13
NC	14
DIAL SOL +8V	15
GND-2	16

PTC-69

CN1 — JOG DIAL — CN592

+5V	1	1	1	1	+5V
DIAL A	2	2	2	2	DIAL A
DIAL B	3	3	3	3	DIAL B
DIAL STILL	4	4	4	4	DIAL STILL
H:JOG/L:SHUTTLE	5	5	5	5	H:JOG/L:SHUTTLE
GND-2	6	6	6	6	GND-2
DIAL MODE	7	7	7	7	DIAL MODE
DIAL SOL. HOLDER	8	8	8	8	DIAL SOL. HOLDER
DIAL SOL. STARTER	9	9	9	9	DIAL SOL. STARTER
DIAL SOL. +8V	10	10	10	10	DIAL SOL. +8V

CN2

DIAL SOL. +8V	1	1	2
DIAL SOL. STARTER	2	2	9
DIAL SOL. HOLDER	3	3	0

SERACH DIAL SENSORS — PM005 DIAL SOL.

SWC-19

CN580 (2/2)

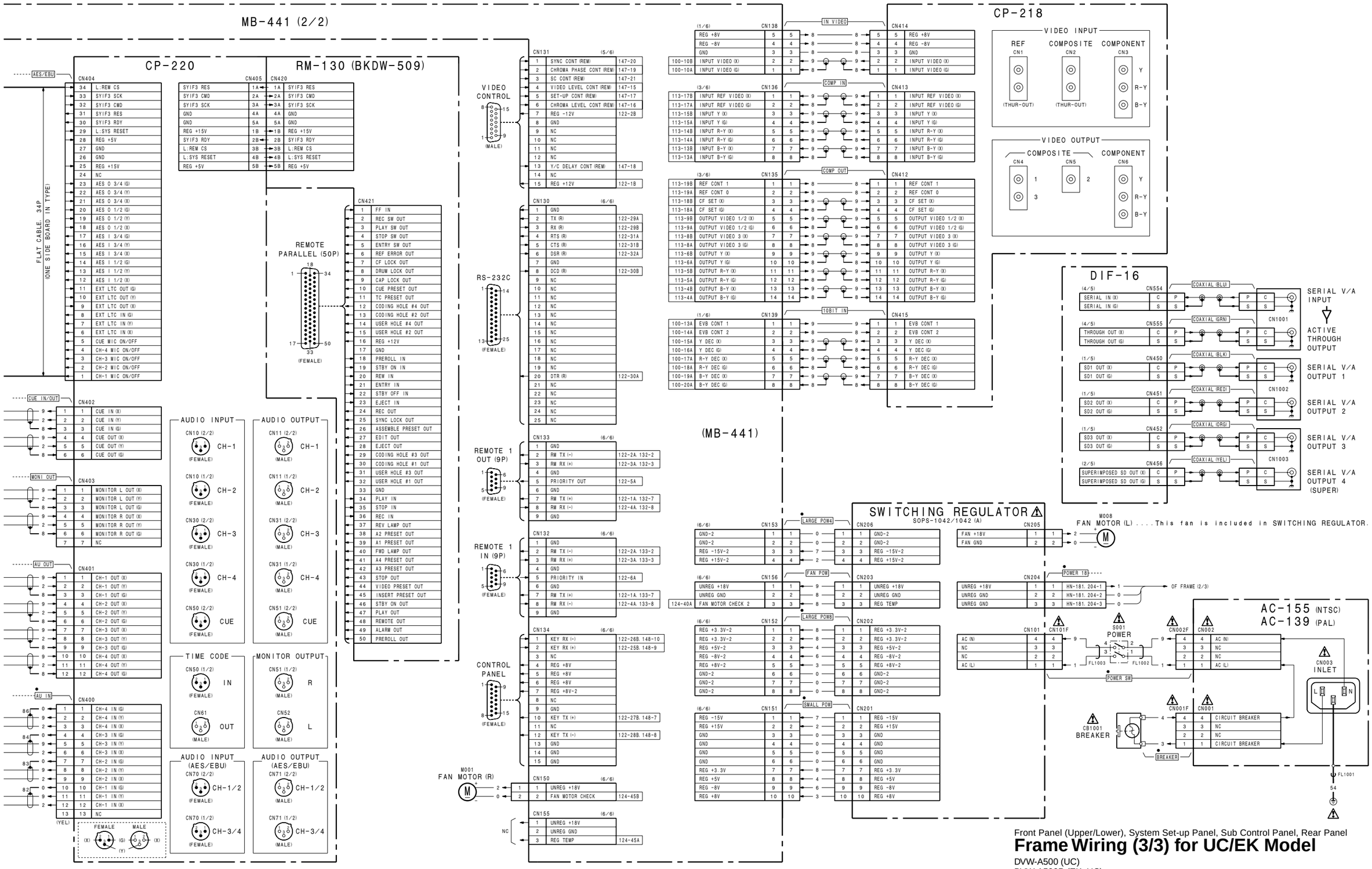
1	GND-2
2	GND-2
3	GND-2
4	REG +8V-2
5	REG +8V-2
6	REG +8V-2
7	KEY TX (+)
8	KEY RX (+)
9	KEY RX (-)
10	KEY TX (-)
11	KY ADDRESS
12	KY TEST
13	NC
14	NC
15	REG +8V-2
16	GND-2

SHEET NUMBER OF SCHEMATIC DIAGRAM

CN148 (6/6) — CN148 (6/6) — SYSTEM SET-UP PANEL

REG +8V-2	1	1	REG +8V-2	
REG +8V-2	2	2	REG +8V-2	
REG +8V-2	3	3	REG +8V-2	
GND-2	4	4	GND-2	
GND-2	5	5	GND-2	
GND-2	6	6	GND-2	
KEY TX (+)	7	7	KEY TX (+)	122-27B. 134-10
KEY TX (-)	8	8	KEY TX (-)	122-28B. 134-12
KEY RX (+)	9	9	KEY RX (+)	122-25B. 134-2
KEY RX (-)	10	10	KEY RX (-)	122-26B. 134-1
REG +5V-2	11	11	REG +5V-2	
REG +5V-2	12	12	REG +5V-2	
GND-2	13	13	GND-2	
GND-2	14	14	GND-2	
L:HW CS	15	15	L:HW CS	122-11B
SYIF3 RDY	16	16	SYIF3 RDY	122-8A. 121-45A. 147-34. 137-30
SYIF3 SCK	17	17	SYIF3 SCK	122-9B. 121-42A. 147-33. 137-33
SYIF3 RES	18	18	SYIF3 RES	122-8B. 121-44A. 147-31. 137-31
SYIF3 CMD	19	19	SYIF3 CMD	122-9A. 121-43A. 147-32. 137-32
NC	20	20	NC	

(2/2) (1/2)



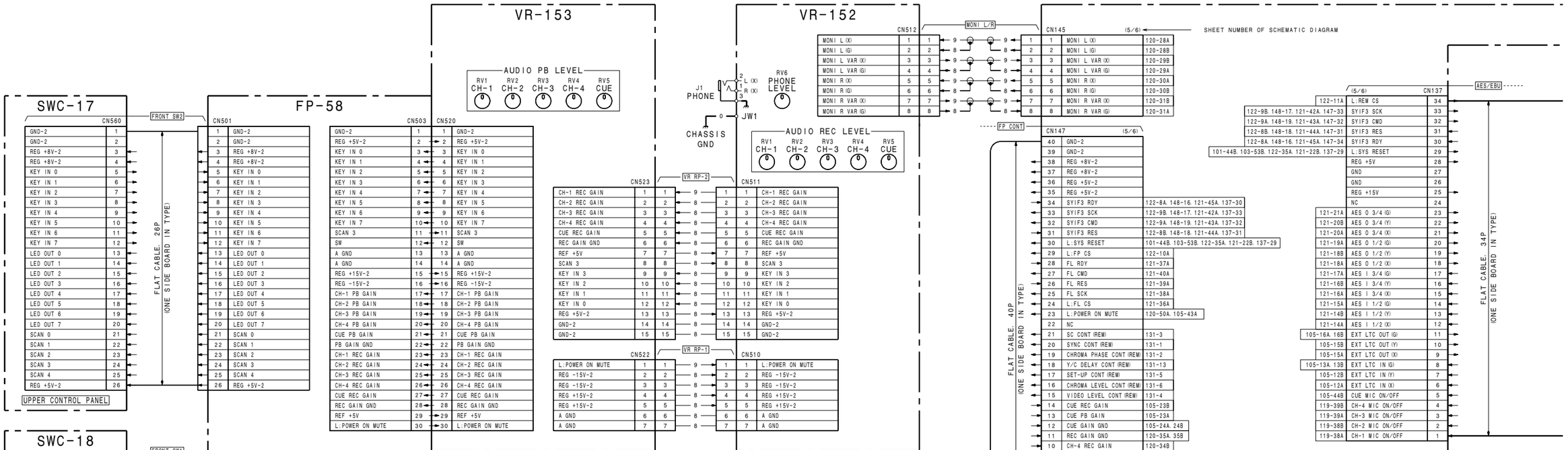
Front Panel (Upper/Lower), System Set-up Panel, Sub Control Panel, Rear Panel

Frame Wiring (3/3) for UC/EK Model

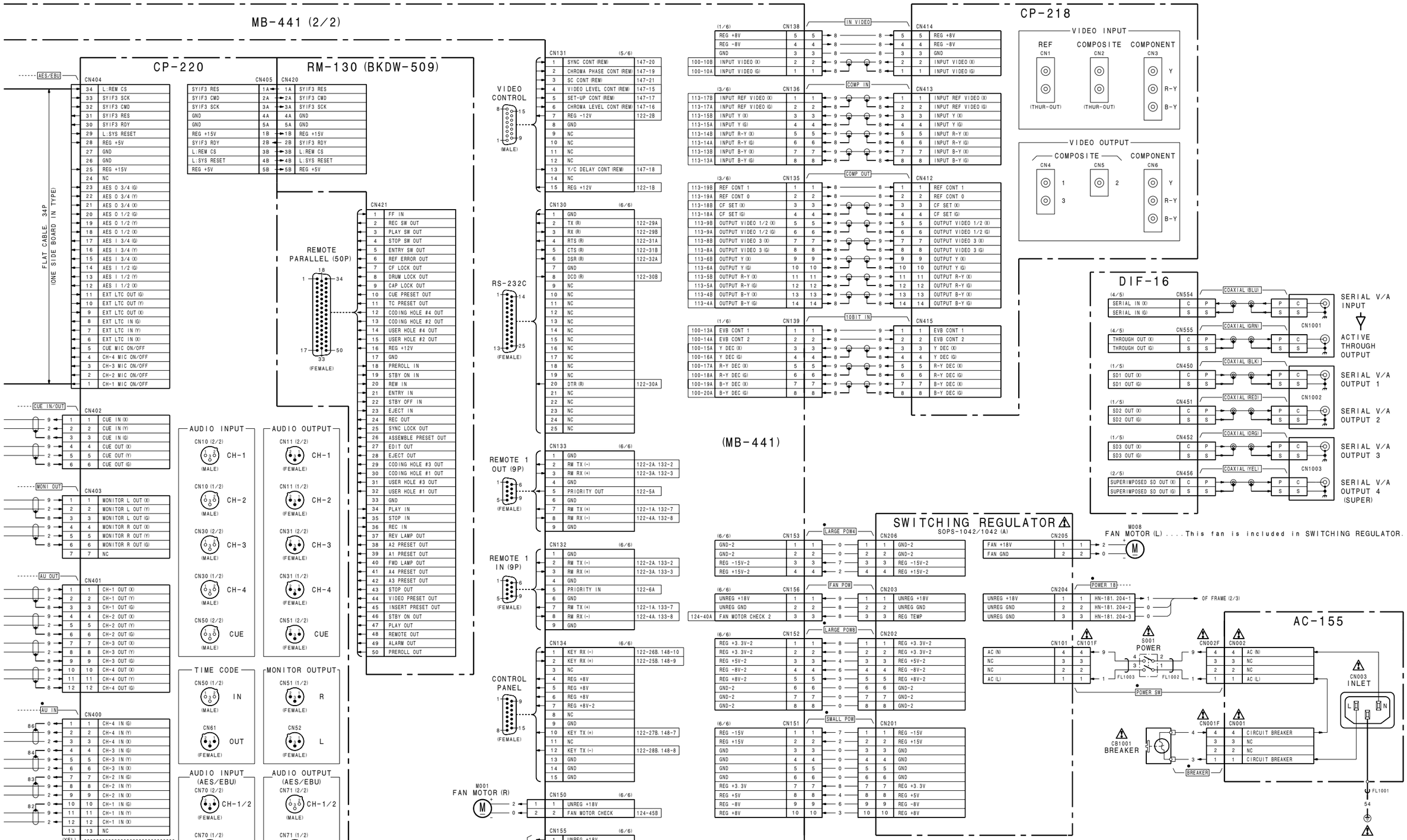
DVW-A500 (UC)
DVW-A500P (EK, UC)
DVW-500 (UC)
DVW-500P (EK, UC)

DVW-FRAME-ALL-REC-S/M-06

Frame Wiring (3/3) Recorder (J) Model



Frame Wiring (3/3) Recorder (J) Model



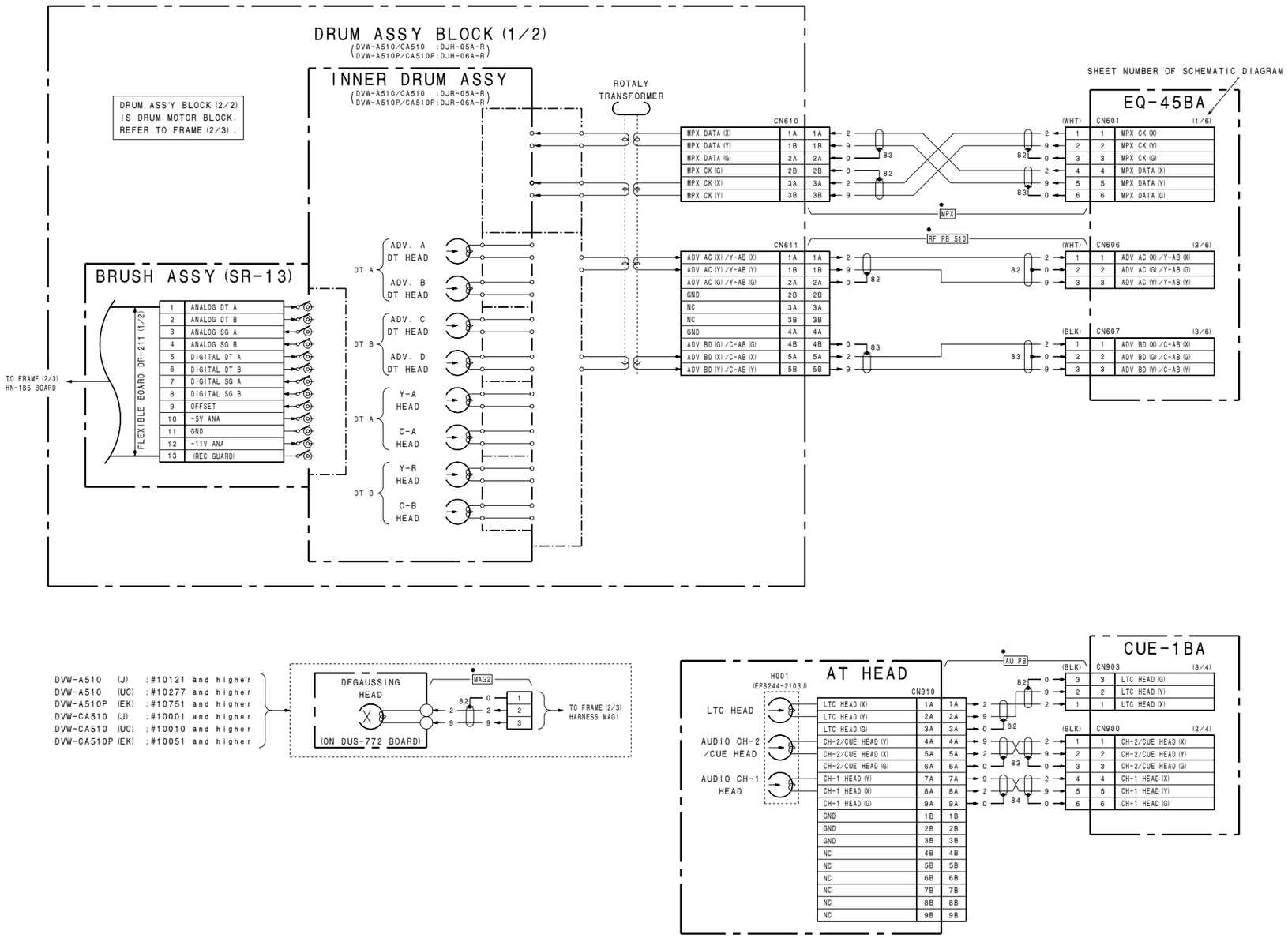
Front Panel (Upper/Lower), System Set-up Panel, Sub Control Panel, Rear Panel

Frame Wiring (3/3) for J Model

DVW-A500 (J)
DVW-500 (J)

DVW-FRAME-ALL-REC-S/M-06

Frame Wiring (1/3) Player DVW-A510/A510P/CA510/CA510P



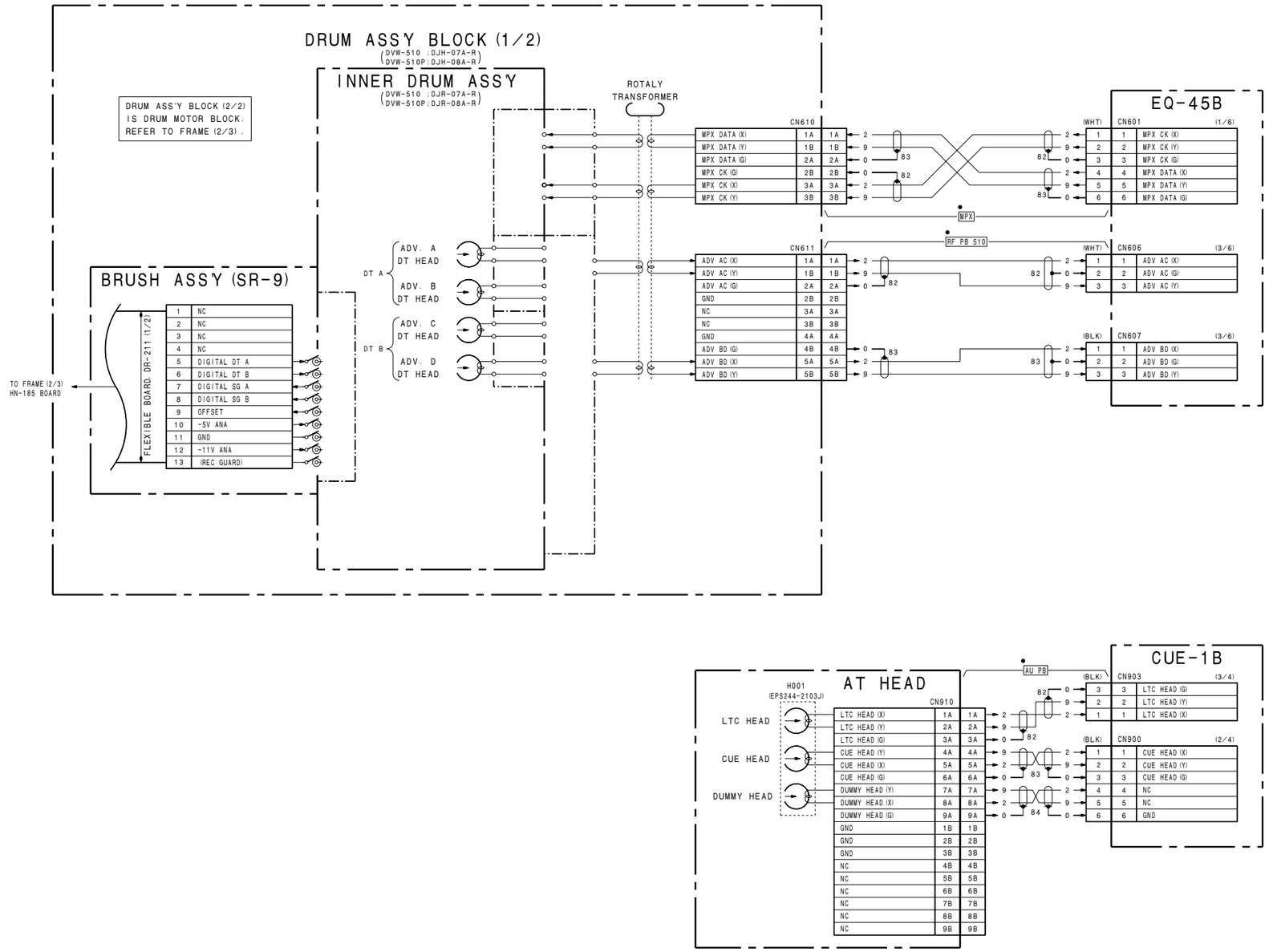
Drum, Heads (Except CTL Head)

Frame Wiring (1/3)

DVW-A510 (J, UC)
DVW-A510P (EK)
DVW-CA510 (J, UC)
DVW-CA510P (EK)

DVW-FRAME-ALL-PLAY-S/M-04

Frame Wiring (1/3) Player DVW-510/510P

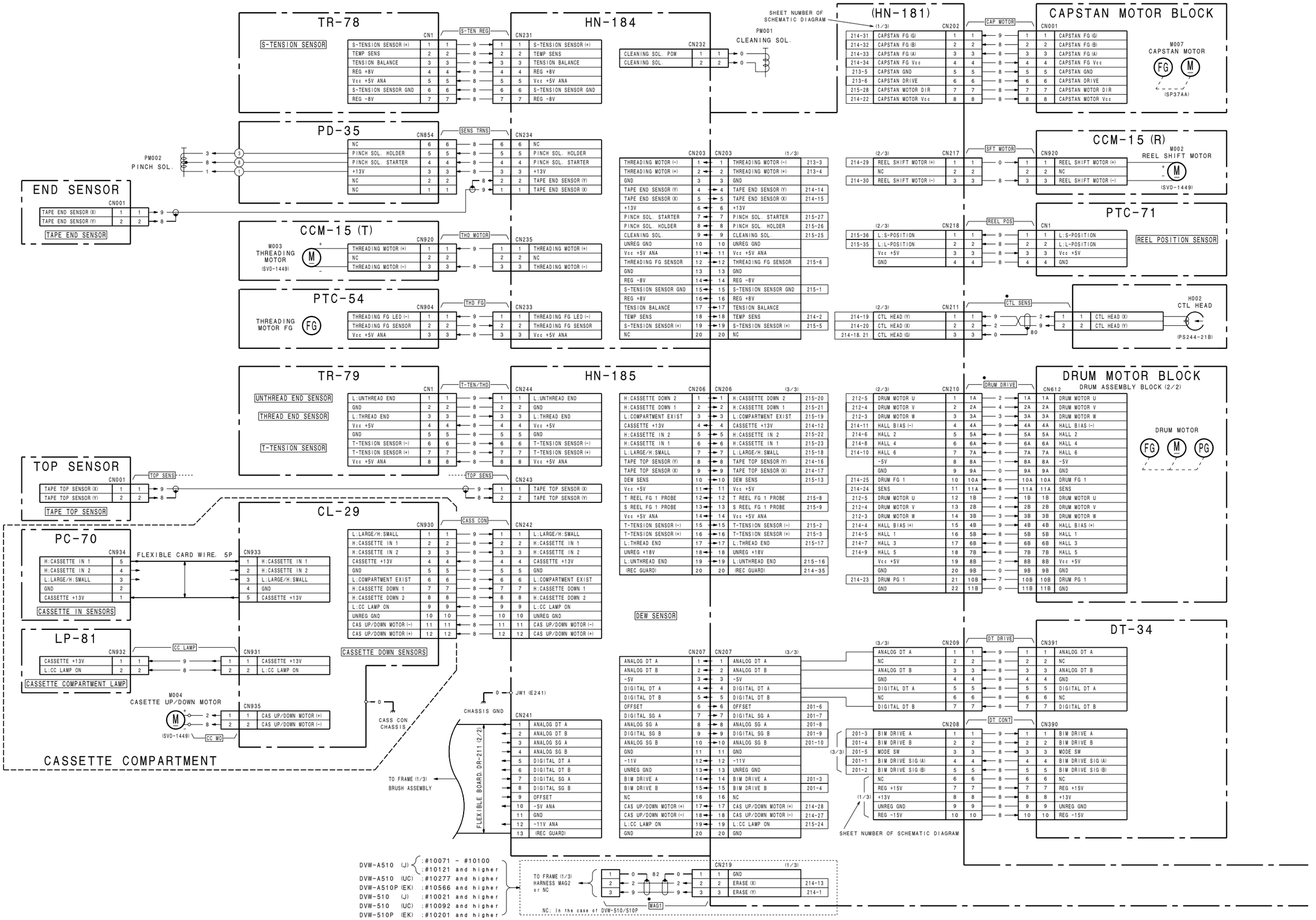


Drum, Heads (Except CTL Head)

Frame Wiring (1/3)

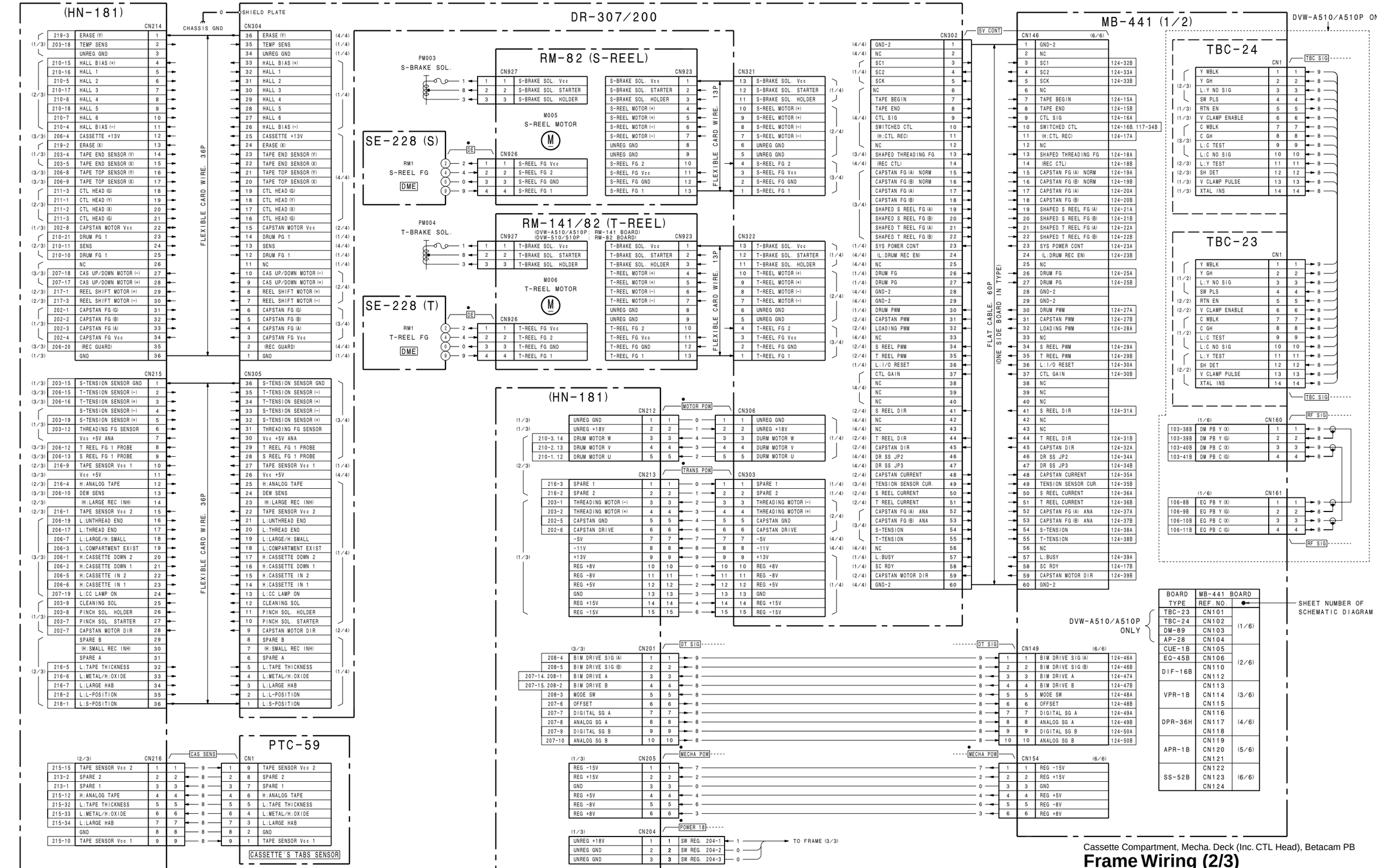
DVW-510 (J, UC)
DVW-510P (EK)
DVW-FRAME-ALL-PLAY-S/M-04

Frame Wiring (2/3) Player DVW-A510/510/A510P/510P



2-12

Frame Wiring (2/3) Player DVW-A510/510/A510P/510P



Cassette Compartment, Mecha. Deck (Inc. CTL Head), Betacam PB

Frame Wiring (2/3)

DVW-A510 (J, UC)
DVW-A510P (EK)
DVW-510 (J, UC)
DVW-510P (EK)

DVW-FRAME-ALL-PLAY-S/M-04

Frame Wiring (2/3) Player DVW-CA510/CA510P

EJECTOR ASSEMBLY

IF-36

CD				
1	1	(BLK) CN1104	1	L:C. IN
2	3		2	L:C. OUT
3	4		3	L:VS1
4	6		4	L:VS2
5	8		5	L:VS3
6	9		6	L:VMON
7	96		7	L:VM A
8	97		8	L:VM B
9	98		9	L:ON AIR
10	94		10	L:VOK
		(BRN) CN1103		
11	2		1	+5V
12	2		2	+5V
13	2		3	+5V
14	2		4	+5V
15	0		5	GND
16	0		6	GND
17	0		7	GND
18	0		8	GND
19	7		9	+24V
20	7		10	+24V

CN1201 CART (20P) — 8, 14, 1, 20, 7, 13 (MALE)

LED	A	2 → A
L:VS1	B	9 → B
GND	C	0 → C

SE-237/DU-91 EJECTOR ARM SENSOR

S901 VTR LOCK — MSW — CN1102

1	1	NC	
4 → 2	2	L:VOK	
0 → 3	3	GND	

M1001 EJECTOR MOTOR (KNS-1600A) — CN1101

0 → 1	1	A COM	
2 → 2	2	A (+)	
4 → 3	3	A (-)	
9 → 4	4	B COM	
6 → 5	5	B (+)	
3 → 6	6	B (-)	

CN1105 — TCL-1

L:VS3	1	1 → 1	1	L:VS3
L:VS2	2	3 → 2	2	L:VS2
L:C. OUT	3	4 → 3	3	L:C. OUT
L:C. IN	4	6 → 4	4	L:C. IN
H:ON AIR	5	8 → 5	5	H:ON AIR
+5V (C)	6	2 → 6	6	+5V (C)
UNREG GND	7	0 → 7	7	UNREG GND
UNREG GND	8	9 → 8	8	UNREG GND

CN286

CASSETTE COMPARTMENT

M801 CASETTE UP/DOWN MOTOR (SVD-1449) — MTR-C — CN285

2 →	1	CC. MOTOR (+)	1	→ 2
	2	NC	2	
1 →	3	CC. MOTOR (-)	3	→ 1

SE-225 CASSETTE DOWN SENSOR (1) — C-IN — CN287

D → 8	1	F.G.	1	6 ← D
B → 0	2	C. IN SENSOR Vcc	2	3 ← A
C → 0	3	UNREG GND	3	0 ← C
A → 3	4	H:CASSETTE IN	4	4 ← B

SE-225 CASSETTE IN SENSOR

SEN-1 — CN284

8 →	1	H:CC. DOWN 1	1	← 8
0 →	2	UNREG GND	2	← 0
3 →	3	C. DOWN SENSOR 1 Vcc	3	← 3
3 →	4	C. DOWN SENSOR 2 Vcc	4	← 3
0 →	5	UNREG GND	5	← 0
9 →	6	H:CC. DOWN 2	6	← 9

SE-226 CASSETTE DOWN SENSOR (2) — SEN-1

SE-237/DU-91 CASSETTE OUT SENSER — SEN-2

SE-237/DU-91 CASSETTE SENSOR — VS-3 — CN283

4 →	1	L:VS3	1	← 4
0 →	2	UNREG GND	2	← 0
3 →	3	CASSETTE SENSOR Vcc	3	← 3

SEN-2 — CN282

7 →	1	L:VS2	1	← 7
0 →	2	UNREG GND	2	← 0
3 →	3	C. OUT SENSOR Vcc	3	← 3

LED-200 ON AIR TALLY — CN1

CASSETTE +13V	1	1	3 → 1	CASSETTE +13V
NC	2	2	0 → 2	NC
L:ON AIR	3	3	1 → 3	L:ON AIR

DA-1 — CN281

1	1	CASSETTE +13V	1	→ 3
2	2	NC	2	→ 0
3	3	L:ON AIR	3	→ 1

END SENSOR

CN001

TAPE END SENSOR (X)	1	1	9 →	1
TAPE END SENSOR (Y)	2	2	8 →	2

TAPE END SENSOR

TOP SENSOR

CN001

TAPE TOP SENSOR (X)	1	1	9 →	1
TAPE TOP SENSOR (Y)	2	2	8 →	2

TAPE TOP SENSOR — TOP SENS

PM002 PINCH SOL. — 3, 8, 1

TR-78

S-TENSION SENSOR — CN1 — S-TEN REG — CN231

S-TENSION SENSOR (+)	1	1 → 9	1	1	1	S-TENSION SENSOR (+)
TEMP SENS	2	2 → 8	2	2	2	TEMP SENS
TENSION BALANCE	3	3 → 8	3	3	3	TENSION BALANCE
REG +8V	4	4 → 8	4	4	4	REG +8V
Vcc +5V ANA	5	5 → 8	5	5	5	Vcc +5V ANA
S-TENSION SENSOR GND	6	6 → 8	6	6	6	S-TENSION SENSOR GND
REG -8V	7	7 → 8	7	7	7	REG -8V

PD-35

CN854 — SENS TRNS — CN234

NC	6	6 → 8	6	6	6	NC
PINCH SOL. HOLDER	5	5 → 8	5	5	5	PINCH SOL. HOLDER
PINCH SOL. STARTER	4	4 → 8	4	4	4	PINCH SOL. STARTER
+13V	3	3 → 8	3	3	3	+13V
NC	2	2 → 8	2	2	2	TAPE END SENSOR (Y)
NC	1	1 → 9	1	1	1	TAPE END SENSOR (X)

CCM-15 (T)

M003 THREADING MOTOR (SVD-1449) — CN920 — THD MOTOR — CN235

THREADING MOTOR (+)	1	1 → 9	1	1	1	THREADING MOTOR (+)
NC	2	2	2	2	2	NC
THREADING MOTOR (-)	3	3 → 8	3	3	3	THREADING MOTOR (-)

PTC-54

THREADING MOTOR FG — CN904 — THD FG — CN233

THREADING FG LED (-)	1	1 → 9	1	1	1	THREADING FG LED (-)
THREADING FG SENSOR	2	2 → 8	2	2	2	THREADING FG SENSOR
Vcc +5V ANA	3	3 → 8	3	3	3	Vcc +5V ANA

TR-79

UNTHREAD END SENSOR
THREAD END SENSOR
T-TENSION SENSOR

CN1 — T-TEN/THD — CN244

L:UNTHREAD END	1	1 → 9	1	1	1	L:UNTHREAD END
GND	2	2 → 8	2	2	2	GND
L:THREAD END	3	3 → 8	3	3	3	L:THREAD END
Vcc +5V	4	4 → 8	4	4	4	Vcc +5V
GND	5	5 → 8	5	5	5	GND
T-TENSION SENSOR (-)	6	6 → 8	6	6	6	T-TENSION SENSOR (-)
T-TENSION SENSOR (+)	7	7 → 8	7	7	7	T-TENSION SENSOR (+)
Vcc +5V ANA	8	8 → 8	8	8	8	+5V ANA

TOP SENS — CN243

9 →	1	TAPE TOP SENSOR (X)	1	→ 9
8 →	2	TAPE TOP SENSOR (Y)	2	→ 8

CL-28

CN286 — CLV-1 — CN242

NC	1	1 → 4	1	1	1	L:LARGE/H:SMALL
H:CASSETTE IN 1	2	2 → 4	2	2	2	H:CASSETTE IN 1
H:CASSETTE IN 2	3	3 → 4	3	3	3	H:CASSETTE IN 2
CASSETTE +13V	4	4 → 3	4	4	4	CASSETTE +13V
NC	5	5	5	5	5	GND
L:COMPARTMENT EXIST	6	6 → 0	6	6	6	L:COMPARTMENT EXIST
H:CASSETTE DOWN 1	7	7 → 8	7	7	7	H:CASSETTE DOWN 1
H:CASSETTE DOWN 2	8	8 → 9	8	8	8	H:CASSETTE DOWN 2
NC	9	9	9	9	9	L:CC LAMP ON
UNREG GND	10	10 → 0	10	10	10	UNREG GND
CC. MOTOR (+)	11	11 → 2	11	11	11	CAS UP/DOWN MOTOR (-)
CC. MOTOR (-)	12	12 → 1	12	12	12	CAS UP/DOWN MOTOR (+)

CN280

HN-184

CN231 — S-TEN REG — TR-78

S-TENSION SENSOR (+)	1	1 → 9	1	1	1	S-TENSION SENSOR (+)
TEMP SENS	2	2 → 8	2	2	2	TEMP SENS
TENSION BALANCE	3	3 → 8	3	3	3	TENSION BALANCE
REG +8V	4	4 → 8	4	4	4	REG +8V
Vcc +5V ANA	5	5 → 8	5	5	5	Vcc +5V ANA
S-TENSION SENSOR GND	6	6 → 8	6	6	6	S-TENSION SENSOR GND
REG -8V	7	7 → 8	7	7	7	REG -8V

CN234 — SENS TRNS — PD-35

NC	6	6 → 8	6	6	6	NC
PINCH SOL. HOLDER	5	5 → 8	5	5	5	PINCH SOL. HOLDER
PINCH SOL. STARTER	4	4 → 8	4	4	4	PINCH SOL. STARTER
+13V	3	3 → 8	3	3	3	+13V
TAPE END SENSOR (Y)	2	2 → 8	2	2	2	TAPE END SENSOR (Y)
TAPE END SENSOR (X)	1	1 → 9	1	1	1	TAPE END SENSOR (X)

CN235 — THD MOTOR — CCM-15 (T)

THREADING MOTOR (+)	1	1 → 9	1	1	1	THREADING MOTOR (+)
NC	2	2	2	2	2	NC
THREADING MOTOR (-)	3	3 → 8	3	3	3	THREADING MOTOR (-)

CN233 — THD FG — PTC-54

THREADING FG LED (-)	1	1 → 9	1	1	1	THREADING FG LED (-)
THREADING FG SENSOR	2	2 → 8	2	2	2	THREADING FG SENSOR
Vcc +5V ANA	3	3 → 8	3	3	3	Vcc +5V ANA

CHASSIS GND — 0 — JW1 (E241)

CN241 — FLEXIBLE BOARD DR-211 (2/2) — TO FRAME (1/3) BRUSH ASSEMBLY

ANALOG DT A	1	1 → 1	1	1	1	ANALOG DT A
ANALOG DT B	2	2 → 2	2	2	2	ANALOG DT B
ANALOG SG A	3	3 → 3	3	3	3	ANALOG SG A
ANALOG SG B	4	4 → 4	4	4	4	ANALOG SG B
DIGITAL DT A	5	5 → 5	5	5	5	DIGITAL DT A
DIGITAL DT B	6	6 → 6	6	6	6	DIGITAL DT B
DIGITAL SG A	7	7 → 7	7	7	7	DIGITAL SG A
DIGITAL SG B	8	8 → 8	8	8	8	DIGITAL SG B
OFFSET	9	9 → 9	9	9	9	OFFSET
-5V ANA	10	10 → 10	10	10	10	-5V ANA
GND	11	11 → 11	11	11	11	GND
-11V ANA	12	12 → 12	12	12	12	-11V ANA
(REC GUARD)	13	13 → 13	13	13	13	(REC GUARD)

HN-185

CN244 — T-TEN/THD — TR-79

L:UNTHREAD END	1	1 → 9	1	1	1	L:UNTHREAD END
GND	2	2 → 8	2	2	2	GND
L:THREAD END	3	3 → 8	3	3	3	L;THREAD END
Vcc +5V	4	4 → 8	4	4	4	Vcc +5V
GND	5	5 → 8	5	5	5	GND
T-TENSION SENSOR (-)	6	6 → 8	6	6	6	T-TENSION SENSOR (-)
T-TENSION SENSOR (+)	7	7 → 8	7	7	7	T-TENSION SENSOR (+)
Vcc +5V ANA	8	8 → 8	8	8	8	+5V ANA

CN232 — PM001 CLEANING SOL.

CLEANING SOL. POW	1	1 → 0	1	→ 0
CLEANING SOL.	2	2 → 0	2	→ 0

CN203 — CN203 (1/3)

THREADING MOTOR (-)	1	1	THREADING MOTOR (-)	213-3
THREADING MOTOR (+)	2	2	THREADING MOTOR (+)	213-4
GND	3	3	GND	
TAPE END SENSOR (Y)	4	4	TAPE END SENSOR (Y)	214-14
TAPE END SENSOR (X)	5	5	TAPE END SENSOR (X)	214-15
+13V	6	6	+13V	
PINCH SOL. STARTER	7	7	PINCH SOL. STARTER	215-27
PINCH SOL. HOLDER	8	8	PINCH SOL. HOLDER	215-26
CLEANING SOL.	9	9	CLEANING SOL.	215-25
UNREG GND	10	10	UNREG GND	
Vcc +5V ANA	11	11	Vcc +5V ANA	
THREADING FG SENSOR	12	12	THREADING FG SENSOR	215-6
GND	13	13	GND	
REG -8V	14	14	REG -8V	
S-TENSION SENSOR GND	15	15	S-TENSION SENSOR GND	215-1
REG +8V	16	16	REG +8V	
TENSION BALANCE	17	17	TENSION BALANCE	
TEMP SENS	18	18	TEMP SENS	214-2
S-TENSION SENSOR (+)	19	19	S-TENSION SENSOR (+)	215-5
NC	20	20	NC	

CN206 — CN206 (3/3)

H:CASSETTE DOWN 2	1	1	H:CASSETTE DOWN 2	215-20
H:CASSETTE DOWN 1	2	2	H:CASSETTE DOWN 1	215-21
L:COMPARTMENT EXIST	3	3	L:COMPARTMENT EXIST	215-19
CASSETTE +13V	4	4	CASSETTE +13V	214-12
H:CASSETTE IN 2	5	5	H:CASSETTE IN 2	215-22
H:CASSETTE IN 1	6	6	H:CASSETTE IN 1	215-23
L:LARGE/H:SMALL	7	7	L:LARGE/H:SMALL	215-18
TAPE TOP SENSOR (Y)	8	8	TAPE TOP SENSOR (Y)	214-16
TAPE TOP SENSOR (X)	9	9	TAPE TOP SENSOR (X)	214-17
DEW SENS	10	10	DEW SENS	215-13
Vcc +5V	11	11	Vcc +5V	
T REEL FG 1 PROBE	12	12	T REEL FG 1 PROBE	215-8
S REEL FG 1 PROBE	13	13	S REEL FG 1 PROBE	215-9
Vcc +5V ANA	14	14	Vcc +5V ANA	
T-TENSION SENSOR (-)	15	15	T-TENSION SENSOR (-)	215-2
T-TENSION SENSOR (+)	16	16	T-TENSION SENSOR (+)	215-3
L:THREAD END	17	17	L:THREAD END	215-17
UNREG +18V	18	18	UNREG +18V	
L:UNTHREAD END	19	19	L:UNTHREAD END	215-16
(REC GUARD)	20	20	(REC GUARD)	214-35

DEW SENSOR

CN207 — CN207 (3/3)

ANALOG DT A	1	1	ANALOG DT A	
ANALOG DT B	2	2	ANALOG DT B	
-5V	3	3	-5V	
DIGITAL DT A	4	4	DIGITAL DT A	
DIGITAL DT B	5	5	DIGITAL DT B	
OFFSET	6	6	OFFSET	201-6
DIGITAL SG A	7	7	DIGITAL SG A	201-7
ANALOG SG A	8	8	ANALOG SG A	201-8
DIGITAL SG B	9	9	DIGITAL SG B	201-9
ANALOG SG B	10	10	ANALOG SG B	201-10
GND	11	11	GND	
-11V	12	12	-11V	
UNREG GND	13	13	UNREG GND	
BIM DRIVE A	14	14	BIM DRIVE A	201-3
BIM DRIVE B	15	15	BIM DRIVE B	201-4
NC	16	16	NC	
CAS UP/DOWN MOTOR (+)	17	17	CAS UP/DOWN MOTOR (+)	214-28
CAS UP/DOWN MOTOR (-)	18	18	CAS UP/DOWN MOTOR (-)	214-27
L:CC LAMP ON	19	19	L:CC LAMP ON	215-24
GND	20	20	GND	

TO FRAME (1/3) HARNESS MAG2 — 1, 2, 3 — 0, 2, 9 — 82 — 0, 2, 9 — MAG1

CN219 (1/3)

1	1	GND		
2	2	ERASE (X)	214-13	
3	3	ERASE (Y)	214-1	

DVW-CA510 (J) ; #10001 and higher
DVW-CA510 (UC) ; #10010 and higher
DVW-CA510P (EK) ; #10036 and higher

SHEET NUMBER OF SCHEMATIC DIAGRAM

(HN-181)

CN202 (1/3) — CAP MOTOR — CAPSTAN MOTOR BLOCK CN001

214-31	CAPSTAN FG (G)	1	1 → 9	1	1	CAPSTAN FG (G)
214-32	CAPSTAN FG (B)	2	2 → 8	2	2	CAPSTAN FG (B)
214-33	CAPSTAN FG (A)	3	3 → 8	3	3	CAPSTAN FG (A)
214-34	CAPSTAN FG Vcc	4	4 → 8	4	4	CAPSTAN FG Vcc
213-5	CAPSTAN GND	5	5 → 8	5	5	CAPSTAN GND
213-6	CAPSTAN DRIVE	6	6 → 8	6	6	CAPSTAN DRIVE
215-28	CAPSTAN MOTOR DIR	7	7 → 8	7	7	CAPSTAN MOTOR DIR
214-22	CAPSTAN MOTOR Vcc	8	8 → 8	8	8	CAPSTAN MOTOR Vcc

M007 CAPSTAN MOTOR (FG, M) (SP37AA)

CCM-15 (R)

(2/3) CN217 — SFT MOTOR — CN920 — M002 REEL SHIFT MOTOR (SVD-1449)

214-29	REEL SHIFT MOTOR (+)	1	1 → 0	1	1	REEL SHIFT MOTOR (+)
	NC	2	2	2	2	NC
214-30	REEL SHIFT MOTOR (-)	3	3 → 8	3	3	REEL SHIFT MOTOR (-)

PTC-71

(2/3) CN218 — REEL POS — CN1 — REEL POSITION SENSOR

215-36	L:S-POSITION	1	1 → 9	1	1	L:S-POSITION
215-35	L:L-POSITION	2	2 → 8	2	2	L:L-POSITION
	Vcc +5V	3	3 → 8	3	3	Vcc +5V
	GND	4	4 → 8	4	4	GND

(2/3) CN211 — CTL SENS — H002 CTL HEAD (PS244-21B)

214-19	CTL HEAD (Y)	1	1 → 9	1	1	CTL HEAD (X)
214-20	CTL HEAD (X)	2	2 → 9	2	2	CTL HEAD (Y)
214-18.21	CTL HEAD (G)	3	3 → 0	80		

DRUM MOTOR BLOCK

DRUM ASSEMBLY BLOCK (2/2)

(2/3) CN210 — DRUM DRIVE — CN612

212-5	DRUM MOTOR U	1	1A → 2	1A	1A	DRUM MOTOR U
212-4	DRUM MOTOR V	2	2A → 4	2A	2A	DRUM MOTOR V
212-3	DRUM MOTOR W	3	3A → 3	3A	3A	DRUM MOTOR W
214-11	HALL BIAS (-)	4	4A → 9	4A	4A	HALL BIAS (-)
214-6	HALL 2	5	5A → 8	5A	5A	HALL 2
214-8	HALL 4	6	6A → 8	6A	6A	HALL 4
214-10	HALL 6	7	7A → 8	7A	7A	HALL 6
	-5V	8	8A → 1	8A	8A	-5V
	GND	9	9A → 0	9A	9A	GND
214-25	DRUM FG 1	10	10A → 6	10A	10A	DRUM FG 1
214-24	SENS	11	11A → 8	11A	11A	SENS
212-5	DRUM MOTOR U	12	1B → 2	1B	1B	DRUM MOTOR U
212-4	DRUM MOTOR V	13	2B → 4	2B	2B	DRUM MOTOR V
212-3	DRUM MOTOR W	14	3B → 3	3B	3B	DRUM MOTOR W
214-4	HALL BIAS (+)	15	4B → 9	4B	4B	HALL BIAS (+)
214-5	HALL 1	16	5B → 8	5B	5B	HALL 1
214-7	HALL 3	17	6B → 8	6B	6B	HALL 3
214-9	HALL 5	18	7B → 8	7B	7B	HALL 5
	Vcc +5V	19	8B → 2	8B	8B	Vcc +5V
	GND	20	9B → 0	9B	9B	GND
214-23	DRUM PG 1	21	10B → 7	10B	10B	DRUM PG 1
	GND	22	11B → 0	11B	11B	GND

DRUM MOTOR (FG, M, PG)

DT-34

(3/3) CN209 — DT DRIVE — CN391

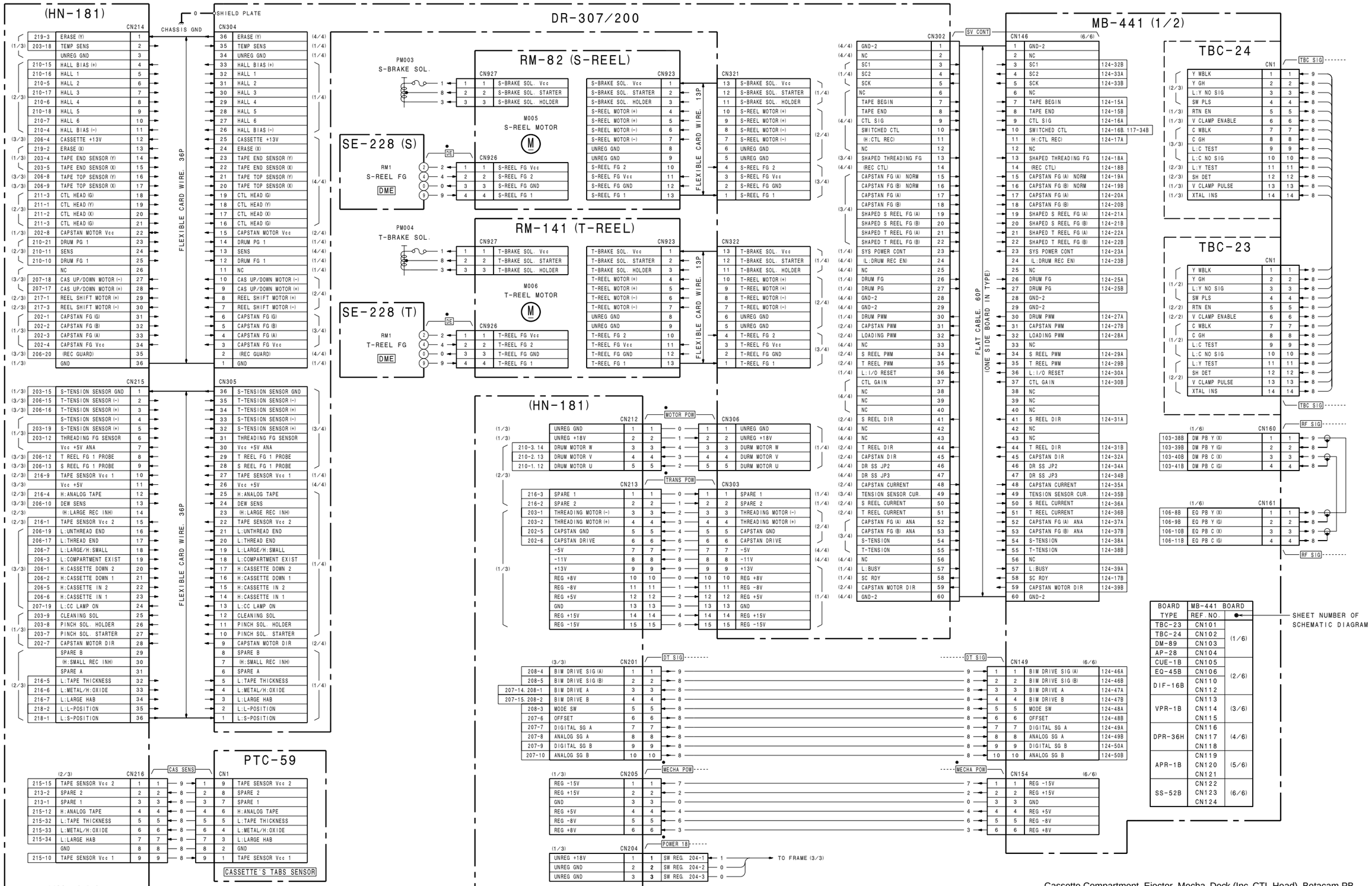
ANALOG DT A	1	1 → 9	1	1	1	ANALOG DT A
NC	2	2 → 8	2	2	2	NC
ANALOG DT B	3	3 → 8	3	3	3	ANALOG DT B
GND	4	4 → 8	4	4	4	GND
DIGITAL DT A	5	5 → 8	5	5	5	DIGITAL DT A
NC	6	6 → 8	6	6	6	NC
DIGITAL DT B	7	7 → 8	7	7	7	DIGITAL DT B

CN208 — DT CONT — CN390

201-3	BIM DRIVE A	1	1 → 9	1	1	BIM DRIVE A
201-4	BIM DRIVE B	2	2 → 8	2	2	BIM DRIVE B
201-5	MODE SW	3	3 → 8	3	3	MODE SW
201-1	BIM DRIVE SIG (A)	4	4 → 8	4	4	BIM DRIVE SIG (A)
201-2	BIM DRIVE SIG (B)	5	5 → 8	5	5	BIM DRIVE SIG (B)
	NC	6	6 → 8	6	6	NC
	REG +15V	7	7 → 8	7	7	REG +15V
	+13V	8	8 → 8	8	8	+13V
	UNREG GND	9	9 → 8	9	9	UNREG GND
	REG -15V	10	10 → 8	10	10	REG -15V

(3/3) — (1/3) — SHEET NUMBER OF SCHEMATIC DIAGRAM

Frame Wiring (2/3) Player DVW-CA510/CA510P



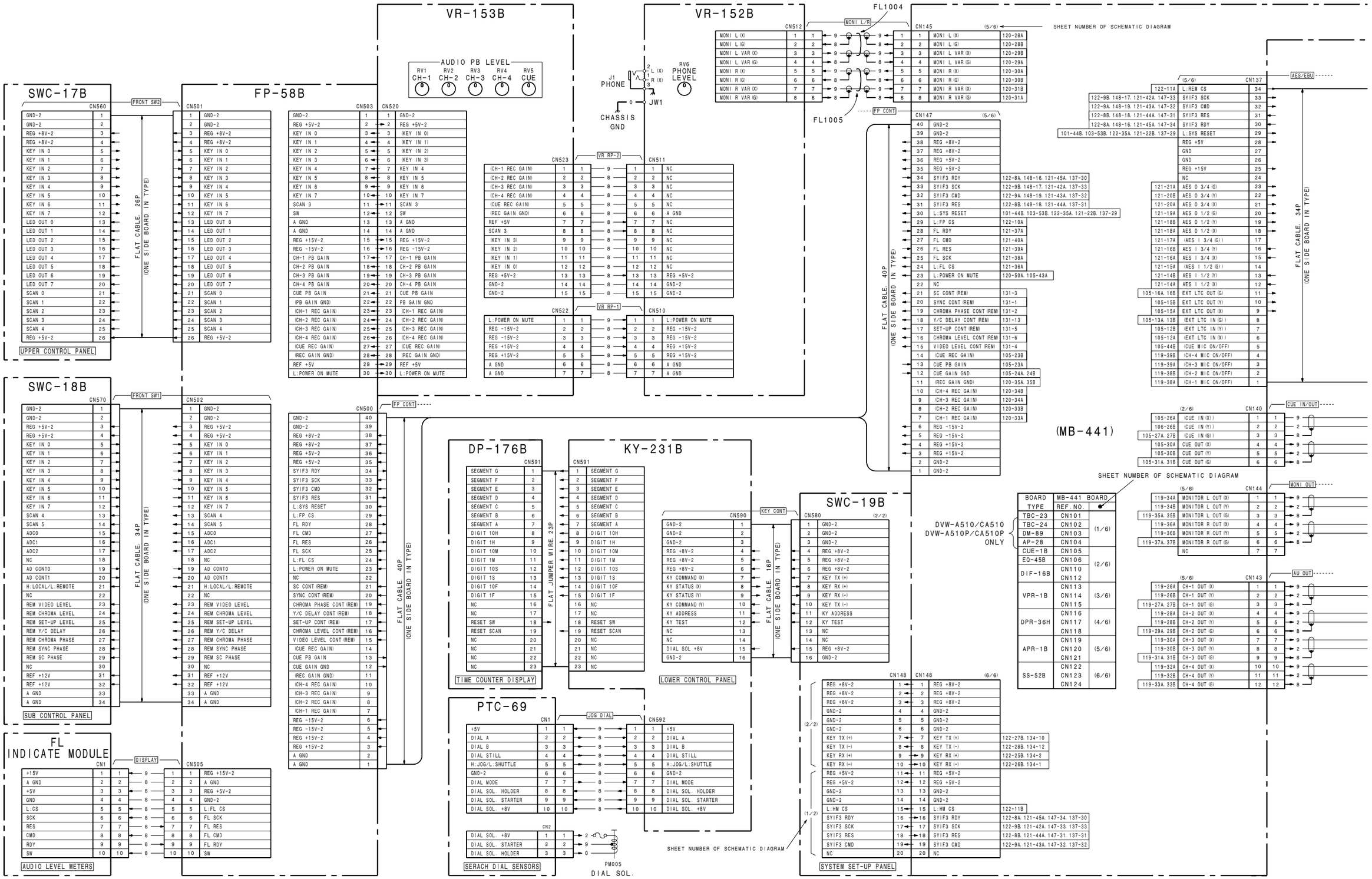
Cassette Compartment, Ejector, Mecha. Deck (Inc. CTL Head), Betacam PB

Frame Wiring (2/3)

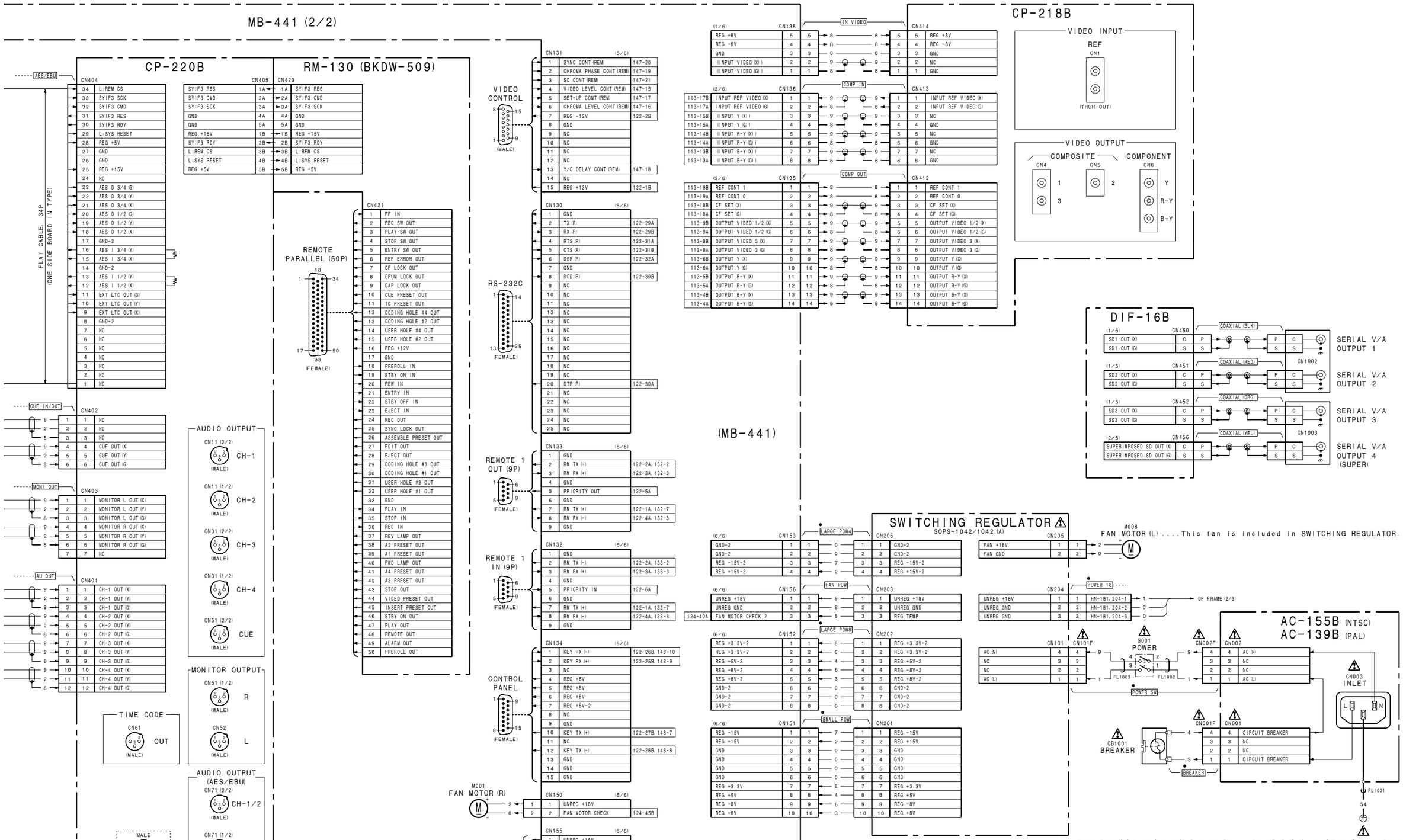
DVW-CA510 (J, UC)
DVW-CA510P (EK)

DVW-FRAME-ALL-PLAY-S/M-04

FL1004 and FL1005 are not equipped in the DVW-A510/510/CA510.



Frame Wiring (3/3) Player (UC/EK) Model

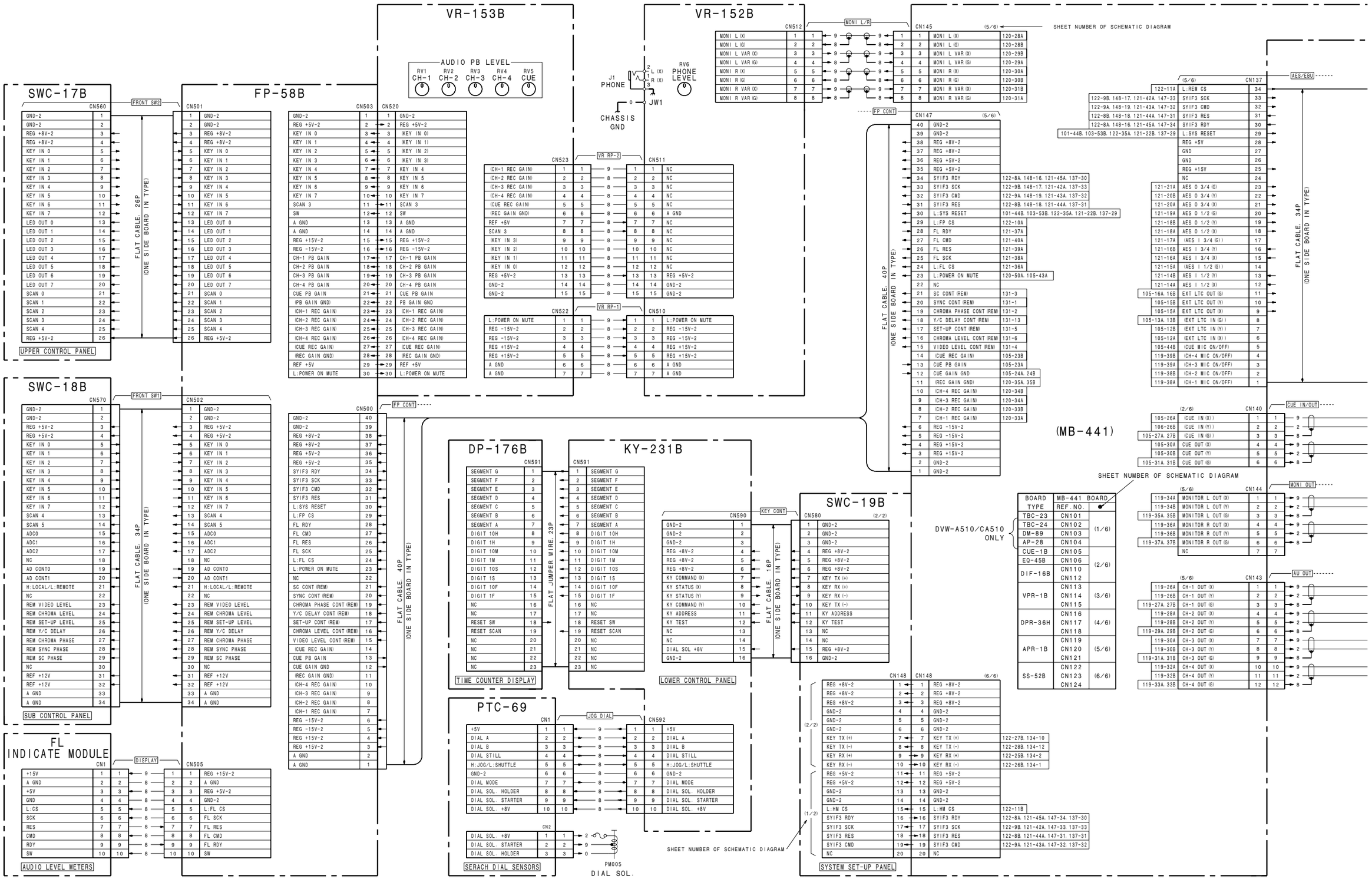


Front Panel (Upper/Lower), System Set-up Panel, Sub Control Panel, Rear Panel

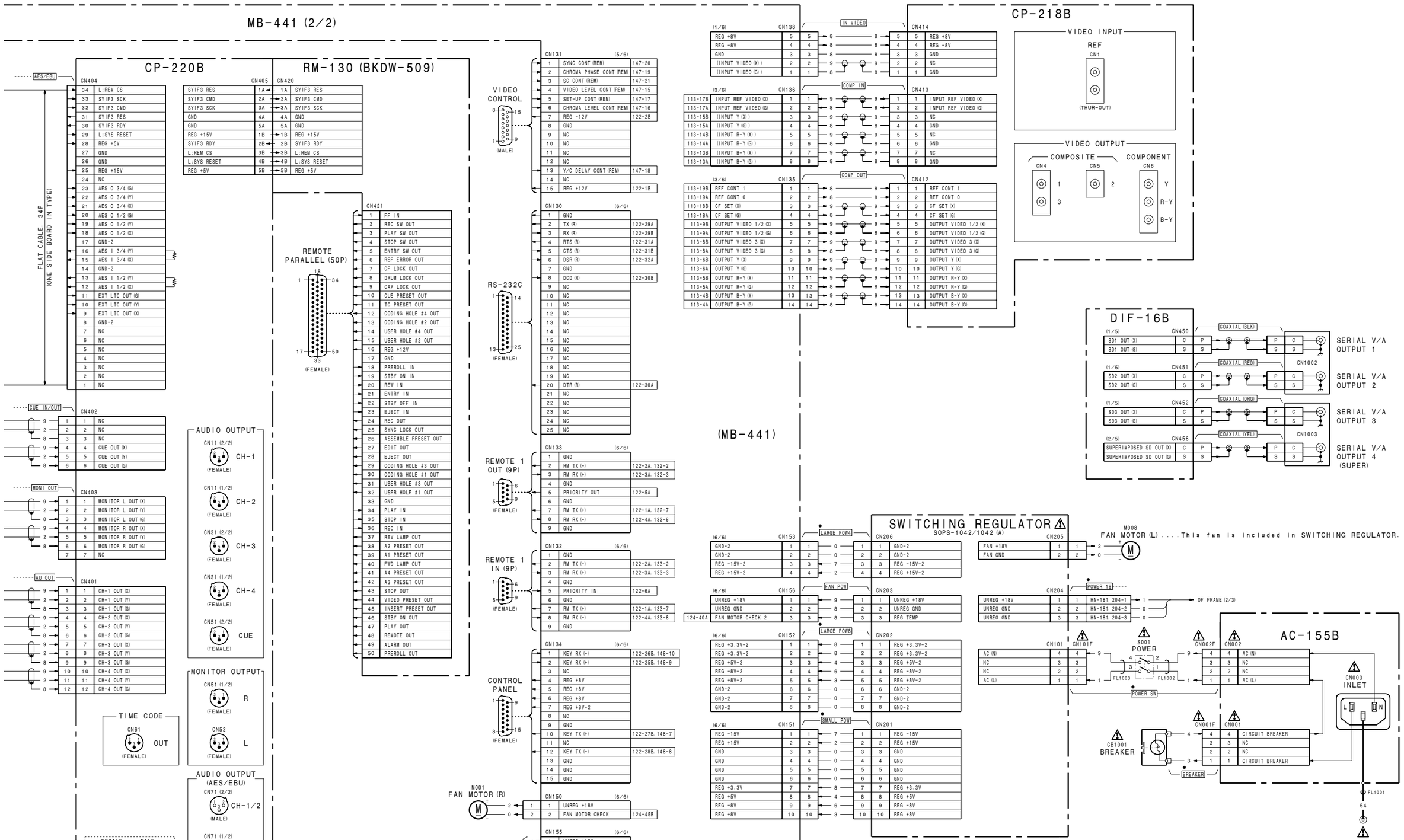
Frame Wiring (3/3) for UC/EK Model

DVW-A510 (UC)
DVW-A510P (EK)
DVW-510 (UC)
DVW-510P (EK)
DVW-CA510 (UC)
DVW-CA510P (EK)

DVW-FRAME-ALL-PLAY-S/M-04


VR-153B
VR-152B
AUDIO PB LEVEL
RV1 CH-1
RV2 CH-2
RV3 CH-3
RV4 CH-4
RV5 CUE
RV6 PHONE LEVEL
J1 PHONE
JW1
CHASSIS GND
SHEET NUMBER OF SCHEMATIC DIAGRAM
SWC-17B
FRONT SW2
CN560
CN501
FLAT CABLE, 26P (ONE SIDE BOARD IN TYPE)
UPPER CONTROL PANEL
FP-58B
CN503
CN520
CN523
VR RP-2
CN511
CN522
VR RP-1
CN510
CN512
MONI L/R
CN145
(5/6)
FP CONT
CN147
FLAT CABLE, 40P (ONE SIDE BOARD IN TYPE)
CN137
AES/EBU
FLAT CABLE, 34P (ONE SIDE BOARD IN TYPE)
SWC-18B
FRONT SW1
CN570
CN502
CN500
FLAT CABLE, 34P (ONE SIDE BOARD IN TYPE)
SUB CONTROL PANEL
DP-176B
CN591
FLAT JUMPER WIRE, 23P
TIME COUNTER DISPLAY
KY-231B
CN590
KEY CONT
FLAT CABLE, 16P (ONE SIDE BOARD IN TYPE)
LOWER CONTROL PANEL
SWC-19B
CN580
(2/2)
SYSTEM SET-UP PANEL
CN148
(6/6)
(MB-441)
CN140
(2/6)
CUE IN/OUT
CN144
(5/6)
MONI OUT
CN143
AU OUT
BOARD TYPE
MB-441 BOARD REF.NO.
DVW-A510/CA510 ONLY
FL INDICATE MODULE
DISPLAY
CN505
AUDIO LEVEL METERS
PTC-69
CN1
JOG DIAL
CN592
CN2
SERACH DIAL SENSORS
PM005
DIAL SOL.

Frame Wiring (3/3) Player (J) Model



Front Panel (Upper/Lower), System Set-up Panel, Sub Control Panel, Rear Panel

Frame Wiring (3/3) for J Model

DVW-A510 (J)
DVW-510 (J)
DVW-CA510 (J)

DVW-FRAME-ALL-PLAY-S/M-04

Section 3
Semiconductor Pin Assignments

The following describes the semiconductor types used in this unit.
For semiconductors marked with page numbers in the index, refer to the corresponding pages in this section. However, in some cases incompatible types are also listed, therefore, when a part is to be replaced, also refer to the Spare Parts section.
In addition, for semiconductors with ID Nos., refer to the separate CD-ROM titled “Semiconductor Pin Assignments” (Sony Part No. 9-968-546-xx) that allows searching for parts by semiconductor type or ID No.
The semiconductors in the manual or on the CD-ROM are listed by equivalent types. Thus the external view or the index mark indication may differ from the actual type.
Pin assignments and block diagrams are based on the IC manufacturer’s data book.

本機に使用されている半導体型名の一覧を下記に示します。
索引中，ページが記載されている半導体は，本章の該当ページを参照してください。ただし，互換性のない型名を併記している場合がありますので，部品を交換するときは，Spare Partsの章を参照してください。
また，ID番号が記載されている半導体は，別途発行の “Semiconductor Pin Assignments” CD−ROM版 (ソニー部品番号：9−968−546−xx)を参照してください。
半導体型名またはID番号から検索ができます。
マニュアルまたはCD−ROMに掲載されている半導体は，それぞれの機能を等価的に表わしたものです。
外観やインデックスマークの表示方法が実物と異なる場合があります。
ピン配置およびブロック図はICメーカーのデータブックに従いました。

DIODE	Page or ID No.
02DZ6.2-TPH3	DC008-04
1S2836	DC001-02
1S2836-T1	DC001-02
1SS154-TE85L	DC001-07
1SS193	DC001-06
1SS193-TE85L	DC001-06
1SS300-TE85L	DC001-02
1SS301-TE85L	DC001-03
1SS372-TE85L	DC001-01
1SV160	DC001-14
1SV160-TE85L	DC001-14
DA204U	DC001-01
DA204UT106	DC001-01
DAN202U	DC001-03
DAN202UT106	DC001-03
DAP202U	DC001-02
DAP202UT106	DC001-02
EC10DS2	DC007-01
EC10DS2-TE12L5	DC007-01
ERB44-08	DA001-01
ERC84-009	DA001-01
KV1470	DC001-13
KV1470TL00	DC001-13
MA141WK	DC001-03
MA143A-(TX).SO	DC001-01
RB717F	DC001-02
RB717F-T106	DC001-02
RD2.0M-T1B	DC001-04
RD2.0MB	DC001-04
RD3.3M-B	DC001-04
RD3.3M-T1B	DC001-04
RD6.2M-B	DC001-04
RD6.2M-T1B	DC001-04
RU-3AM	DA001-01
SB007-03CP	DC001-06
SB007-03CP-TB	DC001-06
SB007T03Q	DC001-01
SB007T03Q-TL	DC001-01
SB01-05CP	DC001-06
SB01-05CP-TB	DC001-06
SB20-03P	DC002-03
SB20-03P-TD	DC002-03

LED	Page or ID No.
CL-150D-CD	LC001-01
CL-150D-CD-T	LC001-01
CL-191HR-CD-T	LC004-02
CL-191YG-CD-T	LC004-01
GL480	LR089-01
GL5HD8	LR001-01
LB-402VP	LR077-01
TLG182P	LR001-01
TLG255A	LR013-01
TLS255A	LR013-01
TLY255A	LR013-01
TLY256	LR020-01

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TRANSISTOR	Page or ID No.
2SA1156-2K	TM006-01
2SA1156-2L	TM006-01
2SA1213Y-TE12L	TC002-01
2SA1413-K	TR031-02
2SA1610-T1Y33	TC001-01
2SA1610-Y33	TC001-01
2SA1611-M5M6	TC001-01
2SA1611T1-M5M6	TC001-01
2SB1094	TM001-16
2SB1094-LK	TM001-16
2SB1115-T1YL	TC002-01
2SB1115A-YQ	TC002-01
2SB1151-K	TM006-01
2SB1151-L	TM006-01
2SB798-DL	TC002-01
2SC2120-Y	TR001-03
2SC2120-Y-TPE2	TR001-03
2SC2603TP-F	TR011-02
2SC2785-HFE	TR011-02
2SC2873Y-TE12L	TC002-02
2SC3356-K	TC001-02
2SC3356-T1K	TC001-02
2SC3518-L	TR031-01
2SC3632-K	TR031-01
2SC3735-L-B35	TC001-02
2SC3735-T1B-B35	TC001-02
2SC4176-B35	TC001-02
2SC4176-T1B35	TC001-02
2SC4177-L6	TC001-02
2SC4177-T1L5L6	TC001-02
2SC4178-F13	TC001-02
2SC4178-T1F13	TC001-02
2SC4213-A	TC001-02
2SC4213-B	TC001-02
2SC4213A-TE85L	TC001-02
2SC4213B-TE85L	TC001-02
2SD1585-LK	TM004-01
2SD1615A-T1GQGP	TC002-02
2SD1623-S	TC002-02
2SD1691-K	TM006-02
2SD596-DV5	TC001-02
2SD596-T1DV5	TC001-02
2SD773	TR009-02
2SD773-T-3	TR009-02
2SJ106-Y	TC001-06
2SJ106Y-TE85L	TC001-06
2SJ418	TR031-09
2SK2046	TR031-03
2SK208-Y	TC001-05
2SK208Y-TE85L	TC001-05
2SK711-BL	TC001-05
2SK711-BL/V-TE85L	TC001-05
2SK94-T1X3	TC001-05
2SK94-X4	TC001-05
DTA114EUA	TC001-04
DTA114EUA-T106	TC001-04
DTA114TKA-T146	TC001-04
DTA114TUA-T106	TC001-04

TRANSISTOR	Page or ID No.
DTA123JKA-T146	TC001-04
DTA144EUA-T106	TC001-04
DTC114EUA-T106	TC001-03
DTC114TUA-T106	TC001-03
DTC123JUA-T106	TC001-03
DTC124EUA-T106	TC001-03
DTC144ESA	TR008-04
DTC144EUA-T106	TC001-03
FMS2	TC008-07
FMS2-T-148	TC008-07
FMY3	TC008-05
FMY3-T-148	TC008-05
IMX1	TC005-01
IMX1T110	TC005-01
PT480	TR037-02

OTHER	Page or ID No.
DM-211A	MR011-01
DM-218A	MR011-01
DM-230-1	MA023-01
GP1A52HR	MR010-06
GP1A53HR	MR010-06
GP1S54	MR010-02

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74AC00SJ	TC74HC00P
74AC00SJX	TC74HC00P
74AC08SJ	TC74HC08P
74AC08SJX	TC74HC08P
74AC11SJ	TC74HC11P
74AC11SJX	TC74HC11P
74AC138SJ	TC74HC138P
74AC138SJX	TC74HC138P
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74AC14SJX	TC74HC14P
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74AC157SJX	TC74HC157P
74AC244SJ	TC74HC244P
74AC244SJX	TC74HC244P
74AC245SJ	TC74HC245P
74AC245SJX	TC74HC245P
74AC32SJ	TC74HC32P
74AC32SJX	TC74HC32P
74AC540SJ	MC74HC540N
74AC540SJX	MC74HC540N
74AC574SJ	TC74HC574P
74AC574SJX	TC74HC574P
74AC74SJ	TC74HC74P
74AC74SJX	TC74HC74P
74ACT244SJ	TC74HC244P
74ACT244SJX	TC74HC244P
74ACT245SJ	TC74HC245P
74ACT245SJX	TC74HC245P
74F00SJ	SN7400N
74F00SJX	SN7400N
74F174SJ	3-8
74LVX3245QSCX	74LVX4245QSCX
AD7528JN	AD7528JN
AK5390-VS	AK5389-VP
AK5390-VS-E2	AK5389-VP
AK6420AF-E2	AK6420HF
AM26LS32ACNS	AM26LS32PC
AM26LS32ACNSR	AM26LS32PC
AN3920S	AN3920K
AN3920S-E2	AN3920K
AN3922NS	AN3922NK
AN3922NS-E2	AN3922NK
BA033FP	L78M05T-FA
BA033FP-E2	L78M05T-FA
BA10358F-E2	LM358N
BP-015	BP-015
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BR9021BF-E2	BR9021BF
BR93LC46F-E2	BR93LC46F
BX-3914	BX3914
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CX20099-T6	CX20099
CX23065A	CX23065
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CXA1179N-TH	CXA1179N
CXA1370Q	CXA1370Q
CXA1450M-TH	CXA1450M
CXA1451M	CXA1451M
CXA1451M-TH	CXA1451M
CXA1479Q	CXA1479Q
CXA1805Q	CXA1805Q
CXA1805Q-T4	CXA1805Q
CXA1806Q	3-8
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CXD2221Q	CXD2221Q
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CXD8928R	CXD8928R

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CXK48324Q	CXK48324Q
CXK48324R	CXK48323R
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CY7C199-20VC	CY7C199-45PC
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HD29029FP-EL	MMH0026CP1
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IDT6116SA25SO-T	CXK5816SP-15
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IDT71V124S15Y-TL	HM62W8127HJP-27
KM68V1002CJ-15T	KM68V1002AJ-15T
L78M05T-FA	L78M05T-FA
L78M05TLL-SONY-TL	L78M05T-FA
L79M05T-FA	L79M05T-FA
L79M05T-FA-TL	L79M05T-FA
LA7205M	LA7205M
LA7205M-TE-L	LA7205M
LC3564BM-10-TLM	CXK5864AP-10L
LM1881M	LM1881N
LM1881MX	LM1881N
LM2903P	UA393DC
LM2903PS	UA393DC
LM2903PS-E20	UA393DC
LM337T	LM337T
LM358PS	LM358N
LM358PSR	LM358N
LP2986AIMM-3.3	3-12
LT1021DCS8-5	LT1021DCS8-5
LT1021DCS8-5-E2	LT1021DCS8-5
LT1227CS8	LT1227CS8
LT1227CS8-E2	LT1227CS8
LT1252CS8	LT1252CS8
LT1252CS8-E2	LT1252CS8
M27C2001-80XF1(F8)	3-13
M27C4002-10F1(F)	M27C4002-12F1
M27C4002-10F1(F8)	M27C4002-12F1
M48Z18-100PC1	M48Z58Y-70MH1TR
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M51954BFP-600D	M51954BFP
M51958AFP600D	M51958A
M5238FP	RC4558
M5238FP-600D	RC4558
M54523P	TD62083AP
M54532P	M54532P
M62301FP-70ND	M62301FP
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MB4002PF-ER	MB4002
MB40558PF	3-13
MB40558PF-ER	3-13
MB40568PF-G-BND-ER	3-14
MB90061-111	MB90061-111
MB90T736	MB90T736
MC10H116M	MC10116L
MC10H116MEL	MC10116L
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MC14050BF	CD4050AE
MC14050BFEL	CD4050AE
MC14051BF	CD4051BE
MC14051BFEL	CD4051BE
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MC14053BFEL	CD4053BE
MC14066BF	CD4066AE
MC14066BFEL	CD4066AE
MC14538BFE	MC14538BCP
MC14538BFEL	MC14538BCP
MC14577CF	MC14577AF
MC14577CFEL	MC14577AF
MC1488M	SN75188N
MC1489AM	SN75189AN
MC1489AMEL	SN75189AN
MC34182DR2	RC4558
MC34184DR2	TL084CN
MC74HC175F	TC74HC175P
MC74HC4050F	TC74HC4050P
MC74HC4066F	MC74HC4066N
MC74HC4066FEL	MC74HC4066N
MSM6524GS-KR1	MSM6524GS-VK
NJM082M	RC4558
NJM1496M	MC1496P
NJM1496M-TE2	MC1496P
NJM2041M-D	RC4558
NJM2041M-D(TE2)	RC4558
NJM2068M-D	RC4558
NJM2068M-D-T1	RC4558
NJM2903D	UA393DC
NJM2903M	UA393DC
NJM2903M-TE2	UA393DC
NJM2904V(TE2)	LM358N
NJM360M	LM360N
NJM360M-TE2	LM360N
NJM431U	NJM431U
NJM431U-TE1	NJM431U

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NJM4556AM-A-TE2	RC4558
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NJM4560M	RC4558
NJM4560M-TE2	RC4558
NJM4560MD-TE2	RC4558
NJM4565M-A	RC4558
NJM4565M-A(TE2)	RC4558
NJM5532L-D	3-14
NJM5532M-D	RC4558
NJM5532MD(TE2)	RC4558
NJM78L05A	UA78L05AWC
NJM78L09UA(TE2)	NJM78L12UA
NJM79L05A	NJM79L03A
NJM79L12A	NJM79L03A
NJM79L12A-T3	NJM79L03A
PCM1702U-J/2K	PCM1702U-J
PCM69AU-K/2K	PCM69U-J
S-80727-SN-DQ-T1	S-80720SN-DH
S-80827ANUP-EDQ-T2	S-8054HN-CB
S-80830ALUP-EAT-T2	S-8054ALR-LN
S-80840ANUP-ED4-T2	S-8054HN-CB
SBX1645-01	SBX1645-01
SC14S66F	SC14S66F
SC14S66FER	SC14S66F
SC7S00F	TC7S00F
SC7S02F	TC4S01F
SC7S04F	TC7S04F
SC7S32F	TC7S32F
SM5843AS1-E2	SM5843AP1
SN74HC00ANS	TC74HC00P
SN74HC00ANSR	TC74HC00P
SN74HC02ANS	TC74HC02P
SN74HC02ANSR	TC74HC02P
SN74HC04ANS-E20	TC74HC04P
SN74HC04ANSR	TC74HC04P
SN74HC08ANS	TC74HC08P
SN74HC08ANS-E05	TC74HC08P
SN74HC109ANS	TC74HC109P
SN74HC109ANSR	TC74HC109P
SN74HC10ANS	TC74HC10P
SN74HC10ANSR	TC74HC10P
SN74HC11ANS-E20	TC74HC11P
SN74HC11ANSR	TC74HC11P
SN74HC138ANS	TC74HC138P
SN74HC138ANSR	TC74HC138P
SN74HC14ANS	TC74HC14P
SN74HC14ANSR	TC74HC14P
SN74HC151ANS-E20	TC74HC151P
SN74HC151ANSR	TC74HC151P
SN74HC157ANS	TC74HC157P
SN74HC157ANSR	TC74HC157P
SN74HC163ANSR	TC74HC163P
SN74HC164ANS	TC74HC164P
SN74HC164ANSR	TC74HC164P
SN74HC175ANSR	TC74HC175P
SN74HC193ANS	TC74HC193P

IC	Page or ID No.
SN74HC193ANSR	TC74HC193P
SN74HC245ANS	TC74HC245P
SN74HC245ANSR	TC74HC245P
SN74HC257ANS-E20	TC74HC257P
SN74HC257ANSR	TC74HC257P
SN74HC27ANS	TC74HC27P
SN74HC27ANSR	TC74HC27P
SN74HC32ANS	TC74HC32P
SN74HC32ANSR	TC74HC32P
SN74HC393ANS	TC74HC393P
SN74HC393ANSR	TC74HC393P
SN74HC4040ANS	MC74HC4040N
SN74HC4040ANS-E05	MC74HC4040N
SN74HC541ANS	MC74HC541N
SN74HC541ANSR	MC74HC541N
SN74HC74ANSR	TC74HC74P
SN74HC86ANS-E05	TC74HC86P
SN74HCT04ANS	TC74HC04P
SN74HCT04ANSR	TC74HC04P
SN74HCT244ANS	TC74HC244P
SN74HCT244ANS-E05	TC74HC244P
SN74HCT245ANS-E20	TC74HC245P
SN74HCT245ANSR	TC74HC245P
SN74HCU04ANS-E20	TC74HC04P
SN74HCU04ANSR	TC74HC04P
SN74LS221DB	SN74221N
SN74LS221DB-E05	SN74221N
SN74LS221NS	SN74221N
SN74LS221NSR	SN74221N
SN74LVTH245ANS	TC74HC245P
SN74LVTH245ANS-E05	TC74HC245P
SN75C1168NS-E05	SN75C1168NS
TA7267P	TA7267P
TA7805S	NJM78M05FA
TA78L005AP-TPE6	UA78L05AWC
TA78L05F	NJM78L12UA
TA78L05F-TE12L	NJM78L12UA
TA78L05S	UA78L05AWC
TA78L05S-TPE2	UA78L05AWC
TA78L09F-TE12L	NJM78L12UA
TA78L09S-TPE2	UA78L05AWC
TA78L12F	NJM78L12UA
TA78L12F-TE12L	NJM78L12UA
TA78L12S	UA78L05AWC
TA78L12S-TPE2	UA78L05AWC
TA79005S	TA79005S
TA79L005P-TPE6	NJM79L03A
TA79L05F(TE12L)	NJM79L09UA
TA79L09F(TE12L)	NJM79L09UA
TA79L09F-TE12L	NJM79L09UA
TA8504F	TA8504F
TC4053BFT(EL, N)	CD4053BE
TC4S30F	TC7S86FU
TC4S30F(TE85R)	TC7S86FU
TC4S66F	SC14S66F
TC4S66F(TE85R)	SC14S66F
TC4W53FU	TC4W53FU
TC4W53FU(TE12R)	TC4W53FU

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IC	Page or ID No.
TC4W66FU(TE12R)	TC4W66F
TC74HC123AF	TC74HC123P
TC74HC123AF(EL)	TC74HC123P
TC74HC133AF	TC74HC133P
TC74HC133AF(EL)	TC74HC133P
TC74HC163AF	TC74HC163P
TC74HC221AF	TC74HC221P
TC74HC221AF(EL)	TC74HC221P
TC74HC4024AF	TC74HC4024AF
TC74HC4024AF(EL)	TC74HC4024AF
TC74HC4050AF-TP1	TC74HC4050P
TC74HC4520AF	MC14520BCP
TC74HC4538AF	MC74HC4538N
TC74HC4538AF(EL)	MC74HC4538N
TC74HC86AF	TC74HC86P
TC74HCT04AF	TC74HC04P
TC74HCT04AF(EL)	TC74HC04P
TC74LCX245FT(EL)	TC74HC245P
TC74VHC00FT(EL)	TC74HC00P
TC74VHC04F	TC74HC04P
TC74VHC04F(EL)	TC74HC04P
TC74VHC04FT(EL)	TC74HC04P
TC74VHC08F(EL)	TC74HC08P
TC74VHC08FT(EL)	TC74HC08P
TC74VHC123AFT(EL)	TC74HC123P
TC74VHC138FT(EL)	TC74HC138P
TC74VHC157FT(EL)	TC74HC157P
TC74VHC163F	TC74HC163P
TC74VHC163F(EL)	TC74HC163P
TC74VHC163FT(EL)	TC74HC163P
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TC74VHC244F(EL)	TC74HC244P
TC74VHC245F(EL)	TC74HC245P
TC74VHC245FT(EL)	TC74HC245P
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TC74VHC373FT(EL)	TC74HC373P
TC74VHC541FT(EL)	MC74HC541N
TC74VHC573FT(EL)	TC74HC573F
TC74VHC574FT(EL)	TC74HC574P
TC74VHC74FT(EL)	TC74HC74P
TC74VHC86FT(EL)	TC74HC86P
TC74VHCT541AFT(EL)	MC74HC541N
TC7S00F-TE85L	TC7S00F
TC7S02F(TE85R)	TC4S01F
TC7S04F-TE85L	TC7S04F
TC7S08F	TC7S08F
TC7S08F(TE85R)	TC7S08F
TC7S08FU(TE85R)	TC7S08F
TC7S32F(TE85R)	TC7S32F
TC7S86F(TE85R)	TC7S86FU
TC7S86F-TE85L	TC7S86FU
TC7SET08FU(TE85R)	TC7S08F
TC7SH00FU-TE85R	TC7S00F
TC7SH04FU	TC7S04F
TC7SH04FU-TE85R	TC7S04F
TC7SH08FU-TE85R	TC7S08F
TC7SH32FU-TE85R	TC7S32F
TC7SU04F	TC7S04F
TC7SU04F-TE85L	TC7S04F

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TC7W04FU	TC7W04F
TC7W04FU(TE12R)	TC7W04F
TC7W08FU	TC7W08F
TC7W08FU(TE12R)	TC7W08F
TC7W14FU(TE12R)	TC7W14FU
TC7W32FU	TC7W32FU
TC7W32FU(TE12R)	TC7W32FU
TC7WH04FU(TE12R)	TC7W04F
TC7WH125FU(TE12R)	TC7W125FU
TC7WH74FU(TE12R)	TC7W74FU
TC7WH74FU(TR12R)	TC7W74FU
TD62003P(J, S)	TD62003P
THAT2181SB-TE2	3-14
TL064CNS	TL084CN
TL064CNS-E05	TL084CN
TL082CPS-E20	RC4558
TL084CNS	TL084CN
TL084CNSR	TL084CN
TL431CDR2	TL431CDR2
TL431CPS	TL431CP
TL431CPSR	TL431CP
TLC272CPS	TLC272CP
TLC272CPSR	TLC272CP
TLC549IPS	TLC548
TLC549IPSR	TLC548
UPA101G-E2	UPA101G
UPC1246G	UPC1246G
UPC1246G-E2	UPC1246G
UPC1663G	UPC1663C
UPC1663G-E2	UPC1663C
UPC311G2	UPC311C
UPC311G2-E2	UPC311C
UPC319G2-E2	UPC319C
UPC324G2	XRA10324AF
UPC324G2-E2	XRA10324AF
UPC358G2-E2	LM358N
UPC4558C	RC4558
UPC4558G2	RC4558
UPC4570G2	RC4558
UPC4570G2-E2	RC4558
UPC812G2	RC4558
UPC812G2-E2	RC4558
UPD485505G-25	UPD485505G-25
UPD485505G-25-E2	UPD485505G-25
UPD485505G-35	UPD485505G-25
UPD485505G-35-E2	UPD485505G-25
UPD70325GJ-10-5BG	UPD70325GJ-10-5BG
UPD71054GB-3B4	UPD71054G
UPD71059GB-3B4	UPD71059G
UPD72002GB-11-3B4	UPD72002GB-11-3B4
UPD75106GF-J33-3BE	UPD75106G
UPD78011BGC-608-AB8	UPD78011GC-533-AB8
UPD78011FGC-577-AB8	UPD78011GC-533-AB8
UPD78014FGC-632-AB8	UPD78011GC-533-AB8
UPD78014FGC-637-AB8	UPD78011GC-533-AB8
UPD78014FGC-639-AB8	UPD78011GC-533-AB8
UPD78014FGC-684-AB8	UPD78011GC-533-AB8
UPD78212CW-618	UPD78212CW-618

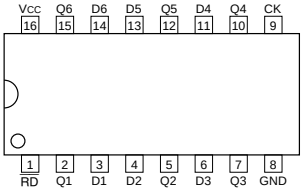
IC	Page or ID No.
UPD78218ACW-671	UPD78212CW-618
XRD7523AID-JTR	MP7523
Z8401510FEC	Z8401510FEC

IC

74F174SJ (FSC)

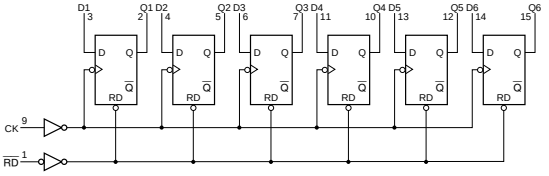
HEX D-TYPE FLIP-FLOPS WITH DIRECT RESET

—TOP VIEW—



INPUTS			OUT
RD	CK	D	Q
0	×	×	0
1	↑	0	0
1	↑	1	1

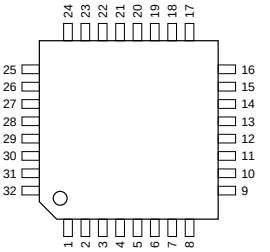
0 : LOW LEVEL
1 : HIGH LEVEL
× : DON'T CARE



CXA1806Q (SONY)
CXA1806Q-T4

5-BIT A/D CONVERTER

—TOP VIEW—



INPUTS

BIAS1, BIAS2 : CONNECTED TO SMOOTHING CAPACITOR
CLH, CLS : CLOCK INPUT
RBTM : LEAST SIGNIFICANT VOLTAGE
RTOP : MOST SIGNIFICANT VOLTAGE
VIN : ANALOG INPUT

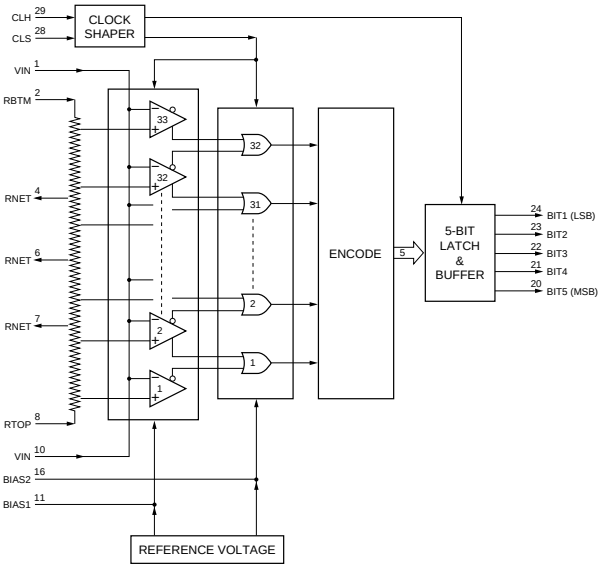
OUTPUTS

BIT1 - BIT5 : A/D OUTPUT
RNET : INTERMEDIATE VOLTAGE OUTPUT

OTHER

NC : NO CONNECTION

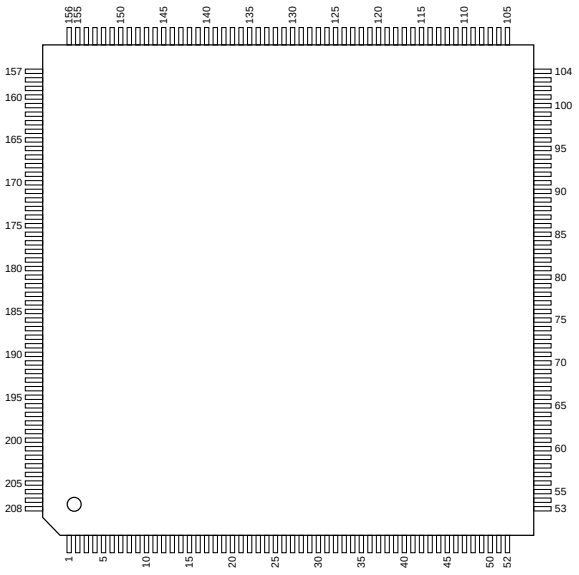
PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	VIN	9	—	A.VEE	17	—	NC	25	—	VCC
2	I	RBTM	10	I	VIN	18	—	NC	26	—	GND
3	—	NC	11	I	BIAS1	19	—	GND	27	—	VEE
4	O	RNET	12	—	D.VEE	20	O	BIT5 (MSB)	28	I	CLS
5	—	NC	13	—	D.VEE	21	O	BIT4	29	I	CLH
6	O	RNET	14	—	A.VEE	22	O	BIT3	30	—	D.GND
7	O	RNET	15	—	NC	23	O	BIT2	31	—	NC
8	I	RTOP	16	I	BIAS2	24	O	BIT1 (LSB)	32	—	A.GND



CXD8806R (SONY)

BIT REDUCTION ENCODER & ERROR CORRECTION CODER

—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I/O	HDM16	53	O	OAOTM18	105	O	AE11	157	I	IACK
2	I/O	HDM17	54	—	VDD	106	O	AE12	158	I	RESETI
3	—	GND	55	—	GND	107	—	GND	159	I	IAV0
4	I/O	HDM18	56	I	STTSX0	108	O	AE13	160	I	IAV1
5	I/O	HDM19	57	I	STTSX1	109	O	AE14	161	I	IAF0
6	O	$\overline{OCS0}$	58	I	CSX	110	O	AE15	162	I	IAF1
7	O	$\overline{OCS1}$	59	I	STRBX	111	O	AE16	163	I	CNT1
8	O	$\overline{OCS4}$	60	—	GND	112	O	AE17	164	—	GND
9	I	TEST	61	—	VDD	113	O	AE18	165	—	VDD
10	—	VDD	62	I/O	DADX0	114	—	VDD	166	I	CNT2
11	O	$\overline{OCS2}$	63	I/O	DADX1	115	O	AE19	167	O	$\overline{OWEO}$
12	O	$\overline{OCS3}$	64	I/O	DADX2	116	O	AE20	168	I	IAF2
13	O	$\overline{OOEX}$	65	I/O	DADX3	117	O	AE21	169	I	IAF3
14	O	$\overline{OOE}$	66	I/O	DADX4	118	O	$\overline{OEE0}$	170	I	IREN
15	—	GND	67	I/O	DADX5	119	—	GND	171	I	IVD
16	O	$\overline{OWE0}$	68	I/O	DADX6	120	O	$\overline{OEE1}$	172	I	IHD
17	O	$\overline{OWE1}$	69	I/O	DADX7	121	I/O	BE0	173	I	IPRY
18	O	OWENM1	70	—	VDD	122	I/O	BE1	174	I	ICFI
19	O	OWENM0	71	O	OTA0	123	I/O	BE2	175	I	$\overline{IWEI}$
20	—	VDD	72	—	GND	124	I/O	BE3	176	—	GND
21	I	IWENM1	73	O	OTA1	125	I/O	BE4	177	I	CKI
22	I	IWENM0	74	O	OTA2	126	I/O	BE5	178	I	IDIN0
23	—	GND	75	O	OTA3	127	I/O	BE6	179	I	IDIN1
24	O	OAOTM0	76	O	OTB0	128	I/O	BE7	180	I	IDIN2
25	O	OAOTM1	77	O	OTB1	129	I/O	BE8	181	I	IDIN3
26	—	GND	78	O	OTB2	130	—	GND	182	I	IDIN4
27	—	VDD	79	—	VDD	131	—	VDD	183	—	VDD
28	O	OAOTM2	80	O	OTB3	132	I/O	BE9	184	I	IDIN5
29	O	OAOTM3	81	O	ORCA	133	I/O	BE10	185	I	IDIN6
30	O	OAOTM4	82	O	ORCB	134	I/O	BE11	186	I	IDIN7
31	—	GND	83	O	ORCC	135	I/O	BE12	187	I	IDIN8
32	—	VDD	84	—	VDD	136	I/O	BE13	188	I	IDIN9
33	O	OAOTM5	85	—	GND	137	I/O	BE14	189	—	GND
34	O	OAOTM6	86	I	IPCK	138	I/O	BE15	190	I	$\overline{IRWI}$
35	—	GND	87	—	GND	139	O	OCRCOT	191	I/O	HDM0
36	O	OAOTM7	88	—	VDD	140	O	ORA1	192	I/O	HDM1
37	O	OAOTM8	89	O	ORCD	141	O	ORA2	193	I/O	HDM2
38	—	GND	90	O	OPRY	142	—	GND	194	I/O	HDM3
39	—	VDD	91	O	AE0	143	O	ORB1	195	I/O	HDM4
40	O	OAOTM9	92	O	AE1	144	O	ORB2	196	I/O	HDM5
41	O	OAOTM10	93	O	AE2	145	I	IRF0	197	I/O	HDM6
42	O	OAOTM11	94	O	AE3	146	I	IRF1	198	I/O	HDM7
43	—	VDD	95	I	$\overline{IOEE}$	147	—	VDD	199	I/O	HDM8
44	—	GND	96	—	GND	148	I	IRF2	200	—	GND
45	O	OAOTM12	97	—	VDD	149	I	IFLD	201	—	VDD
46	O	OAOTM13	98	O	AE4	150	I	ISG0	202	I/O	HDM9
47	O	OAOTM14	99	O	AE5	151	I	ISG1	203	I/O	HDM10
48	O	OAOTM15	100	O	AE6	152	I	IR2F	204	I/O	HDM11
49	—	VDD	101	O	AE7	153	I	IAD0	205	I/O	HDM12
50	—	GND	102	O	AE8	154	—	GND	206	I/O	HDM13
51	O	OAOTM16	103	O	AE9	155	I	IAFS	207	I/O	HDM14
52	O	OAOTM17	104	O	AE10	156	I	IAD1	208	I/O	HDM15

INPUTS

CKI	:	27 MHz CLOCK
CNT1, CNT2	:	WRITE ENABLE DELAY CONTROL 1, 2
CSX	:	SYSTEM CONTROL CHIP SELECT
IACK	:	64FS CLOCK
IAD0, IAD1	:	AUDIO 1/2, 3/4 CHANNEL
IAF0 - IAF2	:	AUDIO 5F0 - 5F2
IAF3	:	AUDIO 5F PARITY
IAFS	:	FS
IAV0, IAV1	:	AUDIO V0, V1
ICFI	:	CFI
IDIN0 - IDIN9	:	INPUT DATA
IFLD	:	REC ENABLE SELECT
IHD	:	HD
$\overline{IOEE}$	:	ECC MEMORY I/O CONTROL
IPCK	:	16 MHz CLOCK
IPRY	:	PARITY
IR2F	:	REFERENCE FRAME
IREN	:	INTERNAL RAM ENABLE
IRF0, IRF2	:	TRACK START FOR VIDEO 1, 2
IRF1	:	TRACK START FOR AUDIO
$\overline{IRWI}$	:	SHUFFLING MEMORY I/O CONTROL
ISG0, ISG1	:	TRACK SEGMENT 0, 1
IVD	:	VD
$\overline{IWEI}$	:	WRITE ENABLE PULSE
IWENM0	:	WRITE ENABLE WIDTH CONTROL
IWENM1	:	WRITE ENABLE DELAY CONTROL
RESETI	:	SYSTEM RESET
STRBX	:	SYSTEM CONTROL STROBE
STTSX0, STTSX1	:	SYSTEM CONTROL STATUS 0, 1
TEST	:	IC TEST PIN

OUTPUTS

AE0 - AE21	:	ECC MEMORY ADDRESS
OAOTM0 - OAOTM18	:	SHUFFLING MEMORY ADDRESS
OCRCOT	:	CRC VERIFY
$\overline{OCS0}$ - $\overline{OCS3}$	:	SHUFFLING MEMORY CHIP SELECT 0 - 3 FOR 1M
$\overline{OCS4}$	:	SHUFFLING MEMORY CHIP SELECT FOR 4M
$\overline{OEE0}$	:	ECC MEMORY I/O CONTROL
$\overline{OEE1}$	:	ECC MEMORY OUTPUT ENABLE
$\overline{OOE}$	:	SHUFFLING MEMORY OUTPUT ENABLE
$\overline{OOEX}$	:	SHUFFLING MEMORY I/O CONTROL OUT 1
OPRY	:	RF ENABLE
ORA1, ORB1	:	TRACK END FOR AC, BD CHANNEL VIDEO 0
ORA2, ORB2	:	TRACK END FOR AC, BD CHANNEL AUDIO
ORCA, ORCB, ORCC, ORCD	:	REC ENABLE A, B, C, D
OTA0 - OTA3	:	AC CHANNEL RF 0 - 3
OTB0 - OTB3	:	BD CHANNEL RF 0 - 3
$\overline{OWE0}$	:	SHUFFLING MEMORY WRITE ENABLE
$\overline{OWE1}$	:	SHUFFLING MEMORY I/O CONTROL OUT 2
OWENM0	:	WRITE ENABLE WIDTH CONTROL
OWENM1	:	WRITE ENABLE DELAY CONTROL
$\overline{OWEO}$	:	WRITE ENABLE

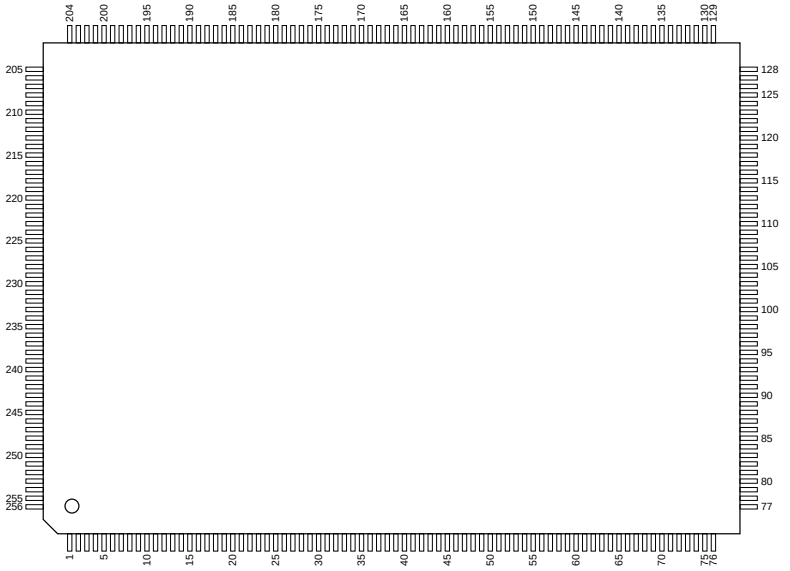
INPUTS/OUTPUTS

BE0 - BE15	:	ECC MEMORY I/O
DADX0 - DADX7	:	SYSTEM CONTROL BUS
HDM0 - HDM19	:	SHUFFLING MEMORY

CXD8807BR (SONY)

BIT REDUCTION DECODER & VIDEO ERROR CONCEALMENT

—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I/O	DADX0	65	—	GND	129	I	FFYI0 7	193	—	GND
2	I/O	DADX1	66	—	VDD	130	I	FFCI0 0	194	—	VDD
3	I/O	DADX2	67	O	OWE1	131	I	FFCI0 1	195	O	VCL2R2
4	—	NC	68	O	OWENM1	132	—	NC	196	O	VCL2W
5	—	NC	69	O	OWENM0	133	—	NC	197	O	OCFOO
6	I/O	DADX3	70	I	IWENM1	134	I	FFCI0 2	198	O	OVD
7	I/O	DADX4	71	I	IWENM0	135	I	FFCI0 3	199	O	OHD
8	I/O	DADX5	72	—	NC	136	I	FFCI0 4	200	O	AUXRDY
9	I/O	DADX6	73	—	NC	137	I	FFCI0 5	201	—	NC
10	I/O	DADX7	74	I/O	HDM0	138	O	FFWEN	202	O	OCFIF
11	—	GND	75	I/O	HDM1	139	—	GND	203	O	OVPRY
12	—	VDD	76	I/O	HDM2	140	—	VDD	204	O	OVDT0
13	I	STTSX0	77	I/O	HDM3	141	I	FFCI0 6	205	O	OVDT1
14	I	STTSX1	78	I/O	HDM4	142	I	FFCI0 7	206	O	OVDT2
15	I	CSX	79	—	GND	143	O	VCL1W	207	—	GND
16	I	STRBX	80	—	VDD	144	O	VCL1R	208	—	VDD
17	—	GND	81	I/O	HDM5	145	O	FFYO0	209	O	OVDT3
18	—	VDD	82	I/O	HDM6	146	O	FFYO1	210	O	OVDT4
19	I	TEST	83	I/O	HDM7	147	O	FFYO2	211	O	OVDT5
20	O	OAOTM0	84	I/O	HDM8	148	O	FFYO3	212	O	OVDT6
21	—	GND	85	I/O	HDM9	149	O	FFYO4	213	O	OVDT7
22	O	OAOTM1	86	I/O	HDM10	150	O	FFYO5	214	O	OVDT8
23	O	OAOTM2	87	I/O	HDM11	151	O	FCCK	215	O	OVDT9
24	—	GND	88	I/O	HDM12	152	—	GND	216	O	OWEO
25	—	VDD	89	I	IRWI	153	—	VDD	217	I	CNT2
26	O	OAOTM3	90	—	GND	154	O	FFYO6	218	—	GND
27	O	OAOTM4	91	—	VDD	155	O	FFYO7	219	—	VDD
28	—	GND	92	I/O	HDM13	156	O	FFCO0	220	—	NC
29	O	OAOTM5	93	I/O	HDM14	157	O	FFCO1	221	—	NC
30	O	OAOTM6	94	I/O	HDM15	158	O	FFCO2	222	—	NC
31	—	GND	95	I/O	HDM16	159	O	FFCO3	223	I	IREN
32	—	VDD	96	I/O	HDM17	160	O	FFCO4	224	I	RESETI
33	O	OAOTM7	97	I/O	HDM18	161	O	FFCO5	225	—	VDD
34	O	OAOTM8	98	I/O	HDM19	162	O	FFCO6	226	I	IDESY
35	—	GND	99	I	IADVV	163	O	FFCO7	227	I	IDEPRY
36	O	OAOTM9	100	I	ICRCIN	164	O	VCLOW	228	I	IDEEF
37	O	OAOTM10	101	I	FFYI1 0	165	—	VDD	229	I	IWEI
38	—	GND	102	—	GND	166	—	GND	230	—	GND
39	—	VDD	103	I	FFYI1 1	167	O	VCLOR2	231	I	CKI
40	O	OAOTM11	104	I	FFYI1 2	168	O	VCLOR1Y	232	I	IDED0
41	O	OAOTM12	105	I	FFYI1 3	169	O	VCLOR1C	233	I	IDED1
42	—	GND	106	I	FFYI1 4	170	I	FFLI0 0	234	I	IDED2
43	O	OAOTM13	107	I	FFYI1 5	171	I	FFLI0 1	235	I	IDED3
44	O	OAOTM14	108	I	FFYI1 6	172	I	FFLI0 2	236	I	IDED4
45	—	VDD	109	I	FFYI1 7	173	I	FFLI0 3	237	I	IDED5
46	—	GND	110	I	FFCI1 0	174	I	FFLI1 0	238	I	IDED6
47	O	OAOTM15	111	I	FFCI1 1	175	I	FFLI1 1	239	I	IDED7
48	O	OAOTM16	112	I	FFCI1 2	176	I	FFLI1 2	240	I	IPPSY
49	—	GND	113	I	FFCI1 3	177	I	FFLI1 3	241	I	CNT1
50	O	OAOTM17	114	—	GND	178	I	FFLI1 4	242	—	GND
51	O	OAOTM18	115	—	VDD	179	I	FFLI1 5	243	—	VDD
52	—	GND	116	I	FFCI1 4	180	—	GND	244	I	IPPPRY
53	—	VDD	117	I	FFCI1 5	181	—	VDD	245	I	IPPEF
54	O	OOEX	118	I	FFCI1 6	182	I	FFLI1 6	246	I	IPPD0
55	O	OOE	119	I	FFCI1 7	183	I	FFLI1 7	247	I	IPPD1
56	—	GND	120	I	FFYI0 0	184	O	FFLO0	248	I	IPPD2
57	—	VDD	121	I	FFYI0 1	185	O	FFLO1	249	I	IPPD3
58	O	OCS4	122	I	FFYI0 2	186	O	FFLO2	250	I	IPPD4
59	O	OCS3	123	I	FFYI0 3	187	O	FFLO3	251	I	IPPD5
60	—	GND	124	I	FFYI0 4	188	O	FFLO4	252	I	ICKHI
61	O	OCS2	125	—	GND	189	O	FFLO5	253	—	GND
62	O	OCS1	126	—	VDD	190	O	FFLO6	254	—	VDD
63	O	OCS0	127	I	FFYI0 5	191	O	FFLO7	255	I	IPPD6
64	O	OWE0	128	I	FFYI0 6	192	O	VCL2R1	256	I	IPPD7

INPUTS

CKI	: 27 MHz CLOCK
CNT1, CNT2	: WRITE ENABLE DELAY CONTROL 1, 2
CSX	: SYSTEM CONTROL CHIP SELECT
FFCI0 0 - FFCI0 7	: CONCEAL MEMORY 0C
FFCI1 0 - FFCI1 7	: CONCEAL MEMORY 1C
FFLI0 0 - FFLI0 3	: CONCEAL MEMORY 2 IN 0
FFLI1 0 - FFLI1 7	: CONCEAL MEMORY 2 IN 1
FFYI0 0 - FFYI0 7	: CONCEAL MEMORY 0Y
FFYI1 0 - FFYI1 7	: CONCEAL MEMORY 1Y
IADVV	: READ START V
ICKHI	: 13.5 MHz CLOCK
ICRCIN	: VERIFY CRC
IDED0 - IDED7	: A CHANNEL INPUT DATA
IDEEF, IPPEF	: A, B CHANNEL INPUT ERROR FLAG
IDEPRY, IPPPRY	: A, B CHANNEL INPUT PARITY
IDESY, IPPSY	: A, B CHANNEL INPUT SYNC
IPPD0 - IPPD7	: B CHANNEL INPUT DATA
IREN	: INTERNAL RAM ENABLE
IRWI	: SHUFFLING MEMORY I/O CONTROL
IWEI	: WRITE ENABLE PULSE
IWENM0	: WRITE ENABLE WIDTH CONTROL
IWENM1	: WRITE ENABLE DELAY CONTROL
RESETI	: SYSTEM RESET
STRBX	: SYSTEM STROBE
STTSX0, STTSX1	: SYSTEM CONTROL STATUS 0, 1
TEST	: IC TEST PIN

OUTPUTS

AUXRDY	: AUX DATA READ ENABLE
FCCK	: CONCEAL MEMORY CLOCK
FFCO0 - FFCO7	: CONCEAL MEMORY 0C
FFLO0 - FFLO7	: CONCEAL MEMORY 2 OUT
FFWEN	: CONCEAL MEMORY WRITE ENABLE
FFYO0 - FFYO7	: CONCEAL MEMORY 0Y
OAOTM0 - OAOTM18	: SHUFFLING MEMORY ADDRESS
OCFOO	: ADVANCED CFO
OCFIF	: CFI
OHD	: HD
OOE	: SHUFFLING MEMORY OUTPUT ENABLE
OOEX	: SHUFFLING MEMORY I/O CONTROL OUT 1
OCS0 - OCS3	: SHUFFLING MEMORY CHIP SELECT 0 - 3 FOR 1M
OCS4	: SHUFFLING MEMORY CHIP SELECT FOR 4M
OVD	: VD
OVDT0 - OVDT9	: OUTPUT DATA
OVPRY	: PARITY
OWE0	: SHUFFLING MEMORY WRITE ENABLE
OWE1	: SHUFFLING MEMORY I/O CONTROL OUT 2
OWENM0	: WRITE ENABLE WIDTH CONTROL
OWENM1	: WRITE ENABLE DELAY CONTROL
OWEO	: WRITE ENABLE
VCL1R	: CONCEAL MEMORY RESET READ
VCL1W	: CONCEAL MEMORY RESET WRITE
VCL2R1, VCL2R2	: CONCEAL MEMORY 2 RESET READ 1, 2
VCL2W	: CONCEAL MEMORY 2 RESET WRITE
VCLOR1C, VCLOR1Y	: CONCEAL MEMORY 0C, 0Y RESET READ 1
VCLOR2	: CONCEAL MEMORY 0 RESET READ 2
VCLOW	: CONCEAL MEMORY 0 RESET WRITE

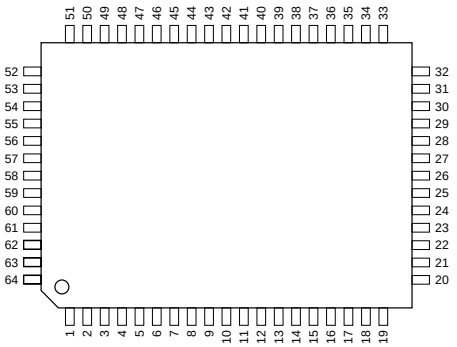
INPUTS/OUTPUTS

DADX0 - DADX7	: SYSTEM CONTROL BUS
HDM0 - HDM19	: SHUFFLING MEMORY

CXD8837Q (SONY)

AUTO TRACKING SERVO CONTROLLER

—TOP VIEW—



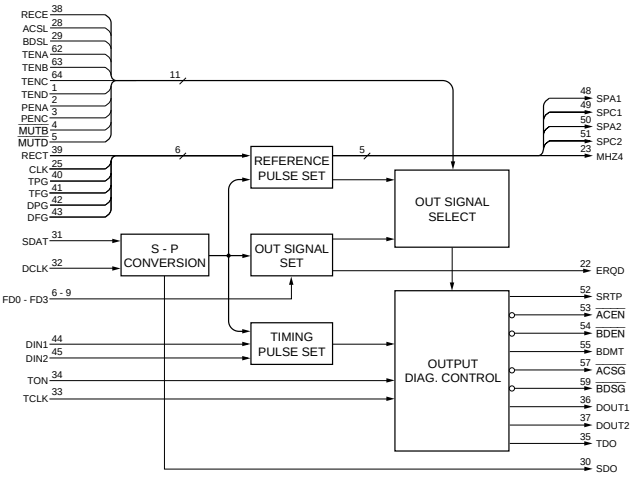
PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	TEND	17	I	T4	33	I	TCLK	49	O	SPC1
2	I	PENA	18	I	T5	34	I	TON	50	O	SPA2
3	I	PENC	19	I	$\overline{\text{TEST}}$	35	O	TDO	51	O	SPC2
4	I	$\overline{\text{MUTB}}$	20	I	DMYT	36	O	DOU1	52	O	SRTP
5	I	$\overline{\text{MUTD}}$	21	—	GND	37	O	DOU2	53	O	$\overline{\text{ACEN}}$
6	I	FD0	22	O	FRQD	38	I	RECE	54	O	$\overline{\text{BDEN}}$
7	I	FD1	23	O	MHZ4	39	I	RECT	55	O	BDMT
8	I	FD2	24	—	GND	40	I	TPG	56	—	GND
9	I	FD3	25	I	CLK	41	I	TFG	57	O	$\overline{\text{ACSG}}$
10	—	Vcc	26	—	GND	42	I	DPG	58	—	GND
11	—	GND	27	—	Vcc	43	I	DFG	59	O	$\overline{\text{BDSG}}$
12	I	TR	28	I	ACSL	44	I	DIN1	60	—	GND
13	I	T0	29	I	BDSL	45	I	DIN2	61	—	Vcc
14	I	T1	30	O	SDO	46	—	Vcc	62	I	TENA
15	I	T2	31	I	SDAT	47	—	GND	63	I	TENB
16	I	T3	32	I	DCLK	48	O	SPA1	64	I	TENC

INPUTS

ACSL : REC HEAD CHANNEL A/C SELECT
BDSL : REC HEAD CHANNEL B/D SELECT
CLK : CLOCK IN
DCLK : SERIAL DATA CLOCK
DFG : DRUM PG
DIN1 : DECODE IN 1
DIN2 : DECODE IN 2
DMYT : IC TEST PIN (LOW)
DPG : DRUM PG
FD0 - FD3 : FREQUENCY DIVIDE SEL (FD0, 3 : LOW FD1, 2 : HI)
$\overline{\text{MUTB}}$: CHANNEL B REC MUTE ENABLE
$\overline{\text{MUTD}}$: CHANNEL D REC MUTE ENABLE
PENA : PILOT ENABLE CHANNEL A
PENC : PILOT ENABLE CHANNEL C
RECE : REC ENABLE
RECT : REC TEST
SDAT : SERIAL DATA IN
T0 - T5 : IC TEST PIN
TCLK : TEST SERIAL DATA CLOCK
TENA : TIMING ENABLE CHANNEL A
TENB : TIMING ENABLE CHANNEL B
TENC : TIMING ENABLE CHANNEL C
TEND : TIMING ENABLE CHANNEL D
$\overline{\text{TEST}}$: IC TEST PIN
TFG : TEST FG
TON : TEST DATA ON
TPG : TEST PG
TR : IC TEST PIN

OUTPUTS

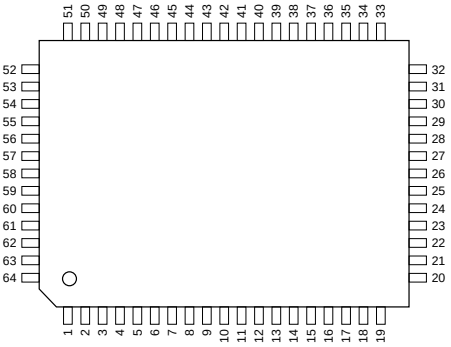
$\overline{\text{ACEN}}$: CHANNEL A/C REC ENABLE
$\overline{\text{ACSG}}$: CHANNEL A/C TRACKING REC SIGNAL
$\overline{\text{BDEN}}$: CHANNEL B/D REC ENABLE
BDMT : CHANNEL B/D REC MUTE
$\overline{\text{BDSG}}$: CHANNEL B/D TRACKING REC SIGNAL
DOU1 : DECODE OUT 1
DOU2 : DECODE OUT 2
FRQD : FREQUENCY DIVIDE
MHZ4 : PILOT SIGNAL FREQUENCY
SDO : SERIAL DATA OUT
SPA1 : START PULSE FOR CHANNEL A
SPA2 : TIMING START PULSE FOR CHANNEL A
SPC1 : START PULSE FOR CHANNEL C
SPC2 : TIMING START PULSE FOR CHANNEL C
STRP : START PULSE
TDO : TEST DATA OUT



CXD8854Q (SONY)

AUXILIARY CIRCUIT FOR BIT REDUCTION ENCODER AND ERROR CORRECTION CODER

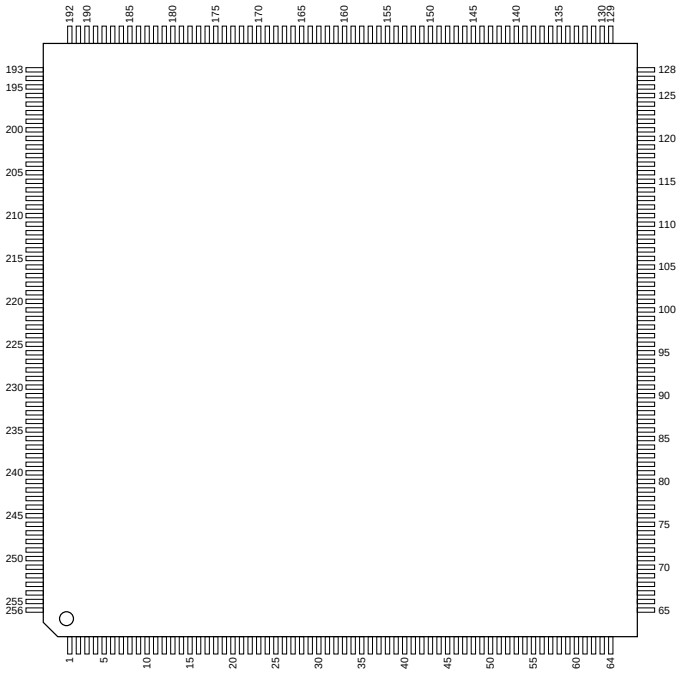
—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	IPAD0	17	I	IAD0	33	O	OAF0	49	I	IID5
2	I	IPAD1	18	I	IAD1	34	O	OAF1	50	I	IID6
3	I	IPAD2	19	I	IAFS	35	O	OAF2	51	I	IID7
4	I	IPAD3	20	I	IAV0	36	O	$\overline{\text{OCSX}}$	52	I	IVA0
5	I	IPAD4	21	I	IAV1	37	O	$\overline{\text{OWE}}$	53	I	IVA1
6	I	IPAD5	22	I	IA64	38	I	IWSEL	54	I	IWR
7	I	IPAD6	23	O	OH625	39	I	OWS0	55	I	IWE
8	I	IPAD7	24	I	IACK	40	I	OWS1	56	I	ICK16
9	I	$\overline{\text{IRST}}$	25	—	GND	41	—	NC	57	—	GND
10	—	GND	26	—	VDD	42	—	GND	58	—	VDD
11	O	OACK	27	I	ID5F0	43	I	ITR	59	I	IIN
12	O	OAD0	28	I	ID5F1	44	I	IID0	60	O	OINX
13	O	OAD1	29	I	ID5F2	45	I	IID1	61	I	IPC5
14	O	OAFS	30	I	IR5F0	46	I	IID2	62	I	IPS0
15	O	OAV0	31	I	IR5F1	47	I	IID3	63	I	IPS1
16	O	OAV1	32	I	IR5F2	48	I	IID4	64	I	IPSTB

CXD9100R (SONY)

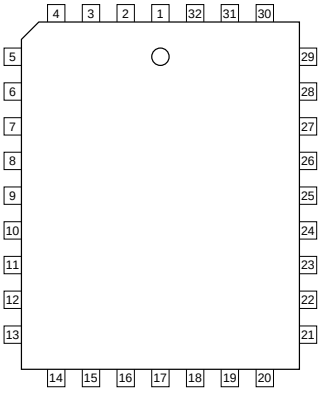
VITC GENERATOR AND COMPOSITE ENCODER
—TOP VIEW—



PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	CSOUT	65	O	PBCF 1	129	O	CMPST 2	193	O	CMPB 5
2	—	Vcc	66	O	PBCF 0	130	O	CMPST 1	194	O	CMPB 4
3	O	D1HD	67	—	Vcc	131	O	CMPST 0	195	O	CMPB 3
4	I/O	BGATE	68	O	VISC 9	132	—	Vcc	196	O	CMPB 2
5	—	GND	69	O	VISC 8	133	—	GND	197	O	CMPB 1
6	—	Vcc	70	O	VISC 7	134	—	Vcc	198	O	CMPB 0
7	I	IVD 9	71	O	VISC 6	135	I	ROMSEL 01	199	—	Vcc
8	I	IVD 8	72	—	GND	136	I/O	WRADRR	200	—	GND
9	I	IVD 7	73	—	Vcc	137	I/O	RDADDR	201	O	G SAV
10	I	IVD 6	74	—	Vcc	138	O	D2SYNC	202	—	Vcc
11	I	IVD 5	75	I	AVD0	139	O	CLAMP	203	I/O	D CF
12	I	IVD 4	76	I	VREF0	140	O	F4HD	204	I	TMOD 2
13	I	IVD 3	77	O	VRO0	141	O	CMPY 9	205	I	TMOD 1
14	I	IVD 2	78	O	AOUT0	142	O	CMPY 8	206	I	TMOD 0
15	I	IVD 1	79	I	AVS0	143	O	CMPY 7	207	—	VCC
16	I	IVD 0	80	I	AVD1	144	O	CMPY 6	208	I	VSCCY
17	I	RESET	81	I	VREF1	145	O	CMPY 5	209	I	BBCPST
18	—	GND	82	O	VRO1	146	—	GND	210	I	START
19	—	Vcc	83	O	AOUT1	147	—	Vcc	211	I	SCK
20	I	PFILON	84	I	AVS1	148	O	CMPY 4	212	—	GND
21	I	IHD	85	I	AVD2	149	O	CMPY 3	213	—	Vcc
22	I	INVD	86	I	VREF2	150	O	CMPY 2	214	I	SIN
23	I	ISVI	87	O	VRO2	151	O	CMPY 1	215	I	HRTH
24	—	GND	88	O	AOUT2	152	O	CMPY 0	216	I	STRB
25	—	Vcc	89	I	AVS2	153	—	Vcc	217	I	CS
26	I	CADDR 2	90	—	GND	154	O	CMPR 9	218	O	VSOUT
27	I	CADDR 1	91	O	VISC 5	155	O	CMPR 8	219	I/O	REND
28	I	CADDR 0	92	—	Vcc	156	O	CMPR 7	220	I/O	OSVI
29	I	ICF	93	O	VISC 4	157	O	CMPR 6	221	I/O	RVITC
30	I	IPA	94	O	VISC 3	158	O	CMPR 5	222	I/O	RLTCH
31	I	CK27	95	O	VISC 2	159	O	CMPR 4	223	I/O	GVITC
32	—	GND	96	—	GND	160	—	GND	224	—	GND
33	I	VLPARA	97	—	Vcc	161	O	CMPR 3	225	—	Vcc
34	I	TCK	98	O	VISC 1	162	O	CMPR 2	226	I/O	R FM
35	I	TMS	99	O	VISC 0	163	O	CMPR 1	227	O	DPARITY
36	I	TRST	100	—	NC	164	O	CMPR 0	228	I	VADRS 3
37	I	TDI	101	I	ROMSEL10	165	I/O	HMSK	229	I	VADRS 2
38	O	TDO	102	I	PALNTSC	166	I/O	R ERR	230	I	VADRS 1
39	I/O	R CF	103	I	TEST	167	O	BUSY	231	I	VADRS 0
40	—	Vcc	104	I	PD0	168	—	Vcc	232	I	STAT 1
41	O	BBST 9	105	I	PD1	169	O	DDATA 9	233	I	STAT 0
42	O	BBST 8	106	I	PD2	170	O	DDATA 8	234	I	LPARA
43	O	BBST 7	107	I	CK8FSC	171	O	DDATA 7	235	I	CPUCLK
44	O	BBST 6	108	—	GND	172	O	DDATA 6	236	—	GND
45	O	BBST 5	109	—	Vcc	173	O	DDATA 5	237	—	Vcc
46	—	GND	110	I	REF CF	174	—	GND	238	I	CADRS 3
47	—	Vcc	111	I	REFVD	175	—	Vcc	239	I	CADRS 2
48	O	BBST 4	112	I	REFHD	176	O	DDATA 4	240	I	CADRS 1
49	O	BBST 3	113	I	CMUTE	177	O	DDATA 3	241	I	CADRS 0
50	O	BBST 2	114	—	Vcc	178	O	DDATA 2	242	—	Vcc
51	O	BBST 1	115	O	DOUT	179	O	DDATA 1	243	I/O	CPUBUS 7
52	O	BBST 0	116	O	HSHIFT	180	O	DDATA 0	244	I/O	CPUBUS 6
53	I/O	VGATE	117	—	Vcc	181	I/O	VMASK	245	I/O	CPUBUS 5
54	I/O	XCFI	118	O	VSHIFT	182	O	WCK4FSC	246	—	Vcc
55	I/O	NT4F	119	—	GND	183	O	DDCF 2	247	—	GND
56	I/O	PL4F	120	O	CK4FSC	184	O	DDCF 1	248	I/O	CPUBUS 4
57	I/O	PL8F	121	—	Vcc	185	O	DDCF 0	249	—	Vcc
58	—	Vcc	122	O	CMPST 9	186	—	Vcc	250	I/O	CPUBUS 3
59	—	GND	123	O	CMPST 8	187	—	GND	251	I/O	CPUBUS 2
60	—	Vcc	124	O	CMPST 7	188	—	Vcc	252	I/O	CPUBUS 1
61	O	REFCF 2	125	O	CMPST 6	189	O	CMPB 9	253	I/O	CPUBUS 0
62	O	REFCF 1	126	O	CMPST 5	190	O	CMPB 8	254	I/O	CK135
63	O	REFCF 0	127	O	CMPST 4	191	O	CMPB 7	255	I/O	IFBUSY
64	O	PBCF 2	128	O	CMPST 3	192	O	CMPB 6	256	I/O	RINIT

CY7C271A-35JC (CYPRESS)

32K (32768 × 8)-BIT PROM
—TOP VIEW—

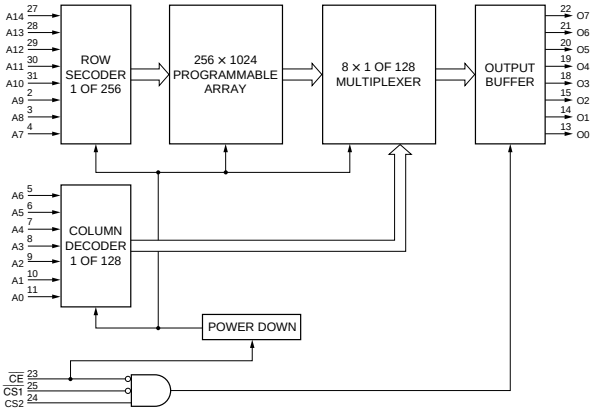


INPUTS
A0 - A14 : ADDRESS
$\overline{CE}$: CHIP ENABLE
$\overline{CS1}$, CS2 : CHIP SELECT

OUTPUTS
O0 - O7 : DATA

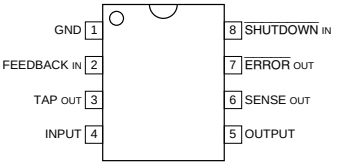
OTHER
NC : NO CONNECTION

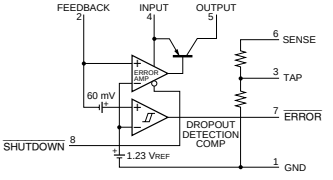
PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	—	NC	9	I	A2	17	—	NC	25	I	$\overline{CS1}$
2	I	A9	10	I	A1	18	O	O3	26	—	NC
3	I	A8	11	I	A0	19	O	O4	27	I	A14
4	I	A7	12	—	NC	20	O	O5	28	I	A13
5	I	A6	13	O	O0	21	O	O6	29	I	A12
6	I	A5	14	O	O1	22	O	O7	30	I	A11
7	I	A4	15	O	O2	23	I	$\overline{CE}$	31	I	A10
8	I	A3	16	—	GND	24	I	CS2	32	—	Vcc



LP2986AIMM-3.3 (NS)

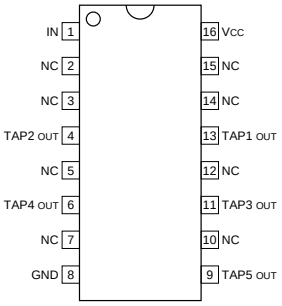
VOLTAGE REGULATOR
—TOP VIEW—

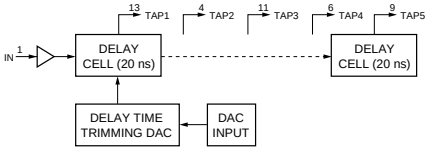




DMA100S (SWCC)
DMA100S-TP2

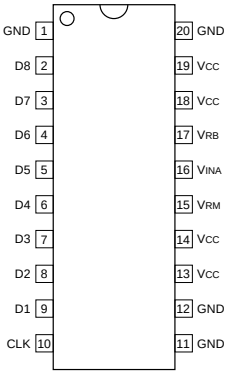
DELAYLINE
—TOP VIEW—





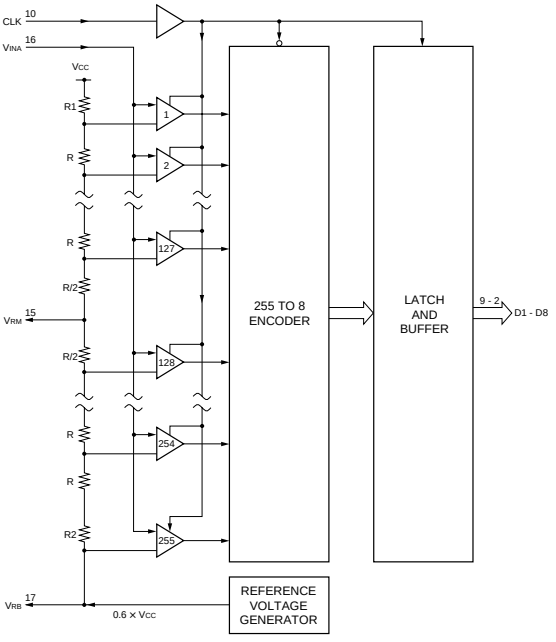
MB40558PF (FUJITSU)
MB40558PF-ER

8-BIT VIDEO A/D CONVERTER
—TOP VIEW—



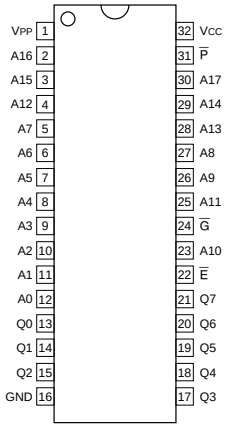
INPUTS
CLK : CLOCK
VINA : ANALOG SIGNAL

OUTPUTS
D1 - D8 : DIGITAL SIGNAL
VRB : REFERENCE VOLTAGE
VRM : INTERMEDIATE VOLTAGE



M27C2001-80XF1(F8) (SGS-THOM)

2M (262144 × 8)-BIT UV EPROM
—TOP VIEW—



INPUTS
A0 - A9, A11 - A17 : ADDRESS
Ē : CHIP ENABLE
Ḡ : OUTPUT ENABLE
P̄ : PROGRAM
VPP : PROGRAM SUPPLY

INPUTS/OUTPUTS
A10 : ADDRESS
Q0 - Q17 : DATA

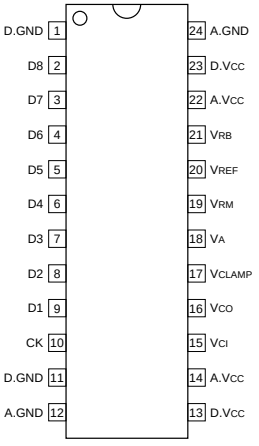
MODE	Ē	Ḡ	P̄	A9	VPP	Q0 - Q7
READ	0	0	×	×	VCC	DATA OUT
OUTPUT DISABLE	0	1	×	×	VCC	HI-Z
PROGRAM	0	1	0 PULSE	×	VPP	DATA IN
VERIFY	0	0	1	×	VPP	DATA OUT
PROGRAM INHIBIT	1	×	×	×	VPP	HI-Z
STANDBY	1	×	×	×	VCC	HI-Z
ELECTRONIC SIGNATURE	0	0	0	✻	VCC	CODES

0 : LOW LEVEL
1 : HIGH LEVEL
× : DON'T CARE
HI-Z : HIGH IMPEDANCE
✻ : 12 V ± 0.5 V

MB40568PF-G-BND-ER (FUJITSU)

8-BIT VIDEO A/D CONVERTER

—TOP VIEW—

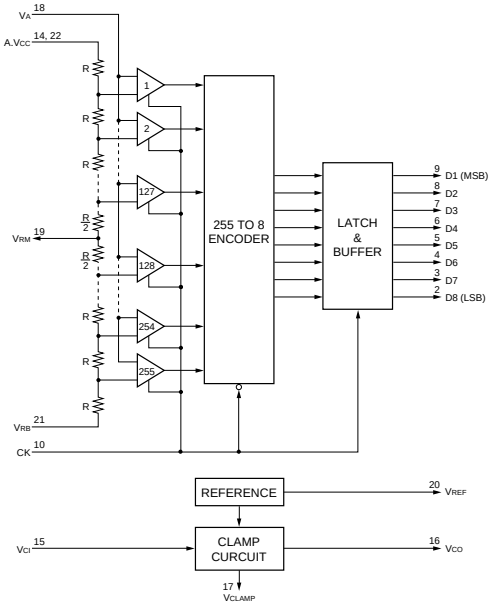


INPUTS

CK : CLOCK
VA : ANALOG SIGNAL
VCI : CLAMP CURCUIT
VRB : ANALOG REFERENCE DC

OUTPUTS

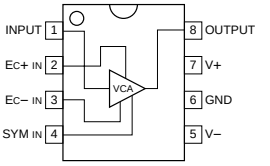
D1 - D8 : DIGITAL SIGNAL (LSB TO MSB)
VCLAMP : CLAMP DC
VCO : CLAMP CURCUT
VREF : REFERENCE DC
VRM : MONITOR FOR REFERENCE DC



THAT2181SB-TE2 (THAT)

VOLTAGE-CONTROLLED AMPLIFIER

—TOP VIEW—



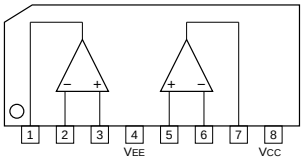
INPUTS

EC+, EC– : GAIN CONTROL CONSTANT
SYM : SYMMETRY ADJUST

NJM5532L-D (JRC)

DUAL OPERATIONAL AMPLIFIER

—SIDE VIEW—



For the USA.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

Check the metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 3.5 mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 5.25 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 20 V AC range are suitable. (See Fig. A)

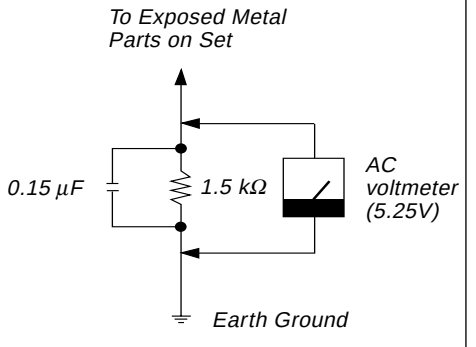


Fig A. Using an AC voltmeter to check AC leakage.

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DVW-A510P (EK)
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